THE ECONOMIC HISTORY OF CENTRAL, EAST AND SOUTH-EAST EUROPE

The collapse of communism in Central, East and South-East Europe (CESEE) led to great hopes for the region and for Europe. A quarter of a century on, the picture is mixed: in many CESEE countries, the transformation process is incomplete, and the economic catch-up has taken longer than anticipated.

The current situation has highlighted the need for a better understanding of the long-term political and economic implications of the Central, East and South-East European historical experience. This thematically organised text offers a clear and comprehensive guide to the economic history of CESEE from 1800 to the present day. Bringing together authors from both East and West, the book also draws on the cutting-edge research of a new generation of scholars from the CESEE region. Presenting a thoroughly modern overview of the history of the region, the text will be invaluable to students of economic history and CESEE area studies.

Matthias Morys is Senior Lecturer in the Department of Economics at the University of York (UK). He earned a Ph.D. (2006) from the London School of Economics and worked as a postdoctoral research fellow at the University of Oxford prior to coming to York. His research interests include monetary and financial history of the 19th and 20th centuries, globalisation in historical perspective, and the economic history of Central, East and South-East Europe.

THE ECONOMIC HISTORY OF CENTRAL, EAST AND SOUTH-EAST EUROPE

1800 to the Present

Edited by Matthias Morys

Routledge
Taylor & Francis Group
LONDON AND NEW YORK

First published 2021
by Routledge
2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

and by Routledge
52 Vanderbilt Avenue, New York, NY 10017

Routledge is an imprint of the Taylor & Francis Group, an informa business

British Library Cataloguing-in-Publication Data
A catalogue record for this book is available from the British Library

Library of Congress Cataloging-in-Publication Data
A catalog record for this book has been requested

ISBN: 978-1-138-92197-9 (hbk)
ISBN: 978-1-138-92198-6 (pbk)
ISBN: 978-1-315-68609-7 (ebk)

Typeset in Bembo
by Apex CoVantage, LLC

To my parents Peter and Ingrid Morys
who opened my eyes for Eastern Europe

CONTENTS

PREFACE

I am grateful to a large number of people for their help in writing and editing this book. First and foremost, I would like to thank all 24 contributing authors for their time and effort since launching the book project in 2015. One of the obstacles we faced in writing a regionally balanced economic history of Central, East and South-East Europe was that each of the three sub-regions had developed their own historiography largely independently from each other. We needed the different research traditions to communicate with each other, which would not have been possible without the great intellectual curiosity of the participants and their active involvement with this project. This often involved forming co-authorships by bringing together experts on the different sub-regions.

An important step in this process was a contributors' conference held in Regensburg, Germany, on 19th and 20th May 2016, where authors presented a first version of their book chapters. I would like to thank Prof. Dr. Ulf Brunnbauer, director of the Leibniz Institute for East and South-East European Studies, for hosting the event; and the Deutsche Forschungsgemeinschaft and the Economic History Society for financial support. Stephan Barisitz, Carsten Burhop, Konrad Clewing, Richard Frensch, Mark Harrison, Jüren Jerger, Uwe Müller, Stefano Petrungaro, Sabine Rutar, Ekaterina Selezneva, Mark Spörer and Peer de Vies provided excellent comments on this occasion.

I am grateful to my wife Marianna for her support, patience and encouragement for a research project that took much longer than anticipated. Marianna was inspirational in one important aspect of this edited volume. She reinforced my determination to incorporate her native Greece into the book chapters as far as possible. As I will explain in chapter 1 in more detail, Greece is sometimes included but more often excluded in historical work covering Central, East and South-East Europe. Excluding the country often was a consequence of its unique position in

South-East Europe during the Cold War, but this is not something which should bind us any longer today.

Finally, I would like to thank my parents Prof. Dr. Peter and Ingrid Morys for the deep interest in Eastern Europe which they fostered in me early on. When I grew up in West Berlin (and later in Bavaria), they regularly took my siblings and me to East Berlin and East Germany; trips into an utterly different and often very strange world, it seemed to me back then. Yet my parents always made clear to us that anything to the East of the Brandenburg Gate belonged to Europe as much as the lands to the West of it, and that Eastern Europe awaited exploration once the political circumstances allowed. I dedicate this book to them.

The interwar period

1918–1939

7

ECONOMIC GROWTH AND STRUCTURAL CHANGE IN CENTRAL, EAST AND SOUTH-EAST EUROPE 1918–1939

Matthias Morys

Introduction

The interwar period has typically received a negative assessment in economic history (Kindleberger 1987, Eichengreen 1992, Feinstein et al. 2008). The 1920s are portrayed as an earnest and well-intentioned attempt by policy-makers to return to the benign economic environment of the pre-war era (free trade, gold standard, fiscal orthodoxy, etc.), and complement it with supportive international structures such as the League of Nations. Yet the legacy of World War I loomed large over the world economy, and political cooperation remained elusive after the divisions brought by the war and the subsequent Paris peace treaties. By the mid-1920s, an economic recovery had been achieved that was fragile in some places and buoyant in others (the "Roaring Twenties"), but the onset of the Great Depression in 1929 reversed the achievements of this quinquennium quickly. Output declined massively, often up to a third of gross domestic product (GDP), and the subsequent recovery remained weak. Some countries were even unable to regain the late 1920s output level before the outbreak of World War II. The gold standard and the international trading system unravelled, and many governments defaulted on their debts.

This perspective might be convincing, yet it largely reflects the experiences of the industrialised economies of North America and Western Europe, and arguably of two countries in particular. For the United States, the Great Depression constituted the single most traumatic event of the 20th century; it acted as a watershed, much more so than the two world wars from which the United States emerged victorious with its mainland unharmed (Bordo et al. 1998). In the case of Europe, the Great Depression was particularly severe in Germany, contributing to the end of the Weimar Republic and the rise of Hitler. The Great Depression was, at least to a considerable degree, an industrial crisis, but this was not the world of Central,

East and South-East Europe (CESEE). Even by the 1930s, Czechoslovakia was the only country in the region that was properly industrialised (and hence suffered from the Great Depression more than any other country in Eastern Europe).

Despite these fundamental structural differences between Western and Eastern Europe, most of the historiography (Berend & Ránki 1982, Berend 1998) has supported a negative assessment of the interwar period also for the countries of Central Europe (Czechoslovakia, Hungary and Poland) and South-East Europe (Albania, Bulgaria, Greece, Romania and Yugoslavia). This is the case in particular for the influential works of Berend and Ránki (1974) and Kaser and Radice (1985–1989). Both works, which remain towering scholarly achievements and important reference points to this day, are carefully argued and are based on a wealth of quantitative and qualitative evidence. Yet there also is a sense that the critical assessment of the interwar achievements carries a subtext, namely to justify, very subtly, the heavy state intervention, collectivisation of agriculture and forced industrialisation which materialised after World War II under communist regimes. The logic is that if neither the (relatively) liberal order of the 1920s nor the "light" state intervention of the 1930s had generated enough growth and structural change, then forms of government that were more intrusive seemed appropriate after the war. Such views were often held with great conviction by authors based in Eastern Europe (Berend, Ránki) or hailing from the region (7 of the 14 contributors to Kaser & Radice [1985–1989] were émigrés). Yet many academics in Western Europe and North America shared them in the 1970s and 1980s, even though they typically articulated them with greater nuance (e.g., Lampe & Jackson 1982).

The literature referred to above typically did not draw on GDP and business cycle indicators, as is the standard case for interwar studies on the United States and Western Europe. It relied instead on a variety of easily available but less pertinent data such as trade, capital flows, infrastructure spending and so forth. There was no conceptual hesitation to use GDP data; they were simply not available. At the time when Berend and Ránki (1974) and Kaser and Radice (1985–1989) wrote their monumental contributions, annual national accounts were available only for three countries (Czechoslovakia, Hungary and Yugoslavia).

Due to intensive quantitative research efforts of the past two decades, we are today in a far better position to analyse economic growth and structural change for the CESEE countries in the interwar period. Thanks to Markevich and Harrison (2011), we possess annual GDP data for the early Soviet Union, by far the largest economy in the region. Ivanov's (2012) national accounts for Bulgaria allow us to better understand the economic development of a country that is widely seen as particularly backward (in the European context) and has fascinated economic historians since the seminal works of Alexander Gerschenkron (1962). Finally, our improved knowledge of interwar Greece (Mazower 1991, Christodoulaki 2001, Kostelenos et al. 2007) puts the CESEE interwar experience into perspective, as Greece was the only country in the region not to undergo the state socialist experience after World War II. The country can serve as counterfactual experiment:

how would neighbouring countries have developed after 1945 with a capitalist economy?

The result of such a reassessment is surprisingly positive. Economic growth rates of the CESEE countries were high, both vis-à-vis other European countries and compared to their own past performance. As opposed to the 1870–1913 period, the CESEE economies began to converge on the Western European core economies led by Britain, France and Germany, and they did so more quickly than the Southern European economies (Italy, Portugal and Spain). All economies in the region moved away from the Gerschenkronian stereotype of backward peasant economies. In most cases, this implied far-reaching structural change. Hungary and Greece, for instance, had a meaningful industrial sector by the late 1930s. But even where structural change did not happen, as in Bulgaria for instance, improvements in agriculture were of such magnitude that per capita incomes and living standards rose substantially.

The positive reassessment of the Central and South-East European experience puts in perspective the economic achievements and shortcomings of the early Soviet Union. On one level, the Soviet Union became part of the European convergence club very similar to the other countries described in this chapter. The country grew neither quickly nor slowly in a regional or European comparative framework but in line with what convergence forces would suggest. Yet on many other levels, the Soviet Union stood apart. After the devastations of World War I and the Russian Civil War (1918–1921) and (some form of) economic recovery under the relatively market-friendly New Economic Policy (1921–1928), the Soviet Union became the first country worldwide to move to a strategy of forced industrialisation. The collectivisation of agriculture and the complete nationalisation of industry (nationalisation had been limited to the "commanding heights" of the economy such as large-scale industry and commercial banks until 1928) brought the entire economy under the control of the Soviet government which henceforth directed the economy with the help of Five-Year Plans. Government fiat (and force) replaced the market, and the new economic policies became dependent on a totalitarian political system for their implementation. This strategy was controversial at the time and has remained so ever since. Was there long-run gain at the expense of short-term pain? The bulk of the evidence presented in this chapter suggests that fundamental structural change took place elsewhere in the region under market-based economic systems, and it calls into question the idea that the Soviet approach was the only option available to transform the Russian economy (Allen 2003).

The remainder of this chapter is structured as follows. Section 2 will describe the national accounts available for the 12 CESEE countries. Section 3 will analyse GDP, population and GDP per capita developments in the interwar period, partly based on summary statistics and partly on the concept of convergence. We will argue that convergence with Western Europe happened, albeit at different speeds in the various countries. Section 4 is devoted to explaining what section 3 documents: Did the high growth rates emanate in the primary sector (agriculture,

fishing, forestry) or the secondary sector (large-scale and small-scale industry, construction)? What explains agricultural productivity increases and the emergence of small-scale industries in most countries? The evidence presented will allow to distinguish three distinct development paths which match, albeit imperfectly, the sub-regions of Central Europe (structural change based on light industries), South-Eastern Europe (little structural change but vast improvements in agriculture) and Eastern Europe/Soviet Union (forced structural change focused on heavy industries). Section 5 summarises and concludes.2 The interwar national accounts of the CESEE countriesFor our data on GDP, population and GDP per capita we rely mostly on the data set provided by Maddison (2009) and partly revised by Maddison (2013; see Bolt & van Zanden 2014 for the changes introduced). The most recent update of this database (Maddison 2018; see Bolt et al. 2018 for the latest revisions) has not resulted in any changes for the CESEE countries. Maddison (2009, 2013, 2018) go back to Maddison (2006), which contains detailed descriptions of the underlying sources. While offering a unified data set standardised at 1990 Geary-Khamis US dollars (in line with the other three growth chapters in this volume), it is worth elaborating on the input series. In broad terms, the data for the Soviet Union, Bulgaria and Greece reflect recent research efforts, while the time series for Czechoslovakia, Hungary, Yugoslavia and Poland go back to the 1950s and 1960s. The data for Romania, the Baltic countries and Albania are either problematic or completely absent, and we exclude them from further analysis after a brief description below.

For Russia and the Soviet Union, the 2013 update of the Maddison database offers, for the first time, a continuous annual time series for the period 1885–1940. Building on earlier work by Gregory (1982) for the late Tsarist economy and Moorsteen and Powell (1966) for Soviet industrialisation 1928–1940 (Maddison 2006: 471), the more recent GDP reconstruction by Markevich and Harrison (2011) covering World War I, the Russian Civil War (1918–1921) and the period of the New Economic Policy (1921–1928) is employed to connect the two time series. Assessing the region's largest economy is therefore much easier today than it was only a decade ago.

The GDP data for Bulgaria has seen similar improvements in recent years. The older data by Chakalov (1946) has been replaced by Ivanov and Tooze (2007) for the interwar period, but it remains confined to benchmark years and contains annual data only for 1924–1945. Ivanov (2012) subsequently provided annual data stretching back to 1870. These data, while widely used (cf. Chapter 3 by Kopsidis & Schulze), have not yet made it into the Maddison data set (including its 2018 update).

The situation of the GDP data for Greece is more complicated. The GDP reconstructions for 1830–1939 by Kostelenos (1995) and Kostelenos et al. (2007) have struggled to find widespread acceptance. Maddison initially did not use them at all (see Maddison 2006: 407 for a detailed discussion of Kostelenos 1995), but has used them since the 2013 update for the pre-WWI period for the lack of comparable annual data. Other authors, such as Kopsidis and Schulze (Chapter 3), draw

on key components of Kostelenos's work but then manipulate the data in different ways. The resulting GDP series are significantly different, with Kostelenos offering a more pessimistic assessment of the pre-WWI economic development than Kopsidis and Schulze. Maddison (2013) does not use Kostelenos for the interwar period but links instead three different estimates, carried out between 1954 and 1960, to obtain a unified series for the interwar period (Maddison 2006: 407).

Different from the other five countries studied in detail in this chapter, the sources underlying Maddison (2006, 2009, 2013, 2018) for the case of Greece do not contain data on sectoral shares (Clark 1957, *Ekonomikos Tachydromos* 1954). We established the shares for 1921, 1929 and 1938 in Table 7.5 as follows. We use the 1913 shares provided by Kopsidis and Schulze in Chapter 3 for 1921 (59.1%, 19.4% and 21.5%, respectively), as we know that the occupational structure in Greece hardly changed between 1910 and 1920 (Lampe & Jackson 1982: 336, Clark 1951: 399). We then estimate the increasing secondary sector share of total output by comparing the industrial production index of Christodoulaki (2001) with overall GDP growth. Such comparison suggests a secondary sector share of 24.9% in 1929 and 25.8% in 1938. Christodoulaki's (2001) industrial production index constitutes the most recent research effort and implies lower industrial growth than the contemporary estimate of Greece's Supreme Economic Council and the later estimate by Mazower (1991) (for details cf. Christodoulaki 1991: 64). Christodoulaki's (2001) industrial production series shows growth of industry to be lower than growth of the secondary sector as a whole (the latter data are confined to 1925–1938 and hence cannot be used for our purposes). Consequently, our estimate produces by design a lower-bound estimate of advances of the secondary sector in the interwar period.

The interwar GDP data for Czechoslovakia, Hungary and Yugoslavia are annual (only Hungary misses the entries for 1921–1923) and have seen no major revisions since the key contributions by Pryor et al. (1971) for Czechoslovakia, Eckstein (1955) for Hungary and Vinski (1961) for Yugoslavia. These GDP reconstructions emerged at the time in the broader context of Thad P. Alton's *Research Project on National Income in East Central Europe*. Alton aimed at calculating GDP for the Soviet bloc economies during the Cold War period (cf. Chapter 11 by Vonyó & Markevich), yet his work inspired research on where the CESEE economies stood in the decades before the introduction of the command economy.

Interwar data for the other six CESEE countries are either problematic (Poland, Romania and Estonia) or completely absent (Albania, Latvia and Lithuania). Annual GDP data for Poland are available only for 1929–1938 based on the work by Laski (1956). Little insight can be gained from such a short time series and we do not include Poland as a result. The case of Romania is more complicated. Axenciuc (2012) provides annual GDP data since 1862 in domestic currency; a series deemed of good quality for the pre-WWI period and used, among others, by Kopsidis and Schulze in Chapter 3. Maddison (2018) incorporates the Axenciuc data, but his conversion into 1990 USD differs widely from the values calculated by Kopsidis and Schulze. The value for 1913, for instance, is only a quarter of the value

reported by Kopsidis and Schulze (481 vs. 1705). Likewise, the 1937 value is only a third of the value reported by Broadberry and Klein (2012: 88; 450 vs. 1206). Common to all series available for Romania is a fall in GDP per capita comparing 1913 with 1937/38, a finding we consider implausible even when taking into account the sizeable border changes after World War I. Furthermore, such a fall in GDP per capita is also difficult to reconcile with other, more positive accounts of the Romanian interwar economy (Lampe & Jackson 1982, Turnock 1986, Kopsidis & Ivanov 2017a). Erring on the side of caution, we exclude Romania from our analysis. There are some GDP data available for Estonia (Klesment 2010: 179), but the underlying source from Valge (2003) is in Estonian and, to the best of our knowledge, has received little international scrutiny. We exclude Estonia from our analysis, even though the available data suggest high levels of GDP per capita. The country constitutes an interesting case for future research.

GDP data for interwar Albania are confined to a single benchmark estimate for 1929 based on GDP proxy estimates by Good and Ma (1999). This one observation can only reveal that Albania was the poorest CESEE economy during the interwar period. There are no GDP data available for Latvia and Lithuania.

Excluding Albania, the Baltic countries, Poland and Romania from our analysis is most unfortunate. Available economic and social indicators suggest that Albania and the Baltic countries constituted the lower and the upper end of CESEE interwar economic development, respectively (see Chapter 10 of this book). Likewise, it must remain open for the time being whether the positive assessment of the pre-WWI Romanian economy by Kopsidis and Schulze in Chapter 3 would find its counterpart in the interwar years. Finally, we can answer the interesting question to what extent Poland benefitted economically from the Westward shift after World War II only once we have more robust data available for the interwar period.

Quantitative dimensions of economic growth

Tables 7.1, 7.2 and 7.3 provide data on GDP, population and GDP per capita for the Soviet Union, Czechoslovakia, Hungary, Bulgaria, Greece and Yugoslavia. GDP levels and population numbers suggest that the Soviet Union was larger than Central Europe and South-East Europe combined. This is true, even if including the missing six countries (of which only Poland and Romania had sizeable populations, approximately 34.8 million and 19.8 million, respectively, by the end of the period).

A major problem for any study of the interwar period is its brevity. We are analysing a maximum of four business cycles (Morys & Ivanov 2015) as opposed to four decades for the state socialist period (Chapter 11) and an even longer period for the long 19th century (Chapter 3). What, then, are the natural boundaries of the interwar period?

We choose 1921 as the first year for which GDP data are available for all six countries. That year coincides with the end of the Russian Civil War (1918–1921) and precedes the end of the Greco-Turkish War (1918–1922) by one year (fighting

TABLE 7.1 GDP: levels and growth rates in six CESEE countries, 1913–1938

	Eastern Europe	*Central Europe*		*South-East Europe*		
	Soviet Union	*Czecho-slovakia*	*Hungary*	*Bulgaria*[3]	*Greece*	*Yugoslavia*[3]
Levels (in millions 1990 USD)						
1913	220,852[3]	27,755	14,700[3]	5,218[5]	7,900[3]	13,223
1921	80,394[3]	27,117	13,585[4]	5,150	11,196	12,093
1929	231,886[1]	42,240	21,250	7,851[6]	14,696	17,822
1938	405,220	41,578[2]	24,342	9,833	18,901	20,083
Growth rates p.a. (in percent)						
Long-run analysis[7]						
1913–1938	2.5	1.7	2.0	2.4	3.6	1.7
1921–1938	10.0	2.7	3.3	3.9	3.1	3.0
1920s						
1921–1929	16.3	5.7	5.1	4.3	3.5	5.0
1930s						
1929–1938	5.7	−0.2	1.5	3.3	2.8	1.3
Business cycle analysis						
When was 1913 level recovered?	1928	1923	1924	1924	1920	1924
Late 1920s peak	n.a.	1929	1929	1931	1929	1929
Early 1930s trough	n.a.	1935	1932	1932	1931	1932
Late 1930s peak	1939	1937[8]	1939	1940	1938	1939
Growth rate p.a.: Early 1930s trough to late 1930s peak	n.a.	9.7% (1935–37)	4.5% (1932–39)	5.1% (1932–40)	4.7% (1931–38)	4.7% (1932–39)

Source: Own calculations based on sources described in section 2 (unless indicated otherwise below; see note 3).

Notes: [1] Value of 1928 instead of 1929 (consistency with Table 7.3). [2] Value for 1937 (consistency with Table 7.3). [3] Values obtained by multiplying values of Tables 7.2 and 7.3. [4] Value for 1920 (consistency with Table 7.3). [5] Value for 1911 (consistency with Table 7.3). [6] Value for 1931 (consistency with Table 7.3). [7] Precise years may differ in case the levels data for individual countries presented above deviate from 1913, 1921, 1929 and 1938. [8] Last data point.

TABLE 7.2 Population: levels and growth rates in six CESEE countries, 1913–1938

	Eastern Europe	*Central Europe*		*South-East Europe*		
	Soviet Union[1]	*Czecho-slovakia*	*Hungary*	*Bulgaria*	*Greece*	*Yugoslavia*
Levels (in million)						
1913	156.19[3]	13.25[3]	7.84[3]	4.59[5]	5.43[3]	13.59[3]
1921	152.84	13.00	7.95[4]	5.15	5.84	12.61
1929	169.27	13.88	8.58	6.11[6]	6.28	14.19
1938	188.50	14.43[2]	9.17	6.56	7.06	16.08
Growth rates p.a. (in percent)						
Long-run analysis[7]						
1913–1938	0.8	0.4	0.6	1.3	1.1	0.7
1921–1938	1.2	0.7	0.8	1.4	1.1	1.4
1920s						
1921–1929	1.5	0.8	0.9	1.7	0.9	1.5
1930s						
1929–1938	1.1	0.5	0.7	1.0	1.3	1.4

Source: Own calculations based on sources described in section 2.

Notes:

[1] Population data for the Soviet Union in Maddison (2009) are consistently higher than Markevich and Harrison (2011) and Rothenbacher (2002, 2013); see Chapter 10 and Table 10.1 of this book for details. We rely here on the Maddison data in order to ensure consistency with Tables 7.1 and 7.3. Value of 1928 instead of 1929 (consistency with Table 7.3). [2] Value for 1937 (consistency with Table 7.3). [3] Population on the country's territory in its interwar boundaries. [4] Value for 1920 (consistency with Table 7.3). [5] Interpolated value for 1911 (consistency with Table 7.3). [6] Value for 1931 (consistency with Table 7.3). [7] Precise years may differ for individual countries in case the levels data presented above deviate from 1913, 1921, 1929 and 1938.

stopped in 1918 for the other four countries). This year is also close to, or even coincides with, the year in which countries regained their 1913 income levels (Tables 7.1 and 7.3, lower panel). The only exception was the Soviet Union, where the devastations of World War I and the subsequent Civil War were such that income levels had fallen by 1921 to approximately a third of their 1913 values (i.e., levels which were recovered only at the end of the decade). Consequently, 1921 would lead to inflated growth rates in the case of the Soviet Union, and selecting 1913 as reference point provides a more realistic perspective. Choosing more than one starting point for an analysis of interwar economic growth is not unusual, in which case authors typically select 1913 and 1921 (Feinstein et al. 2008: 10).

We choose 1938 as the last year unaffected by World War II, again in line with widespread practice for the interwar period (Feinstein et al. 2008: 10). Yet we note that with the exception of Czechoslovakia (last data point for 1937) and Greece,

TABLE 7.3 GDP per capita: levels and growth rates in six CESEE countries, 1913–1938

	Eastern Europe	*Central Europe*		*South-East Europe*		
	Soviet Union	*Czecho-slovakia*	*Hungary*	*Bulgaria*	*Greece*	*Yugoslavia*
Levels (in 1990 USD)						
1913	1414	2096	1875[3]	1137[5]	1455[3]	973
1921	526	2085	1709[4]	1000	1918	959
1929	1370[1]	3042	2476	1285[6]	2342	1256
1938	2150	2882[2]	2655	1499	2677	1249
Growth rates p.a. (in percent)						
Long-run analysis[7]						
1913–1938	1.7%	1.3	1.4	1.0	2.5	1.0
1921–1938	8.6	2.0	2.5	2.4	2.0	1.6
1920s						
1921–1929	14.7	4.8	4.2	2.5	2.5	3.4
1930s						
1929–1938	4.6	−0.7	0.8	2.2	1.5	−0.1
Business cycle analysis						
When was 1913 level recovered?	1930	1923	1924	1925	1921	1922
Late 1920s peak	n.a.	1929	1929	1931	1929	1929
Early 1930s trough	n.a.	1935	1932	1932	1931	1932
Late 1930s peak	1939	1937[8]	1939	1940	1938	1939
Growth rate p.a.: Early 1930s trough to late 1930s peak	n.a.	9.4% (1935–37)	3.8% (1932–39)	4.1% (1932–40)	3.3% (1931–38)	3.3% (1932–39)

Source: Own calculations based on sources described in section 2 (unless indicated otherwise below; see note 3).

Notes: [1] Value for 1928. The onset of the Great Depression was of little relevance to the Soviet Union due to its autarky policies. The year 1928 is chosen instead as the change from the New Economic Policy to Stalin's forced industrialisation. [2] Value for 1937. [3] Values taken from Chapter 3 (Table 3.3) of this book. [4] Value for 1920. [5] Value for 1911. [6] The onset of the Great Depression to Bulgaria was delayed by two years (peak in 1931). We choose 1931 in order to measure growth from peak to peak (all other Central and South-East European countries peak in 1929). [7] Precise years may differ for individual countries in case the levels data presented above deviate from 1913, 1921, 1929 and 1938. [8] Last data point.

the other four countries continued to grow for one or two more years after 1938. Bulgaria, for instance, grew for eight consecutive years between 1932 (trough) and 1940 (peak). We found the following compromise: we maintain 1938 for the calculation of growth rates (Tables 7.1 and 7.3, middle panel), but show separately the (annualised) growth rate from the Great Depression trough to the late 1930s peak (Tables 7.1 and 7.3, lower panel). We will return to this point when discussing the strength (and length) of recovery growth after the Great Depression.

Long-run growth analysis

The CESEE economies grew between 2.7% p.a. (Czechoslovakia) and 3.9% p.a. (Bulgaria) between 1921 and 1938 (Table 7.1). Even when extending the time frame to the quarter century of 1913–1938, growth rates fall in an elevated range between 1.7% (Czechoslovakia) and 3.6% (Greece). In this perspective, which we adopt to capture more adequately the experience of the Soviet Union (cf. above), the Soviet Union occupies an intermediate position (2.5%).

GDP growth translates into GDP per capita growth of the same magnitude only if the population remains unchanged. Yet population grew in all cases, with CESEE essentially falling into two different groups (Table 7.2; cf. Chapter 10 for details): countries experiencing a late demographic transition with high population growth throughout the interwar period (Soviet Union, Bulgaria and Yugoslavia in our sample) and the more advanced economies of the region, which had already transitioned to a new demographic equilibrium characterised by low population growth (Czechoslovakia and Hungary in our sample). Consequently, growth rates of GDP per capita are lower than of GDP in all cases, yet by a wider margin for countries experiencing a late demographic transition.

Based on the 1921–1938 time frame, all countries bar Yugoslavia experienced per capita increases of 2% p.a. and more (Table 7.3). This makes CESEE the fastest growing world region of the interwar period, as a comparison with Western Europe, the United States, Latin America, Japan, China and India for precisely the same period presented in Feinstein et al. (2008: 10) shows. Yet it could be argued that any positive re-assessment of the interwar period is valid only if based on GDP per capita growth for the 1913–1938 period, as results are biased downwards by including the years of zero (or even negative) growth associated with World War I. In this perspective, the countries growing slowest still achieved growth of 1.0% per capita (Bulgaria, Yugoslavia), and the other four countries achieved values between 1.3% (Czechoslovakia) and 2.5% (Greece), with Hungary (1.4%) and the Soviet Union (1.7%) falling in between.

Are such values high or low? There are two points of comparison: a country's own past performance and the contemporaneous performance of other economies. The second perspective will lead to a convergence framework, drawing on the interwar growth experience of 18 European countries (see below). In the following, we compare our findings with the 1870–1913 period studied by Kopsidis and Schulze in Chapter 3. From the six economies they study (Austria, Bulgaria,

Greece, Hungary, Romania and Russia), they show that only Hungary (1.3%) and Romania (1.5%) saw GDP per capita growth of more than 1.0% (Table 3.3). Russia's and Bulgaria's per head income levels hardly grew at all (0.6% and 0.1%, respectively). Before World War I, limited advances of per capita income reflected strong population growth, yet even switching to GDP does not alter the main finding that growth rates increased after the war. GDP growth rates 1913–1938 consistently exceed GDP growth rates 1870–1913 (Table 3.1), in some cases by as much as one percentage point and more (Bulgaria: 2.4% vs. 1.4%; Greece: 3.6% vs. 2.2%). In sum, CESEE grew more quickly in the interwar period than the 1870–1913 period, running against a widespread perception that equates the first age of globalisation with strong economic growth while identifying the interwar period with economic failure.

Short-run growth analysis: the 1920s

Most accounts of the interwar period distinguish two periods separated by the onset of the Great Depression in 1929 (Kindleberger 1987, Eichengreen 1992, Feinstein et al. 2008): "the 1920s," that is the recovery period after World War I, followed by a business cycle upswing and stronger economic growth in 1924–1929 (the latter half often referred to as the "Roaring Twenties"); and "the 1930s," that is from the onset of the Great Depression to the outbreak of World War II. Such a chronology fits well Central Europe and South-East Europe, where four out of five countries reached their late 1920s business cycle peak in 1929 (cf. Tables 7.1 and 7.3, lower panel; Bulgaria reached its peak in 1931).

Can we integrate the Soviet Union into such a chronological framework? Due to its autarky policies, the Soviet Union was one of the few economies worldwide that was not negatively affected by the Great Depression. Yet 1928 acted as a turning point for the Soviet Union no less fundamental than 1929 for the capitalist economies. In this year,

Stalin terminated the New Economic Policy which had served the country well in terms of economic recovery (the 1913 GDP level was recovered in 1928; cf. Table 7.1), but was increasingly seen as incompatible with the political and economic agenda of the Soviet leadership (see Chapters 8 and 12 of this book). Born out of sheer necessity in 1921, the New Economic Policy had reintroduced a considerable amount of "capitalism" after the so-called War Communism between 1918 and 1921. Farmers owned their lands and were no longer subject to draconian wartime requisitioning targets, private trade was legalised, and small enterprises were exempted from nationalisation, among many other measures aimed at reviving private initiative. In particular, the New Economic Policy had empowered the peasants to an extent that they became viewed as a threat to the political leadership or, at least, as an obstacle to rapid industrialisation. Recognising this inherent tension, Stalin terminated the New Economic Policy in 1928 and embarked on a policy of "forced industrialisation," which today is associated with the early phases of the state socialist experience (see Chapter 11).

All Central and South-East European economies grew more quickly in the 1920s than in the 1930s. Czechoslovakia and Hungary grew particularly strongly (GDP per capita growth above 4%), with Yugoslavia slightly behind at 3.4%. Bulgaria's and Greece's per head income levels also grew quickly, at 2.5% p.a. By any measure, the 1920s were a period of high economic growth in which countries quickly recovered from World War I (1913 income levels were recovered on average by 1923) and then grew substantially in the business cycle upswing of the second half of the 1920s (Morys & Ivanov 2015).

The Soviet Union needed a full decade to recover from World War I, the Civil War and the 1921–1922 famine (approx. 6 million deaths). Crucially, and distinct from the other CESEE economies, the Soviet Union did not "develop" in the 1920s. The New Economic Policy provided the country with the opportunity to return to where it had stood in 1913; most of the growth came from the exploitation of unused capacity in industry rather than the build-up of new industries (Markevich & Harrison 2011: 688). This perspective is supported by the sectoral composition of the Soviet economy, which was almost identical comparing 1913 and 1928 (Table 7.5). It has remained the subject of scholarly debate if the continuation of the New Economic Policy beyond 1928 could have delivered genuine industrialisation (Allen 2003) or not (Markevich & Harrison 2011), but there is agreement that by the time it was abandoned it had not proceeded beyond the achievements of the late Tsarist economy. At the time, Soviet policy-makers certainly perceived such a limitation of the New Economic Policy, tipping the balance in favour of a strategy of forced industrialisation after 1928 (cf. chapter 8).

Short-run growth analysis: the 1930s

The 1930s saw a reversal of fortunes between the Soviet Union and the other five countries. The Soviet Union exhibited high growth rates under the first two Five-Year Plans, growing at 5.7% p.a. Yet these policies came at enormous human cost. The collectivisation of agriculture (and the associated grain delivery targets) was a vital pillar, as it ensured the necessary resource transfer from the countryside to the cities (and the industries located in them). But resistance of the farming population (about 80% of total population) to the expropriation of their homesteads resulted in a vicious circle of peasants hoarding food (which was then sold on the black market) and violent countermeasures by the state, contributing – or even leading to – the 1932–1933 famine with an estimated 6 million deaths. For those who survived the 1930s (Stalin's Great Terror of 1937–1938 resulted in another 1 million deaths), living standard increases were far more modest than an annual per capita growth rate of 4.6% suggests. The latest research suggests that living standards in the 1930s did not rise at all and arguably even fell (Allen 1998, Allen & Khaustova 2019; cf. Chapter 10 for details).

In Central Europe and South-East Europe, growth slowed after the onset of the Great Depression. Countries growing rapidly in the 1920s (Czechoslovakia, Hungary and Yugoslavia) experienced a strong slowdown. By contrast, Greece and Bulgaria continued to grow at some pace in the 1930s, with less than a 1% growth difference between the 1920s and the 1930s. As the next section will explore in detail,

the different fortunes between Czechoslovakia and Hungary, on the one hand, and Bulgaria and Greece, on the other, relate to the sectoral structure of the economies. Industrialised Czechoslovakia and industrialising Hungary benefitted more strongly from the global recovery of the 1920s but suffered more from the Great Depression as industrial crisis (Klein et al. 2017). By contrast, growth in Bulgaria and Greece relied mostly on productivity increases in the agricultural sector. As such changes were of a domestic nature, the Great Depression had a smaller impact on South-East Europe.

Greece and Bulgaria are also noteworthy for a short Great Depression: they reached their cyclical troughs in 1931 and 1932, respectively, and recovered the level of the previous business cycle peak (Greece: 1929; Bulgaria: 1931) by 1933. From a business cycle perspective, the Great Depression in Greece and Bulgaria only lasted four and two years, respectively. Hungary and Yugoslavia reached their troughs also as early as 1932, but their recoveries took longer. Czechoslovakia – incidentally the most industrialised CESEE economy – stands out as the only country that did not recover its 1929 GDP per capita level in the interwar period. An intriguing feature in all cases is the strength and the length of the recovery. Bulgaria, Greece, Hungary and Yugoslavia experienced seven to eight year-long uninterrupted growth periods, in which the economies grew at annualised rates between 4.7% and 5.1%.

CESEE in a pan-European convergence framework

The summary statistics in Tables 7.1 and 7.3 suggest that the CESEE countries grew rapidly in the interwar period compared to their own past performance. Did they also grow faster than the more advanced economies at the time, allowing them to catch up in the process? In the following, we will establish whether the CESEE countries converged on the European core economies, namely the three populous countries of Britain, France and Germany and the smaller yet no less developed economies of Belgium, the Netherlands and Switzerland.

The convergence hypothesis states that poor economies will tend to catch up with and grow faster than rich ones, with all economies converging eventually in terms of per capita income.[1] Low-income countries have the potential to grow faster than more developed, richer countries because they are not faced with as rapidly diminishing returns to capital accumulation as high-income and capital-intensive economies. In addition, poor economies can adopt and adapt the technologies, production methods and institutions that are characteristic of the leading, rich economies. Crucially, initial differences in income levels and/or capital stock only create a catch-up potential; *exploiting this potential* is another matter, and the exact conditions for doing so have remained controversial (Abramovitz 1986). A vast body of empirical research suggests that some periods exhibit stronger convergence forces than others, a finding replicated in Chapters 3 and 11 of this book on the long 19th century (weak convergence) and the state socialist period (strong convergence), respectively.

Was the interwar period characterised by convergence or by divergence forces? Table 7.4 offers a preliminary answer by providing income levels and growth rates for four distinct European regions: (1) the six CESEE economies; (2) the Western

European core (as mentioned above, Belgium, Britain, France, Germany, the Netherlands and Switzerland); (3) the four Nordic countries (Denmark, Finland, Norway and Sweden); and (4) Southern Europe (Italy and Portugal). We exclude Spain from our analysis, as the GDP collapse due to the Spanish Civil War (1936–1939) might otherwise bias our results against Southern Europe. This sample of 18 countries includes all European economies with reliable annual data except for Austria and Ireland, two small economies which escape our regional classification.

Table 7.4 constructs per head income levels for each of the four European regions (first panel) by aggregating country-specific data on GDP (third panel) and on population (not shown) and dividing them. It also gives regional growth rates of GDP per capita (second panel) and of GDP (fourth panel) for 1913–1938, 1921–1938, 1921–1929 and 1929–1938. The columns of Table 7.4 list regions in descending order of regional per head income level, namely Western Europe, Northern Europe, Southern Europe and CESEE. In the case of the six CESEE economies, the unique experience of the Soviet Union suggests to provide data for Central Europe and South-East Europe on its own (column 5: five countries) and for the CESEE region as a whole (column 6: six countries). In parentheses we provide regional per head income levels relative to Western Europe.

On balance, convergence forces dominated the interwar period. Northern Europe and CESEE reduced their income gap to the core between 1913 and 1938, while Southern Europe's gap widened only marginally. GDP per capita growth in CESEE compared to Western Europe was higher by 0.6% p.a., shrinking the per head income gap from 35.5% in 1913 to 41.8% in 1938. In terms of GDP, CESEE grew twice as rapidly: 1.2% for the core vs. 2.4% for the CESEE-6. Given the late demographic transition in large parts of CESEE (cf. Chapter 10 for details), GDP growth is arguably the more relevant point of comparison. On this benchmark, the region grew more quickly not only over the full 1913–1938 period but also over each of the three sub-periods 1921–1938, 1921–1929 and 1929–1938. Results are not driven by the Soviet Union: the five Central and South-East European economies grew annually by a full percentage point more (1.2% vs. 2.2%), and they grew faster (or at the same speed) for any of the sub-periods.

Were convergence forces of different magnitude in the various regions? The most basic variant of testing the (unconditional) convergence hypothesis involves regressing the GDP growth rate of a given period (1913–1938 in our case) on the initial income level at the start of the period (1913). Figure 7.1 shows the 18 observations of our sample and the implied regression line based on the following (statistically significant) regression result:

$\text{Growth rate}_{1913–1938}$	=	99.3	−	0.011	×	$\text{GDP per capita}_{1913}$
(in percent)		(*t*-value: 6.48)		(*t*-value: −2.17)		(in 1990 USD)

TABLE 7.4 GDP per capita (levels and growth rates) and GDP (growth rates), 1913–1938, Central, East and South-East Europe versus Western, Northern and Southern Europe

	GDP per capita				
	Western Europe[1]	*Northern Europe*[1]	*Southern Europe*[1]	*Central and South-East Europe*[1]	*Central, East and South-East Europe*[1]
	Belgium *Britain* *France* *Germany* *Netherlands* *Switzerland*	*Denmark* *Finland* *Norway* *Sweden*	*Italy* *Portugal*	*Czechoslovakia* *Hungary* *Bulgaria* *Greece* *Yugoslavia*	*Czechoslovakia* *Hungary* *Soviet Union* *Bulgaria* *Greece* *Yugoslavia*
GDP per capita levels (in 1990 USD)					
In parentheses: levels relative to Western Europe					
1913	4,067	2,912	2,366	1,548	1,444
		(71.6%)	(58.2%)	(38.1%)	(35.5%)
1921	3,526	2,824	2,156	1,567	761
		(80.1%)	(61.2%)	(44.4%)	(21.6%)
1929	4,771	3,898	2,860	2,114	1,547
		(81.7%)	(59.9%)	(44.3%)	(32.4%)
1938	5,245	4,696	2,922	2,221	2,165
		(89.5%)	(55.7%)	(42.3%)	(41.8%)
GDP per capita growth rates p.a. (in percent)					
1913–1938	1.0	1.9	0.8	1.5	1.6
1921–1938	2.4	3.0	1.8	2.1	6.3
1921–1929	3.9	4.1	3.6	3.8	9.3
1929–1938	1.1	2.1	0.2	0.6	3.8
GDP levels (in millions 1990 USD)					
1913	690,790	40,992	102,263	69,417	290,269
1921	575,370	42,508	94,370	69,801	150,195
1929	818,141	61,779	134,907	103,309	341,701
1938	940,194	78,263	148,768	118,770	523,990
GDP growth rates p.a. (in percent)					
1913–1938	1.2	2.6	1.5	2.2	2.4
1921–1938	2.9	3.7	2.7	3.2	7.6
1921–1929	4.5	4.8	4.6	5.0	10.8
1929–1938	1.6	2.7	1.1	1.6	4.9

Source: Own calculations based on sources described in section 2 and Maddison (2009, 2013, 2018).

Note: [1] Regional averages are weighted by population.

The inverse relationship between initial income and subsequent growth rate vindicates the convergence hypothesis: low-income economies were growing faster and catching up. The size of the slope means that for every USD (1990) 1,000 income difference in 1913, the richer economy is expected to grow by 11% less until 1938. With the exception of Italy, all peripheral countries converged on the core economies. Yet the size of this effect differed between countries and regions. The Nordic countries grew strongly, and in particular they grew more strongly than convergence forced would suggest (as indicated by their position above the regression line). By contrast, the Southern European economies grew less strongly than expected.

Bulgaria, the Soviet Union, Hungary and Czechoslovakia all lie very close to the regression line. Please note that the Soviet Union appears hardly any different from the other three countries. Even though the country departed radically from conventional economic policy in the interwar period, the outcome in 1938 fits the standard pattern of European economic development and convergence. The overperformance of the 1928–1938 period compensated for the underperformance of the 15 years preceding it. The forced industrialisation policies of Stalin, then, returned the country to its long-run growth trajectory but failed to raise it above this threshold (in the same vein is Cheremukhin et al. 2017, albeit based on a very different methodology).

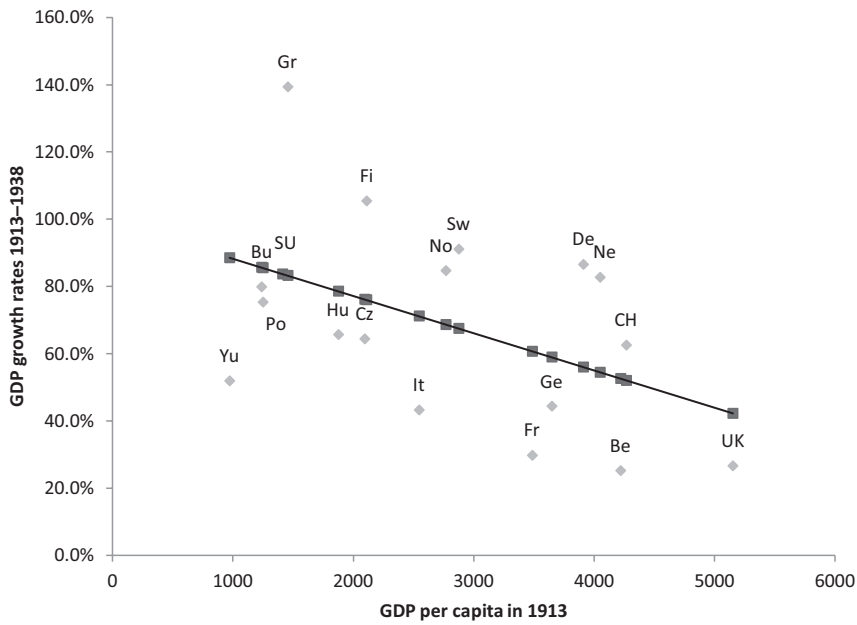

FIGURE 7.1 Beta-convergence of European economies, 1913–1938

Source: Own calculations based on data described in the main text.

Note: Be: Belgium. Bu: Bulgaria. CH: Switzerland. Cz: Czechoslovakia. De: Denmark. Fi: Finland. Fr: France. Ge: Germany. Gr: Greece. Hu: Hungary. It: Italy. Ne: Netherlands. No: Norway. Po: Portugal. SU: Soviet Union. Sw: Sweden. UK: United Kingdom. Yu: Yugoslavia.

The interwar outliers were not the Soviet Union, but Yugoslavia (negative) and Greece (positive). We lack sufficient data on Yugoslav sectoral composition and industrial structure, and what is available often points in different directions. Some of this probably reflects the extreme heterogeneity of a country with strong regional differences (Nikolić 2018). The Greek exception is easier to explain, and understanding the sectoral transformation during the interwar period will be key in doing so. This is what we turn to now.

Sectoral transformation during the interwar period

The previous section documented that the CESEE countries began to catch up with Western Europe during the interwar period. It also showed that economic growth in the early Soviet Union was not extraordinarily high, as some have claimed. Instead the country grew in line with what convergence forces would suggest given its 1913 income position. Yet the Soviet Union's claim to fame does not necessarily rest on high growth rates. Apologists of Stalin's forced industrialisation policies, such as Allen (2003), argue that such policies constituted the best or even the only means to achieve structural change and catapult the Soviet economy into the industrial age. In this perspective, backward countries can get trapped in a vicious cycle, in which they export agricultural goods and return industrial goods in turn but fail to develop an industrial sector of their own as a consequence. Their comparative advantage in agriculture allows them to grow and prosper in the short and medium term but prevents structural change and hence long-run growth. Government intervention can help escape such a sub-optimal equilibrium. Collectivisation of agriculture enables the necessary resource transfer from the countryside to the cities or, in the words of Allen (2003), from "farm to factory"; and the government can decide exactly what kind of industries they want to invest in.

Some of this view is supported by the findings of Chapter 3 of this book, where Kopsidis and Schulze document "growth without structural change" for the CESEE economies for the 1870–1913 period, that is, a development path in which countries grow for extended periods of time without changing their economic structure. Did this pattern continue or change in the interwar period?

Tables 7.5, 7.6 and 7.7 offer different yet related perspectives on structural change. Table 7.5 provides data on sectoral shares from 1900 to World War II. Table 7.6 shows annualised growth rates of the primary, secondary and tertiary sector (columns 2–4) and their relative contribution to overall GDP growth (columns 6–8). Comparing sector growth to average annual GDP growth (column 5) shows if a particular sector grew faster or slower than the aggregate economy. The relative contribution to growth is measured as each sector's growth rate (the full growth rate and not its annualised fraction as reported in columns 2–4), weighted by its share in GDP at the beginning of the period. The three values obtained are then scaled up so that they add up to 100. The difference between columns 2–4 and 6–8 may be illustrated with reference to Bulgaria. For the 1911–1939 period, the secondary sector grew more strongly (3.23% p.a.) than the primary sector (2.42%), yet its impact on overall growth remained limited (16.7%) as a result of its small

share in 1911 (Table 7.5: 13.1%). Finally, Table 7.7 provides sectoral shares of the labour force. As labour productivity in agriculture was typically lower than in industry, labour shares put the continued importance of agriculture into sharper relief than sectoral shares. Hungary is a good case in point, where the primary sector declined to 31.9% of GDP by 1939 but it continued to employ 50.0% of the country's workforce.

Table 7.6 demonstrates the structural shift achieved by the Soviet economy. Before 1914, more than 40% of growth had come from agriculture (Chapter 3, Table 3.5). In the interwar period, more than 40% came from industry, and the contribution of agriculture fell to 13%. At the end of the second Five-Year Plan in 1937, the secondary sector overtook the primary sector by a small margin (32.3% vs. 31.0%).

Yet the data presented in Tables 7.5 and 7.6 do not necessarily support the notion that structural change in the Soviet Union was contingent upon forced industrialisation policies. Drawing on similar data for the 1870–1913 period (Chapter 3, Tables 3.5 and 3.6) suggests that longer-term forces of structural change were operating independent of the prevailing political and economic system. Every two decades, the Russian/Soviet economy added approximately 6% in the secondary sector: 13.6% (1870), 20.1% (1890), 26.0% (1913) and 32.2% (1937). This steady increase reflected a secondary sector, which grew about 2% p.a. more quickly than the primary sector, with little difference between the pre-war and the post-war periods: 2.13% for 1870–1913 versus 2.43% for 1913–1940. The Soviet Union might have provided as efficient (or as inefficient, for that matter) an environment for economic growth as the late Tsarist economy. While Allen has emphasised the Soviet contributions to growth and structural change, the more recent literature has reverted to more conventional views highlighting allocative inefficiencies typically associated with command economies. Castañeda Dower and Markevich (2018) and Cheremukhin et al. (2017), for instance, find that the labour reallocation from agriculture to industry under Stalin did not lead to an efficient outcome and was inferior to what a market-based economic system would have generated. Cheremukhin et al. (2017) make an even broader point. While acknowledging the structural transformation under Stalin, they find, based on a neoclassical growth model, that productivity advances of both the agricultural and the industrial sectors would have been higher in the absence of the frictions associated with a command economy.

A sceptical perspective on Stalin's supposed economic success story finds support in a comparison with Hungary. The country experienced even stronger structural change in the interwar period, yet remained within a conventional economic policy framework, that is, (relatively) liberal policies in the 1920s and a drift towards more interventionist but market-based policies in the 1930s. Hungary had a smaller secondary sector than Russia in the 1870–1913 period but then overtook the Soviet Union in the 1920s. By the outbreak of World War II, the secondary sector in both countries accounted for about 32% of GDP, higher than anywhere else in CESEE except for Czechoslovakia (35%). Hungarian secondary sector growth was similar to the Soviet Union (3.22% vs. 3.30%), and the relative contribution of the secondary sector to overall growth was even larger than in the Soviet case (47.1% vs. 40.4%).

TABLE 7.5 Sectoral shares in six CESEE countries, ca. 1900–1945 (in percent)

Russia / Soviet Union	**1897–1901**	**1913**	**1921**	**1928**	**1937**	**1940**
Primary sector	51.4	44.4	52.3	44.9	31.0	29.5
Secondary sector	21.0	26.0	14.7	26.2	32.2	32.8
Tertiary sector	27.6	29.7	33.0	29.0	36.8	37.7
Czechoslovakia		**1913**	**1921**	**1928**	**1937**	
Primary sector		27.3	25.7	23.8	24.1	
Secondary sector		31.4	29.9	37.4	35.2	
Tertiary sector		41.3	44.4	38.8	40.7	
Hungary	**1900**	**1912**		**1928**	**1937**	**1939**
Primary sector	47.2	51.0		40.1	33.9	31.9
Secondary sector	19.1	22.0		28.6	29.5	31.7
Tertiary sector	33.6	27.0		31.4	36.6	36.4
Bulgaria	**1900**	**1911**	**1921**	**1928**	**1939**	**1945**
Primary sector	56.5	56.7	51.8	52.9	52.1	42.9
Secondary sector	14.6	13.1	15.8	15.9	15.0	18.2
Tertiary sector	28.9	30.2	32.4	31.2	32.9	38.9
Greece		**1913**	**1921**	**1929**	**1938**	
Primary sector		59.1	59.1	55.1	54.4	
Secondary sector		19.4	19.4	24.9	25.8	
Tertiary sector		21.5	21.5	20.0	19.8	
Yugoslavia		**1910**		**1931**		**1953**
Primary sector		44		41		28
Secondary sector		21		27		46
Tertiary sector		35		32		26

Sources: Russia/Soviet Union: Gregory (1982) for 1883–1887; Markevich and Harrison (2011) for 1913, 1921 and 1928; Davies et al. (1994) for 1937 and 1940. Czechoslovakia: Pryor et al. (1971). Hungary: Eckstein (1955). Bulgaria: Ivanov (2012). Greece: Own calculations based on sources described in section 2. Yugoslavia: Vinski (1961).

Hungary and the Soviet Union both industrialised in the interwar period, but there was a fundamental difference: the Soviet Union invested in heavy industries whereas Hungary developed light industries. In the Soviet case, 56% of investment between 1929 and 1934 (the first Five-Year Plan) went to metals, machinery, construction materials, chemicals and fuels, compared to only 8% for light industries

TABLE 7.6 Sector growth and relative contributions to GDP growth in six CESEE countries, ca. 1913–1938

	Sector growth (percent p.a.)			*GDP (percent p.a.)*	*Contribution to growth (in percent; Σ = 100)*		
	Primary	*Secondary*	*Tertiary*				
Soviet Union							
1913–1940	0.87	3.30	3.32	2.41	13.0	40.4	46.6
1913–1928	0.40	0.38	0.17	0.20	54.9	30.2	15.0
1928–1940	1.90	8.65	9.03	5.08	11.6	40.6	47.8
Czechoslovakia							
1913–1937	1.17	2.18	1.64	1.70	17.7	42.8	39.5
1921–1937	2.30	3.76	2.15	2.71	21.1	45.1	33.8
1921–1928	4.96	9.57	4.10	6.12	20.1	51.9	27.9
1928–1937	0.27	-0.55	0.66	0.13	50.2	−156.5	206.2
Hungary							
1912–1939	0.07	3.22	2.96	1.83	1.6	47.1	51.3
1912–1928	0.05	3.24	2.53	1.56	1.4	51.8	46.8
1928–1939	0.11	3.18	3.60	2.22	1.8	43.2	54.9
Bulgaria							
1911–1939	2.42	3.23	3.04	2.73	48.0	16.7	35.3
1921–1939	4.38	4.05	4.44	4.35	52.4	14.3	33.3
1921–1928	5.06	4.84	4.18	4.74	55.8	16.2	28.1
1928–1939	3.96	3.55	4.60	4.10	50.7	13.4	36.0
Greece							
1913–1938	3.21	4.74	3.21	3.55	51.0	30.4	18.6
1921–1938	2.63	4.87	2.63	3.13	47.6	35.1	17.3
1921–1929	2.56	6.74	5.84	3.46	34.0	34.2	31.8
1929–1938	2.69	3.24	−0.14	2.84	65.2	36.3	−1.5
Yugoslavia							
1910–1953	0.46	3.39	0.82	1.52	10.5	73.3	16.2
1910–1931	1.12	2.68	1.02	1.46	32.5	43.9	23.5
1931–1953	−0.16	4.08	0.63	1.59	-3.4	91.9	11.5

Source: Own calculations based on GDP data of Table 7.1 (and described in section 2) and sectoral shares of Table 7.5.

TABLE 7.7 Sectoral shares in the labour force in six CESEE countries, ca. 1890–1950 (in percent)

Russia/Soviet Union	**1890**	**1900**	**1913**	**1926**[1]		**1939**
Primary sector	77.4	73.8	70.0	73.0		57.8
Secondary sector	8.9	11.4		8.9		21.8
Tertiary sector	13.7	14.8		10.1		20.4
Czechoslovakia			**1913**		**1930**	**1950**
Primary sector			40.9		37.5	37.8
Secondary sector			37.4		37.7	37.5
Tertiary sector			21.7		24.8	24.7
Hungary		**1900**	**1910**	**1920**	**1930**	**1941**
Primary sector		59.4	55.8	58.2	54.2	50.0
Secondary sector		16.8	19.4	18.1	21.7	23.2
Tertiary sector		23.8	24.8	23.7	24.1	26.8
Bulgaria	**1890**	**1900**	**1910**	**1920**	**1930**	
Primary sector	85.5	82.7	71.7	71.8	71.8	
Secondary sector	6.9	7.5	13.1	13.2	13.3	
Tertiary sector	7.6	9.8	15.2	15.0	14.7	
Greece			**1910**	**1920**	**1930**	**1950**
Primary sector			49.3	58.7	56.6	51.3
Secondary sector			16.1	17.4	18.8	20.7
Tertiary sector			34.6	23.9	24.6	28.0
Yugoslavia			**1913**		**1930**	**1950**
Primary sector			82.2		79.7	66.9
Secondary sector			11.0		11.2	18.2
Tertiary sector			6.7		9.0	14.9

Sources: Russia/Soviet Union: Chapter 3 of this book for 1890 and 1900 and Clark (1951: 420) for 1913, 1926 and 1939. Czechoslovakia: Buyst and Franaszek (2010: 210). Hungary: Eckstein (1955). Bulgaria: Chapter 3 of this book for 1890 and 1900 and Kopsidis and Ivanov (2017a) for 1910, 1920 and 1930. Greece: Kopsidis and Ivanov (2017a) for 1910, 1920 and 1930 and Buyst and Franaszek (2010: 210) for 1950. Yugoslavia: Buyst and Franaszek (2010: 210).

Note: [1]Numbers do not add up to 100 due to the peculiarity of the underlying source material.

(Allen 2003: 95). By contrast, Hungary thrived on the light industries shunned by the Soviet Union. Agricultural processing (flour milling, distilling of alcohol, sugar refining, etc.) had been important since the late 19th century but expanded substantially after World War I (Klein et al. 2017: 70). The boom of the 1920s was largely propelled by the rapid development of the textile industry. The 1930s witnessed increased industrial activity in metal processing and engineering (partly related to

rearmament), two business activities typically taking place in large-scale company structures. Yet even by 1941, the majority of the secondary sector workforce worked in small-scale companies of fewer than 20 workers (Eckstein 1955: 176–185).

These differences can be explained by the respective economic environments. Hungary continued its market-based growth model, responding to shifts inside and outside of the country. The country had not industrialised before World War I but instead developed a highly productive, capital-intensive agriculture (Schulze 2000, 2007). The emergence of a food-processing industry in the interwar period was a natural next step. Similarly, the production of textiles as a labour-intensive, low-skill and small-scale industry suited well the country's economic conditions. The rise of this particular industry followed a general trend by which low value-added industries moved from the core to the periphery in the interwar period (Kopsidis 2012: 7). An underlying assumption of the Hungarian growth model was trade and capital market integration with the rest of the world. There was no perceived need to produce capital-intensive goods, as they would continue to be imported from Western Europe.

The Soviet Union had a much greater incentive to move into large-scale industry. As a large country with a vast domestic market, Russia had always been one of the least open economies of Europe (cf. Table 5.2 in Chapter 5). The autarky policies pursued since the early 1920s followed less a coherent economic agenda than political needs. The Soviet leadership had considered some form of military confrontation as inevitable since the Allied Intervention in the Russian Civil War (Bushkovitch 2012: 371). Consequently, the Soviet Union needed to develop the full range of industries, including iron and steel, machine building and petroleum. Such considerations were not the only ones in the Soviet industrialisation debate between 1924 and 1928, but they were an important ingredient (Elrich 1960). The Soviet Union simply could not content itself with food processing and textile industries, which constituted the most important manufacturing activities in Hungary and all South-East European countries (Kopsidis & Ivanov 2017a).

The Hungarian experience demonstrates that CESEE countries could industrialise within a conventional economic policy framework. In concession to the important arguments in favour of forced industrialisation advanced by Allen (2003), it is important to note that a conventional policy framework did not necessarily lead to industrialisation. Growth without structural change remained a distinct possibility. This experience is best exemplified by Bulgaria. The country underwent hardly any structural change between 1870 and 1939. The secondary sector accounted for 14.9% in 1870, 14.6% in 1900 and 15.0% in 1939. Consequently, the relative contribution of the secondary sector to overall growth was small and accounted consistently for less than 20%.

Bulgaria grew in the interwar period by developing a more productive agricultural sector. The country moved away from extensification of agriculture (the pre-1914 pattern by which new land was put to agricultural use) to intensification (improving the productivity of a given plot of land). Given the relative poverty of the peasants and the delicate budget situation of the government, only very limited private and public funds were available to increase investment into agriculture (e.g., for the purpose of installing irrigation systems or building dams). Farming remained labour intensive, but an important process of "low-cost modernisation"

(Ivanov & Tooze 2007, Kopsidis & Ivanov 2017b) took place in which farmers increased agricultural productivity by, among others, improving seed varieties or using chemical fertilisers more widely. The result was impressive, as shown by primary sector growth of 4.4% p.a. for two decades.

Agricultural modernisation was not limited to Bulgaria. The agricultural sector continued to grow in all CESEE economies and make a sizeable contribution to total GDP growth (Table 7.6, with the notable exception of Hungary). Even Stalin's rapid industrialisation of 1928–1940 was accompanied – and made possible – by primary sector growth of 1.9% p.a. This finding is very different from earlier literature which had identified many of the region's interwar economic problems in a stagnant agricultural sector (Berend 1985).

Hungary and Bulgaria stand for two different growth models. Hungary saw hardly any growth of agriculture, but it moved decisively into small-scale industries. Bulgaria, incidentally, moved into the same small-scale industries. Food processing accounted for 47% and textiles and clothing for 29% of Bulgarian manufacturing output in 1938 (Kopsidis & Ivanov 2017). Yet Bulgaria's secondary sector growth started from a small basis in the early 1920s and did not leave much impact on the aggregate level. The country grew instead by an intensification of its agricultural sector. We leave explaining the precise reasons for the two different trajectories for future research, but the broad pattern seems clear. In the interwar period, each country moved one step ahead on its development path. Bulgaria moved from an extensification of agriculture to an intensification. Hungary, which was richer and more developed in 1913 (cf. Chapter 3), moved from agriculture into industry. In both cases, the result was substantial GDP per capita increases.

The dichotomy between Bulgaria and Hungary helps understand the case of Greece, the CESEE country with the best interwar growth performance (Figure 7.1). Before World War I, the country stood between Hungary and Bulgaria on many economic indicators (cf. Chapter 3). Its agriculture was less developed than Hungary's, but it had a larger manufacturing sector than Bulgaria. In the interwar period, Greece combined the strengths of both models. It experienced "Bulgarian" agricultural growth and "Hungarian" industrial growth. Nowhere else in CESEE was the contribution of the primary and the secondary to overall growth as evenly balanced as in the case of Greece (Table 7.6).

Conclusions

This chapter has reviewed economic growth and structural change of Central, East and South-East Europe in the interwar period. We began by sketching out the dominant view in the literature, a mostly skeptical assessment of economic growth in the region. This well-rehearsed narrative draws on similar accounts for Western Europe and the United States but fails to ask to what extent they can be applied to the Eastern European experience. The negative account emerged in the 1970s and 1980s and was strongly pushed by economic historians based in Eastern Europe and émigrés hailing from the region. It often served a specific purpose, that is to draw on the supposed failure of markets in the 1930s as a justification for the heavily interventionist policies of state socialism after World War II.

We then provided a more positive assessment of the interwar period, largely based on data for six CESEE economies for GDP, population, GDP per capita and indicators of structural change. Many of these data had not been available when the influential accounts of the 1970s and 1980s were written. The new data show the growth performance was considerably better than once thought. The CESEE economies not only grew more quickly in the interwar period than during the 1870–1913 globalisation period, but they also performed better than the Western European core economies. They grew twice as strongly (2.4% vs. 1.2%) between 1913 and 1938, allowing them to catch up (on a per capita basis) from 35.5% of Western European levels to 41.8% by the outbreak of World War II. CESEE remained the poorest region of Europe, but it had joined the European convergence club.

The 1920s in particular showed strong growth, mainly concentrated in the second half of the decade. The earlier reconstruction efforts bore fruit and the region experienced its own version of the "Roaring Twenties." We also reassessed the impact of the Great Depression. The GDP declines in the (still largely agricultural) CESEE economies were much smaller than for their Western European counterparts, and the recessions were typically short. The only exception was Czechoslovakia which, as the region's most industralised economy, was heavily affected by the Great Depression. A common feature of all CESEE economies was strong recovery growth after the Great Depression, above 4% p.a. in all cases and typically lasting seven to eight years. The length and the strength of this post–Great Depression growth became a defining feature of the CESEE experience and explains why they converged on Western European income levels.

Special attention was paid to the *Sonderweg* taken by the Soviet Union, the first country worldwide to develop the characteristic features of state socialism: central planning, collectivisation of agriculture and forced industrialisation focused on heavy industries. From a pure national accounting point of view, the new strategy worked well: no country in the region grew as rapidly as the Soviet Union after 1928, when Stalin terminated the market-friendly New Economic Policy and launched a first Five-Year Plan. In a longer-term perspective, however, a great deal of the overperformance between 1928 and 1938 was owed to the underperformance of the 1913–1928 period when the economy had hardly grown at all. A pan-European convergence framework showed that the Soviet Union in 1938 stood, in terms of per head income, almost exactly where convergence forces would suggest.

We then tested the second line of defense of the apologists of Stalin's forced industrialisation policies: was the Soviet approach better at achieving structural change and catapulting the economy into the industrial age? Structural change progressed unevenly in Central Europe and South-East Europe in the interwar period. Bulgaria, for instance, grew rapidly by increasing agricultural productivity. The country also industrialised to a certain extent, specialising in food production and textiles as so many other countries in the region. Yet as a share of GDP, the secondary sector hardly grew and remained below 20%. Further to the west and with better access to Western Europe, the experience was different. Hungary, for instance, saw a structural shift out of agriculture and into industry larger than the Soviet Union. The main difference between the two countries was not the degree of structural change

but which particular industries they developed. Hungary developed light industries in the 1920s and only the 1930s saw a larger move into metal processing and machinery built around large-scale industries. The Soviet Union, under government fiat (and force) and partly driven by a perceived need for national defense, was able to largely bypass the light-industries stage and move immediately into heavy industries such as iron and steel production, chemicals and petroleum.

The data available for the six countries covered in this chapter suggest that there were essentially three distinct growth models: (1) a "South-East European" growth model epitomised by Bulgaria, where rapid growth stemmed from improving agriculture; (2) a growth model typical of the more advanced Central European economies and exemplified by Hungary, a country which experienced substantial structural change, initially focused on low-skill, labour-intensive light industries and only later venturing into heavy industry; and (3) the Soviet Union, with forced structural change geared towards heavy industries. Only future research can show if this typology is also helpful in explaining the Polish and the Romanian experiences and the smaller (yet no less interesting) cases of Albania and the Baltic countries.

Note

1 In its "unconditional" or "absolute" form, the convergence hypothesis implies that income per capita differentials between economies will disappear in the long run. The "conditional" convergence hypothesis, on the other hand, also takes account of economies' different structural characteristics (and not just initial income differentials). Here the implication is that an economy's income per capita (or per worker) converges to a long-run level that is specific to this economy and determined by its structural features.

References

Abramovitz, M. (1986). Catching-up, forging ahead and falling behind. *Journal of Economic History* 46(2): 385–406.

Allen, R. C. (2003). *Farm to Factory: A Reinterpretation of the Soviet Industrial Revolution*. Princeton: Princeton University Press.

———. The standard of living in the Soviet Union, 1928–1940. *Journal of Economic History* 58 (1998): 1063–1089.

Allen, R. C. and Khaustova, E. (2019). Russian real wages before and after 1917. *Explorations in Economic History* 72: 23–37.

Axenciuc, V. (2012). *Produsul Intern Brut al Românieri 1862–2000*. Serii Statistice Seculare şi Argumente Metodologice, Vols. 1, 2. Bucharest: Editura Economicâ.

Berend, I. (1998). *Decades of Crisis: Central Eastern Europe before World War II*. Los Angeles: University of California Press.

———. (1985). Agriculture. In M. C. Kaser and E. A. Radice, eds., *The Economic History of Eastern Europe 1919–1975*. Volume 1. Oxford: Clarendon Press, pp. 148–209.

Berend, I. and Ránki, G. (1982). *The European Periphery and Industrialization 1780–1914*. Cambridge: Cambridge University Press.

———. (1974). *Economic Development in East-Central Europe in the 19th and 20th Centuries*. New York: Columbia University Press.

Bolt, J., Inklaar, R., de Jong, H. and van Zanden, J. L. (2018). *Rebasing "Maddison": New Income Comparisons and the Shape of Long-Run Economic Development*. University of Groningen, GGDC Research Memorandum 174.

Bolt, J. and van Zanden, J.L. (2014). The Maddison project: Collaborative research on historical national accounts. *Economic History Review* 67(3): 627–651.

Bordo, M.D., Goldin, C. and White, E.N., eds. (1998). *The Defining Moment. The Great Depression and the American Economy in the Twentieth Century*. Chicago: University of Chicago Press.

Broadberry, S. and Klein, A. (2012). Aggregate and per capita GDP in Europe, 1870–2000: Continental, regional and national data with changing boundaries. *Scandinavian Economic History Review* 60(1): 79–107.

Bushkovitch, P. (2012). *A Concise History of Russia*. Cambridge: Cambridge University Press.

Buyst, E. and Franaszek, P. (2010). Sectoral developments, 1918–1945. In S. Broadberry and K. O'Rourke, eds., *The Cambridge Economic History of Modern Europe, Volume 2: 1870 to the Present*. Cambridge: Cambridge University Press, pp. 208–231.

Castañeda Dower, P. and Markevich, A. (2018). Labor misallocation and mass mobilization: Russian agriculture during the Great War. *The Review of Economics and Statistics* 100(2): 245–259.

Chakalov, A. (1946). *Bulgaria's National Income and Outlay*. Sofia: Knipegraph (in Bulgarian).

Cheremukhin, A., Golosov, M., Guriev, S. and Tsyvinski, A. (2017). The industrialization and economic development of Russia through the lens of a neoclassical growth model. *Review of Economic Studies* 84: 613–649.

Christodoulaki, O. (2001). Industrial growth in Greece between the wars: A new perspective. *European Review of Economic History* 5: 61–89.

Clark, C. (1957). *The Conditions of Economic Progress*. London: Macmillan, 3rd edition.

———. (1951). *The Conditions of Economic Progress*. London: Macmillan, 2nd edition.

Davies, R.W., Harrison, M. and Wheatcroft, S.G. (1994). *The Economic Transformation of the Soviet Union, 1913–1945*. Cambridge: Cambridge University Press.

Eckstein, A. (1955). National income and capital formation in Hungary, 1900–1950. *Income and Wealth, Series V*, 152–223.

Eichengreen, B. (1992). *Golden Fetters. The Gold Standard and the Great Depression, 1919–1939*. Oxford: Oxford University Press.

Ekonomikos Tachydromos. (1954). Issue of 22 May 1954.

Elrich, A. (1960). *The Soviet Industrialisation Debate, 1924–1928*. Cambridge, MA: Harvard University Press.

Feinstein, C.H., Temin, P. and Toniolo, G. (2008). *The World Economy between the World Wars*. Oxford: Oxford University Press.

Gerschenkron, A. (1962). *Economic Backwardness in Historical Perspective. A Book of Essays*. Cambridge, MA: Belknap Press.

Good, D. and Ma, T. (1999). The economic growth of Central and Eastern Europe. 1870–1989. *European Review of Economic History* 2: 103–137.

Gregory, P.R. (1982). *Russian National Income 1885–1913*. Cambridge: Cambridge University Press.

Ivanov, M. (2012). *The Gross Domestic Product of Bulgaria 1870–1975*. Sofia: Ciela.

Ivanov, M. and Tooze, A. (2007). Convergence or decline on Europe's Southeastern periphery? Agriculture, population, and GDP in Bulgaria, 1892–1945. *Journal of Economic History* 11: 672–704.

Kaser, M.C. and Radice, E.A., eds. (1985–1989). *The Economic History of Eastern Europe 1919–1975*. 5 volumes. Oxford: Clarendon Press.

Kindleberger, C.P. (1987). *The World in Depression 1929–1939*. Harmondsworth: Penguin Books.

Klein, A., Schulze, M.S. and Vonyó, T. (2017). How peripheral was the periphery? Industrialization in East Central Europe since 1870. In K.H. O'Rourke and J.G. Williamson,

eds., *The Spread of Modern Industry to the Periphery since 1871*. Oxford: Oxford University Press, pp. 63–90.

Klesment, M. (2010). *Fertility Development in Estonia during the Second Half of the 20th Century. The Economic Context and Its Implications*. PhD dissertation, Tallinn University.

Kopsidis, M. (2012). Missed opportunity or inevitable failure? The search for industrialization in Southeast Europe 1870–1940. *European Historical Economics Society Working Papers in Economic History* 19. http://ehes.org/working_papers.html

Kopsidis, M. and Ivanov, M. (2017a). Industrialization and de-industrialization in Southeast Europe, 1870–2010. In K. H. O'Rourke and J. G. Williamson, eds., *The Spread of Modern Industry to the Periphery since 1871*. Oxford: Oxford University Press, pp. 91–114.

———. (2017b). Was Gerschenkron right? Bulgarian agricultural growth during the interwar period in light of modern development economics. *Südost-Forschungen* 74: 44–72.

Kostelenos, G. (1995). *Money and Output in Modern Greece: 1858–1938*. Athens: Centre of Planning and Economic Research.

Kostelenos, G., Vsiliou, D., Kounaris, E., Petmezas, S. and Sfakianakis, M. (2007). *Gross Domestic Product, 1830–1939*. Athens: Centre of Planning and Economic Research.

Lampe, J. R. and Jackson, M. R. (1982). *Balkan Economic History, 1550–1950*. Bloomington: Indiana University Press.

Maddison, A. (2009). *Historical Statistics of the World Economy. 1–2008 AD*.

———. *The World Economy. Vol. 1: A Millennial Perspective. Vol. 2: Historical Statistics*. Paris: OECD Development Centre Studies, 2006.

Maddison Project Database (2018). https://www.ggdc.net/maddison

———. (2013). https://www.rug.nl/ggdc/historicaldevelopment/maddison/releases/maddison-project-database-2013

Markevich, A. and Harrison, M. (2011). Great war, civil war, and recovery: Russia's national income, 1913 to 1928. *Journal of Economic History* 71: 672–703.

Mazower, M. (1991). *Greece and the Interwar Economic Crisis*. Oxford: Clarendon.

Mitchell, B. R. (2007). *International Historical Statistics*. 6th ed. Basingstoke: Palgrave Macmillan.

Moorsteen, R. and Powell, R. P. (1966). *The Soviet Capital Stock, 1928–1962*. Homewood, IL: Richard D. Irwin.

Morys, M. and Ivanov, M. (2015). The emergence of a European region: Business cycles in South-East Europe from political independence to World War II. *European Review of Economic History* 19: 382–411.

Nikolić, S. (2018). Determinants of industrial location: Kingdom of Yugoslavia in the interwar period. *European Review of Economic History* 22(1): 101–133.

Pryor, F. L., Pryor, Z. P. and Stadnik, M. (1971). Czechoslovak aggregate production in the interwar period. *Review of Income and Wealth* 21, 35–59.

Rothenbacher, F. (2013). *The Central and East European Population since 1850*. Basingstoke: Elgar.

———. (2002). *The European Population 1850–1945*. Basingstoke: Elgar.

Schulze, M. S. (2007). Origins of catch-up failure: Comparative productivity growth in the Habsburg Empire, 1870–1910. *European Review of Economic History* 11(2): 189–218.

———. (2000). Patterns of growth and stagnation in the late nineteenth century Habsburg economy. *European Review of Economic History* 4(3): 311–340.

Turnock, D. (1986). *The Romanian Economy in the Twentieth Century*. London: Croom Helm.

Valge, J. (2003). *On the Threshold of a New Economy: Estonia's GDP 1923–1938* (in Estonian).

Vinski, I. (1961). National product and fixed assets in the territory of Yugoslavia 1909–1959. *Review of Income and Wealth* 9: 206–233.

8

ECONOMIC POLICY, 1918–1939

Nathan Marcus, Stefan Nikolić and Tobias Straumann

Introduction

Due to a number of extreme common shocks, the interwar years were challenging for all European countries. But the economic policies varied greatly, depending on economic factors as well as political and cultural traditions. To understand the specific experiences of Eastern European countries, one has to take three characteristics into account. First, with the exception of Austria and Czechoslovakia, the CESEE countries were much poorer and more agrarian than Western Europe. Thus the question of how to modernise the economy was much more salient for the East than for the West and, with the exception of the Soviet Union, involved the import of capital denominated in gold and foreign currencies, which created additional constraints. Second, nearly all CESEE countries were newly formed, enlarged, or curtailed after the First World War, while most Western European countries had been consolidated within their national borders for a longer period of time. CESEE countries were thus forced to direct great efforts towards forming a stable national economy and society and coping with population exchanges and minority issues. Third, nearly all CESEE countries shifted from liberal democracies to authoritarian regimes. In one country, Russia, the period even witnessed the emergence of a totalitarian state, with terror and mass murder being an integral part of the industrialisation strategy.

Given the specific conditions, the economic policies of the CESEE countries were geared towards building institutions, modernising the economy, and mitigating economic and political vulnerabilities. With the exception of the Soviet Union, they went through four phases between 1918 and 1939. In the immediate aftermath of the First World War, governments focused on relief and reconstruction, that is on reorganising trade relations, setting up a taxation system and a central bank, reducing inflation and stabilising the currency, bringing fiscal deficits

under control, integrating former alien goods, and in some cases, implementing agrarian reforms. In the second half of the 1920s CESEE countries focussed on fostering growth by importing foreign capital and imposing protectionist measures. During the height of the Great Depression, lasting from 1929 to 1932, nearly all of them introduced capital controls and turned their current account deficit into a surplus by raising import tariffs, subsidizing exports, and reducing their burden of foreign debt service; Greece also devalued its currency. Only one country, Poland, maintained the gold standard until 1936. In the second half of the 1930s, the last phase, the CESEE countries intensified their protectionist policies, pursued a more expansionary fiscal policy, and experimented with state-led industrialization.

As mentioned, the trend towards more interventionist policies between 1918 and 1939 was accompanied by a regime shift. One country after another installed some sort of authoritarian government, not least due to the difficult economic circumstances during the interwar years: Bulgaria, Hungary, Lithuania, Poland, and Yugoslavia in the 1920s; Austria, Estonia, Latvia, Greece, and Romania in the 1930s. Only Czechoslovakia remained a democracy throughout the whole period.[1] There was also an intellectual shift. In the beginning of the interwar years, most CESEE countries followed the intellectual tradition linked to the writings of the German economist Friedrich List (1789–1846). His main argument was that backwardness required protection, especially in foreign trade. In the 1930s, they went beyond the Listian approach by opting for the nationalisation of monetary policy, capital controls, clearing and trade agreements, and programs of state-led industrialisation.[2] They also established a form of corporatism that echoed the model of fascist Italy. Employers and workers were forced to become members of associations and unions that were controlled by the state. Yet, though moving towards comprehensive state intervention, the economic policies of the CESEE countries were still of a fundamentally different character than the experiment of the Russian Bolsheviks. After gaining power in the October Revolution of 1917, they embarked on a program of nearly total control of the economy. At the end of the 1920s, they nationalised all sectors of the economy, directed growth according to five-year plans, and decoupled the economy from the world, whereas all other Eastern European countries continued to allow for market forces, though strongly regulating them.[3]

The remainder of the chapter will spell out the common challenges and the different policies in more detail. In the first two sections, we describe and explain the economic policies adopted by the Eastern European countries in the 1920s and the 1930s. Thereafter, we deal with the Soviet experience. The chapter ends with a short conclusion.

Reconstruction and stabilisation (1918–1929)

The end of the First World War profoundly reshaped the political and economic map of Central and South-Eastern Europe. First, the Peace Treaties dismembered the Austro-Hungarian Empire and created five new states in its stead: Poland,

Austria, Czechoslovakia, Hungary, and the Kingdom of Serbs, Croats and Slovenes (later Yugoslavia). Second, the three Baltic republics (Latvia, Estonia, and Lithuania) were brought into existence. These new countries joined those already present in the region: Romania (which doubled in size), Bulgaria (which lost territory on all its borders), Albania (which was almost redone from scratch) and Greece (which traded territory and populations with Bulgaria and Turkey). Seeking to obtain a lasting peace, the victors not only forged new nation-states, but also brought to life the League of Nations, a multilateral body charged "to promote international co-operation and to achieve international peace and security."[4] Despite US isolationism, the League successfully mediated several territorial disputes during the 1920s but remained helpless as armed conflicts increased and member states deserted the organisation in the 1930s. The League considered economic prosperity a condition for peace and became engaged in the economic stabilisation of Eastern Europe right after the War.[5]

The First World War had left all the world's economies in disarray and exceptional destruction and loss of life across Central and South-Eastern Europe. Food shortages and the Allied blockade had caused starvation and, after the armistice, dying from malnutrition or epidemics continued. Bridges and railway lines lay broken or destroyed, factories had been run without attention to wear or renewal of machinery, and the countryside had been depleted of livestock. Pre-war patterns of trade were disrupted, and industrial and agricultural production kept falling, necessitating the import of food and capital stock. The new nation-states in Central and South-Eastern Europe, aiming for economic independence, had to grapple with transitioning production from wartime to a peace economy and with changes stemming from the reordering of populations and the new national borders that cut across trading and transportation routes. Industrialization and modernization were key, but lacking a solid tax base and the political will and administrative tools for direct taxation, the new governments would seek to borrow abroad to finance such large expenditures. In dire need of foreign capital to pay for repairs, new machinery, and foreign goods, their first aim was to stabilize their economies and new currencies.[6]

An early policy commonly adopted across the region, ostensibly to deal with economic challenges, were agricultural reforms. Many rural areas were dominated by large estates, often owned by members of national minorities, which were now confiscated, fragmented, and sold to small farmers. Motivated by fears of a Bolshevik revolution, they were primarily aimed at creating national cohesion and loyalty among peasant citizens of the new states (and thus rarely allocated land to national minorities).[7] Estonia and Latvia, where almost half the land was owned by a small number of Baltic German aristocrats, implemented the most wide-reaching reforms. Greece used them to settle about half a million refugee farmers in its new provinces. Czech and Yugoslav dispossessions also followed ethnic lines but affected only about one-tenth of landed property, and the restructuring of agricultural ownership in Hungary, Poland, Bulgaria and Albania remained relatively minor as well.[8] A more efficient agricultural sector might have helped provide the

economic surplus to pay for vital imports and investments, but overwhelmingly, agricultural reforms, even when they extended the amount of cultivated area, contributed little to the mechanization and modernization of farming.[9] Generally, the populist reforms tended to diminish agricultural productivity, partly because they questioned future property rights.

An international conference, held under League auspices in Brussels in the fall of 1920, charged financial experts, officials, and bankers to develop other ideas to bring about economic recovery. Across Europe, many governments still relied on inflation to finance expenditures. Subsequent currency depreciation made importing necessary raw materials, food, and new machinery difficult. Further, while inflation reduced much domestic debt, it also destroyed savings and made internal borrowing impossible. The conference pronounced three interlinked policy principles to stabilise currencies, end inflation, and benefit international trade and lending: national budgets had to be balanced and ordinary expenditures covered through taxation; inflation had to cease so that countries could return to the gold standard; and central banks had to be independent from national governments to uphold fixed exchange rates. The conference also evoked a declaration by the Allied Supreme Council from March that year, calling for the unhindered free flow of goods but with all its expertise devoted to monetary matters, it made no specific pronouncement on trade.[10] More than anywhere else in the world, it was in the capital-poor countries of Central and South-Eastern Europe that the League of Nations put Brussels' three principles into practice, helping countries issue loans on foreign capital markets in return.

In need of foreign capital, Central and South-Eastern European states adopted the three Brussels principles at the Genoa Conference of April 1922, but achieving currency stability proved easier than balancing state budgets (Table 8.1).[11] The League of Nations helped stabilise the currencies of many economies in the region, providing technical advice and facilitating the issue of foreign loans.[12] Albania welcomed a League of Nations financial advisor in 1923, but ended cooperation after a central bank was founded and public finances were reformed.[13] Loftier and more enduring economic interventions took place in Austria and Hungary that same year, where large budget deficits had translated into hyperinflation. The League insisted on balancing the budget and stabilising currencies, helping to float foreign loans for both countries in return. At the same time it became active in Greece, too, where following the 1923 Treaty of Lausanne 1.3 million refugees (about 25% of the existing population) needed to be resettled. The League helped Greece obtain a loan in 1924 and issue another in 1928, after the country pledged to balance a reduced budget and charged its reformed central bank to oversee currency stability. Estonia turned to the League in 1924, issuing a foreign loan in 1927 after it, too, had founded a national bank conforming to the Brussels recommendations. The League of Nations further helped issue a loan for Bulgaria in 1927 to assist in resettling its quarter million refugees, and a second in 1928, to strengthen Bulgarian currency stability, help it lower expenditures and balance the national budget.[14]

TABLE 8.1 Post-war currency stabilisations (year) and their value in percent of 1914 in Central, East and South-East Europe

Country	*Year*	*%*
Latvia	1921	0.8
Lithuania	1922	–
Austria	1922	0.00007
Czechoslovakia	1923	15.6
Bulgaria	1924	3.8
Estonia	1924	1.1
Hungary	1924	0.00007
Yugoslavia	1925	9.1
Poland	1926	0.000026
Romania	1927	3.0
Greece	1928	6.7

Sources: Rudolf Nötel, "International Credit and Finance" in M.C. Kaser and E.A. Radice, The Economic History of Eastern Europe 1919–1975, vol. II (Oxford: Clarendon Press, 1986), pp. 287–95. Derek H. Aldcroft, Europe's Third World: The European Periphery in the Interwar Years (Aldershot: Ashgate, 2006), Table, 3.1, p. 45. The Course and Control of Inflation (Geneva: League of Nations, 1946), pp. 92–3. C. H. Feinstein, P. Temin and G. Toniolo: "International Economic Organization: Banking, Finance, and Trade in Europe between the Wars" in Charles H. Feinstein (ed.), Banking, Finance, and Trade in Europe between the Wars (Oxford: Clarendon, 1995), Table 1.2, p. 24.

Other countries, some wary of the League's stringent conditions, managed to issue foreign loans and stabilise their currencies without its help. But they too ascribed primary importance to balanced budgets, independent central banks, and stable exchange rates. In 1922, the Czech government and Prague Municipality both issued a foreign loan with tranches in US dollars and pound sterling, giving Czechoslovakia a stable currency by 1923. Bulgaria successfully used foreign-exchange restrictions to introduce a stable paper currency in 1924, but in both countries budgetary deficits continued throughout the 1920s.[15] Yugoslavia achieved currency stability by mid-1925 through foreign exchange interventions, after floating a US dollar loan in New York in 1922 and French franc loan in Paris in 1924, maintaining budget equilibrium thereafter. Poland founded an independent central bank in 1924, issued an Italian lire loan that year and a US dollar loan the year after, but only achieved currency stabilisation and a balanced budget by autumn 1926. Latvia and Lithuania both established central banks in 1922, introducing new stable currencies after putting their budgets in order and accumulating foreign reserves, though they ran budget deficits towards the end of the decade. Political instability in Romania and Greece postponed stabilization of their currencies to 1927 and 1928, respectively.[16] The Greek government, ostensibly keeping a sound budget, engaged in opaque accounting practices that concealed expenditures, but in Romania, Austria, and Hungary, budgets were balanced by the mid-1920s and remained so thereafter. Stable exchange rates encouraged foreign borrowing and cross-border trade and helped economic production, but Czechoslovakia was the only country that managed to attain a net-creditor position through its exports.

The adoption of the Brussels principles in Central, Eastern and South-Eastern Europe, balanced budgets and independent central banks, largely ensured currency exchange-rate stability across the entire region during the second half of the 1920s.[17] Generally, foreign lenders and investors looked for balanced budgets and stable currencies when assessing a country's creditworthiness.[18] Reassured by successful currency stabilisations, large sums of foreign capital flowed to the region, largely from the United States and the United Kingdom, but also from France and other European countries. Roughly USD 1.3 billion poured into Eastern European states and enterprises during the 1920s, mainly as fixed-interest loans or short-term credits, but also in the form of investments and acquisitions. The sums necessary to service these foreign debts, both public and private, rose starkly from 1924 to 1929 and negatively impacted countries' balance of payments, posing difficult challenges for central banks aiming at upholding a currency peg (Table 8.2).[19]

Austria and Hungary acquired the heaviest foreign debt burden per capita. The Balkan states borrowed less in absolute terms, but still considerably in relation to the size of their economies, and so their foreign debt service requirements were substantial in light of their limited capacity to earn foreign exchange.[20] Especially Hungary, Poland, and Romania borrowed quite large sums in relation to their economies, too. Thus in 1928, the year foreign borrowing peaked, debt servicing as a percentage of export earnings stood at 17.9% in Hungary, 11.3% in Poland, 14.6% in Romania, and above 30% in Greece.[21] For these agricultural exporters, the general decline of crop prices during the second half of the 1920s would prove especially damaging, and Greece in particular faced constant balance-of-payment problems, despite its large remittances from nationals living overseas.[22] The Baltic states, redirecting their trade towards Germany and Britain, achieved manageable

TABLE 8.2 Annual foreign debt service requirements in 1924 and 1930

	1924			*1930*			*1924–1930*
	Million USD	*per capita*	*in percent of exports*	*Million USD*	*per capita*	*in percent of exports*	*per capita rise*
Austria	5.5	0.70	1.97%	39.9	5.07	15.05%	625.45%
Hungary	3.9	0.45	3.33%	35.2	4.05	22.11%	802.56%
Czechoslovakia	14.8	1.00	2.94%	19.6	1.33	3.79%	32.43%
Poland	12.4	0.38	5.1%	53.9	1.67	19.78%	334.68%
Bulgaria	3.6	0.60	10.06%	8.3	1.39	18.62%	130.56%
Romania	18.9	1.02	13.62%	32.8	1.77	13.59%	73.54%
Yugoslavia*	15.9	1.15	13.02%	23.3	1.76	19.53	65.34%

Source: Royall Tyler, The League of Nations Reconstruction Schemes in the Inter-War Period (League of Nations: Geneva, 1945), p. 157. Includes interest, and yield on securities and other investments, and in some cases also amortisation. Per capita figures for 1930 based on 1924 population sizes, too.

* Figures for Yugoslavia refer to 1926 instead of 1924 and are taken from Iancu Spigler, "Public Finance" in M.C. Kaser and E.A. Radice, *The Economic History of Eastern Europe 1919–1975*, vol. II (Oxford: Clarendon Press, 1986), pp. 287–95.

TABLE 8.3 Balance of payments of Central, East and South-East European countries, 1922–1930

	CZ	*HU*	*PL*	*BU*	*RO*	*YU*	*GR*	*EST*	*LAT*	*LIT*
1922					−8				+8	
1923			+20						+3	
1924		−14	−43	−2	−22	+19			−6	+9
1925	+15	−26	−126	−7	−49				−6	+1
1926	+57	−13	+91	−7	−46	−8			−5	+3
1927	+58	−26	−82	−4	−113	−23		+2	+4	+1
1928	+56	−89	−124	−7		−27		−2	+1	−1
1929	+22	−91	−68	−21		+13	−45	−2	−5	+5
1930	+42	−38	−3	−1		−35	−34	−2	+1	

Source: International capital movements during the inter-war period (United Nations, Dept. of Economic Affairs: Lake Success, NY, 1949), pp. 11–2.

current accounts. The situation turned worse after the US Federal Reserve raised interest rates and the 1929 crash on Wall Street dried up foreign liquidity. Apart from the Baltic states and Czechoslovakia, all the other countries faced a negative balance of payments and sudden transfer problem as the 1920s came to an end (Table 8.3).[23]

Balance-of-payment deficits and expanding money supply at a time when international capital markets were less prone to lend created a toxic concoction. The inevitable outflow of foreign currency had to eventually show up in central bank balance sheets, undermining public confidence in currency stability. Earning foreign currency from exports offered an alternative to foreign borrowing, and foreign trade had expanded across the region in the 1920s, but less than in some Western European countries.[24] The potential for growing trade between Bulgaria, Romania, and Yugoslavia seemed favourable in the 1920s as old trade relations persisted and bilateral trade flows between Austria, Czechoslovakia, and Hungary remained high.[25] However, in per capita terms, they never reached pre-war levels and the share of agricultural exports declined everywhere.[26] Generally, there occurred a redirection of Eastern European trade during the late 1920s towards Western Europe and the rest of the world, but regional trade still remained important.[27] Table 8.4 provides insights into these changing relations but gives no information about absolute importance.[28]

Among Wilson's Fourteen Points had been the call for a "removal . . . of all economic barriers and the establishment of equality of trade conditions" all around the world, but instead most new states followed national policies of autarky, aimed at becoming industrially independent. In general, they heavily taxed the import of industrial products to help the development of their own producers.[29] Despite the potential growth of cross-border trade, trade deficits remained quite large, with the exception of Czechoslovakia and perhaps Estonia. The situation was particularly precarious in Hungary and Greece, where in 1928 imports by far outweighed

TABLE 8.4 Change of reported imports from 1926 to 1929

		IMPORTING FROM													
		AU	*AL*	*BU*	*CZ*	*GR*	*HU*	*PL*	*RO*	*YU*	*EST*	*LAT*	*LIT*	*GER*	*IT*
IMPORTING COUNTRY	AU		315	−40	−14			17	20	−1		−64		49	−25
	AL	100			−34	−66				181					9
	BU	−11			30	−22	12	42	38	80				28	−14
	CZ	53		−14		4850	−14	5	28	−29		100	248		100
	GR		−27	−29	38		112		18	98				25	
	HU			36	7	633		20	38	86					103
	PL	−29		1017	58		−48		−27	−5		83		6	−24
	RO	−3		0	67	78	44	−38		−13				62	−51
	YU	−6	0	−55	−12	133	−22	137	−41					46	−1601
	EST													29	
	LAT	34			30			224					−11	29	
	LIT				41							−19		7	191
	GER	69		42		59	7	−21	322	−27	3	79	62		
	IT	−4	−11	−14	−24			185	−46	7			−99		

Source: Katherine Barbieri and Omar Keshk. 2012. Correlates of War Project Trade Data Set Codebook, Version 3.0. Online: http://correlatesofwar.org. *See*: Katherine Barbieri and Omar M. G. Keshk, and Brian Pollins. 2009. "TRADING DATA: Evaluating our Assumptions and Coding Rules" *in* Conflict Management and Peace Science, vol. 26/5, pp. 471–91.

Note: The pairs AU/GR, GR/AU, IT/HU and GR/IT produced conflicting data and were left empty. Other pairs left empty had no available data.

exports (in Austria a similar position was partially remedied through invisible exports from tourism and services).[30] But although protectionist tariff policies were cited as the culprit for a disappointing return of regional trade, the extent of protectionist measures differed considerably between states.[31] In 1927, potential tariffs of Hungary (29.9%), Austria (17.5%), Czechoslovakia (31.3%), and Yugoslavia (32.1%), were considered somewhat reasonable, while in Poland (53.5%), Romania (42.4%), and Bulgaria (67.5%) they were highly protective given that the average for Western and Northern Europe was 25.1%.[32]

Bulgaria, which exported tobacco, for instance considerably raised custom duties in 1924 to protect home industries, while in 1928 it extended the duty-free import for raw materials and equipment needed by domestic producers. Romania, a wheat exporter, similarly increased import duties most considerably in 1924 and 1927 to benefit its agricultural sector and nascent industries. Poland, which subsidised its coal and agrarian exporters, increased customs tariffs in 1924 and 1928, and Yugoslavia, which predominately exported cereals, fostered domestic production through waiving import duties on coal and certain industrial equipment. Greece protected its wheat growers and nascent industries like soap manufacturing

with tariffs, too. On the other hand, Czechoslovakia, an exporter of manufactured goods, exempted the import of machinery from customs duties in 1925 and though new customs moderately protected agrarians, its tariffs were not generally raised after 1922. Hungary, which had built up a manufacturing industry and launched new import substituting enterprises in chemicals, paper, and textiles, mainly exported wheat, flower, sugar, and meat. Due to the League's intervention program, both Hungary and Austria, the latter an exporter of manufactured goods, had abandoned all trade restrictions and their tariffs did not provide any preferential support for industries.[33]

Apart from protectionist customs, states relied on tax policy to support economic development, and because direct taxation in most states was politically not practical, balanced budgets relied heavily on tariffs and other indirect taxation. Levels of taxation were relatively high for the time and in many states designed to create and support industrial production, which hurt foreign trade.[34] More specifically, Bulgaria granted tax benefits to domestic firms and industries, further offering them reduced transport charges and preferential treatment in public contracts. Hungary similarly granted tax exemptions to facilitate domestic construction and the establishment of new factories, while offering cheaper railway rates to local producers. Czechoslovakia applied tax breaks for enterprises deemed nationally important or purchasing new industrial equipment, while Romania granted low rail charges and certain tax exemptions to non-Jewish Romanians and enterprises using domestic produce. In the Baltic states, all three governments adopted policies to promote agricultural production. In Yugoslavia, the state itself founded several industrial enterprises, providing help to others in form of subsidies, grants, tax exemptions, or freight reductions.[35]

Geared towards autarky and fostering home production, high tariffs and protectionist taxation harmed national economies by reducing the profitability of cross-country trade. An obvious remedy to the countries' balance-of-payment deficits would have been the expansion of exports, but League assistance addressed only budgets and currencies and its talks to facilitate economic collaboration were unsuccessful. After discussing their economic situation at a conference in Porto-Rosa (today Portorož) in 1921, Central European states failed to ratify a trade agreement.[36] The League's Council repeatedly called for normalizing international trade and commissioned several studies stressing the danger of autarkic policies in the Danubian region, but without effect.[37] The League's ultimate push for an international agreement to abolish trade restrictions and non-tariff barriers during the Geneva Economic Conference of 1927 faltered because not enough states ratified the agreement. In the words of Otto Niemeyer, the influential British member of the League's Financial Committee, failure to enforce free cross-border trade was the "Achilles' heel" of League interventions in the region and the League representative to Hungary would later term it as "perhaps the most powerful, of the reasons that caused the breakdown of the 1919–1920 Settlement in Central and South-Eastern Europe."[38]

TABLE 8.5 Trade deficit in percent of exports, 1919–1929

	AL	*AU*	*BU*	*CZ*	*GR*	*HU*	*PL*	*RO*	*YU*	*EST*	*LAT*	*LIT*
1919	−650	−93	−75	−6	−99	6		−33				25
1920	−1066	29	−35	15	−221	−154	−25	−102	−162	−14	−92	−31
1921	−813	−88	−6	20	−82	−105	−28	−93	−68	−98	−139	−65
1922	−305	−52	31	31	−24	−63	−29	12	−75	−16	−7	1
1923	−188	−71	−19	22	−137	−23	7	21	−1	−63	−16	−1439
1924	−67	−83	3	7	−146	−22	−17	7	14	−4	−51	23
1925	−27	−55	−17	6	−128	−5	−26	−4	2	0	−56	−4
1926	−109	−62	−11	14	−84	−9	31	3	2	1	−53	5
1927	−113	−51	8	11	−109	−43	−15	11	−14	9	−13	−8
1928	−160	−47	−13	9	−98	−45	−34	−17	−22	−3	−18	−13
1929	−170	−49	−30	2	−90	3	−11	−2	4	−5	−40	7

Source: Katherine Barbieri and Omar Keshk. 2012. Correlates of War Project Trade Data Set Codebook, Version 3.0. Online: http://correlatesofwar.org. *See*: Katherine Barbieri and Omar M. G. Keshk, and Brian Pollins. 2009. "TRADING DATA: Evaluating our Assumptions and Coding Rules" in *Conflict Management and Peace Science*, vol. 26/5, pp. 471–91.

The hurdles economic nationalism posed through protectionist taxation and high tariffs were serious and prevented cross-border trade from reaching pre-war levels in the 1920s.[39] But trade did not stop and economic performance throughout the region improved during the second half of the decade.[40] The largely agricultural economies were geared towards exporting primary products to pay for the import of machinery and capital goods, but tax subsidies and tariff protection exacerbated their lack of competitiveness. The more industrialised nations fought to find new foreign markets for their semi-finished and finished products in order to buy raw materials and pay for the importation of food and consumer goods. All countries needed to stimulate exports to earn the foreign exchange necessary for servicing foreign debt, but most state-driven infrastructure projects to modernize national railways, ports or invest in hydro-electricity showed little effect. Infrastructural development was costly and piecemeal, and while the share of industrial employment rose consistently across the region, it did so only slowly, and mainly in the cities.[41]

While the Baltic states had a largely stable balance of payments, the other countries of Central Europe, with the exception of Czechoslovakia, steered towards a potential transfer problem. Widespread trade deficits certainly spelled the potential for crisis and pointed to its possible remedy (Table 8.5). But despite the guiding hand of the League of Nations, the already sluggish pace of trade liberalisation was bogged down by national jealousies. As one historian put it, national "politicians' inability to take a broad view of the economic situation . . . their failure to understand the crucial importance of multinational initiatives" doomed the interwar settlement in Eastern Europe.[42] Thus on the eve of the Great Depression the outlook was not entirely bleak, but Europe's periphery remained economically weak, and

financially dependent on the West. As long as its countries ascribed to the gold-standard orthodoxies prescribed by the Brussels conference and preached by the League of Nations, they could not prosper without a continued recourse to foreign loans or a better access to (regional) export markets.

Depression and recovery (1929–1939)

The Great Depression profoundly altered the conditions under which CESEE countries had to conduct economic policies. Some have argued that 1931 marks "the definite turn to state intervention" (Ránki and Tomaszewski 1986, p. 22). Yet economic policies in CESEE were driven by necessity rather than choice. Foreign indebtedness limited monetary policy options and the loss of foreign reserves left the introduction of exchange controls as the only viable option for most CESEE countries if they were to keep honouring their foreign debt. Continuous scarcity of foreign exchange restricted international trade to operate mainly on a clearing basis. Fiscal policy space was limited and further diminished by the weak state of agriculture and industry that required government subsidies. Increased government intervention in CESEE – taking control of foreign exchange, strong regulation of international trade including import substitution policies, price controls, and cartelization – leads to a conclusion that economic policy of CESEE mainly differed from that of Western Europe during the 1930s. Still governments across CESEE influenced economic activity within a market economy and remained relatively open to the international economy. This contrasted with the policies of nationalization and autarky pursued by the Soviet Union.

Table 8.6 charts the depression and recovery in CESEE and rest of Europe during the interwar based on GDP per capita estimates. Column 1 reports the pre-depression peak year and column 2 the trough year. The Great Depression arrived in most Central, East and South-East European (CESEE) countries in 1929. The duration of economic downturn varied. The downturn lasted from two years in Greece to six years in Czechoslovakia. Column 3 reports the amplitude (i.e. the peak to trough decline) of GDP per capita. From 1929 to 1933, Poland lost a quarter of its income per capita. Greece was on the other extreme, experiencing a fall of almost 9 per cent. Peak to trough GDP per capita fell on average by almost 17 per cent in CESEE (almost 16 per cent if we count the first instead of the second dip of the depression in Bulgaria). The amplitude in the rest of Europe (ROE) – Belgium, Denmark, Finland, France, Germany, Italy, the Netherlands, Norway, Sweden, Switzerland, and the UK – was on average around 10 per cent. In this respect, CESEE was particularly hard hit by the Great Depression in comparison to the rest of Europe. As we discuss further later, one reason for this was high foreign indebtedness that constrained policy options in CESEE and in so doing prolonged the downturn. The last two columns depict the heterogeneous recovery process in CESEE. Greece recovered the fastest, surpassing its pre-depression peak already in 1933. On the contrary, several countries did not reach full recovery by the end

TABLE 8.6 Depression and recovery according to GDP per capita developments, CESEE and rest of Europe during the interwar period

	Peak year[1]	*Trough year*	*Amplitude (%)*[2]	*Recovery year*[3]	*GDP pc 1938/ peak year*[4]
Germany	1929	1932	−24.62	1936	1.20
France	1929	1932	−16.12	n.a.	0.94
UK	1929	1932	−6.19	1934	1.13
Poland	*1929*	1933	−24.87	1938	1.03
Austria	1929	1933	−23.53	n.a.	*0.85*
Czechoslovakia	1929	1935	−21.12	n.a.	*0.94*
Yugoslavia	1929	1932	−17.08	n.a.	0.99
Bulgaria	1927	1929	−6.01	1930	1.27
	1931	1935	−14.93	1936	1.10
Romania	1927	1930	−13.38	1934	0.98
Hungary	1929	1932	−11.43	1936	1.08
Greece	*1929*	1931	−8.92	1933	1.14
CESEE avg.			−16.91		
ROE[5] avg.			−10.39		

Source: Broadberry and Klein (2012)

Notes: [1] Interwar data on Greece and Poland starts from 1929. [2] Peak to trough decline of GDP per capita in per cent. [3] Interwar year in which previous peak was reached again; n.a. – if outside interwar. [4] Interwar data on Austria and Czechoslovakia end in 1937. [5] ROE – rest of Europe comprising 12 Western European countries given in Maddison (2003) excluding Austria.

of the interwar. Austria recovered the least. By 1937 Austria was still 15 per cent below its pre-depression peak.

Economic policy played a central role in the process of depression and recovery in Europe in the 1930s. The standard account stresses the abandoning of the gold standard as the crucial step in economic policy that contributed to the end of the Great Depression (Feinstein et al. 2008, p. 93). Countries that left the gold standard had their monetary and fiscal policies freed from "golden fetters" (Eichengreen 1992). Countries with depreciated currencies (e.g. the UK) enjoyed faster economic recovery than countries that remained on gold (e.g. France) (Eichengreen and Sachs 1985). Leaving the gold standard was an economic policy forced by economic forces – reserve losses, banking crises, main trading partner currency devaluation, unemployment, and deflationary pressure (Wolf 2008, pp. 398–399; Straumann 2009, p. 616), as well as political instability (Wandschneider 2008, pp. 175–176). The effects of fiscal policy on recovery were minor due to the limited use of deficit spending (Almunia et al. 2010, pp. 234–235; Feinstein et al. 2008, p. 131). Protectionism led to "beggar-thy-neighbour" policies that impeded foreign trade and harmed economic recovery (Eichengreen and Sachs 1985; Irwin 2011). How do economic policies pursued by CESEE countries fit into this

TABLE 8.7 Dates of policy measures affecting exchange rate regimes, CESEE during the 1930s

Country	*Introduction of exchange control*	*Depreciation or devaluation in relation to gold parity*	*Official suspension of gold standard*
Hungary	July 17, 1931	n.a.	n.a.
Greece	September 28, 1931	April 1932	April 26, 1932
Czechoslovakia	October 2, 1931	February 1934; October 1936	n.a.
Yugoslavia	October 7, 1931	July 1932	n.a.
Latvia	October 8, 1931	September 1936	September 28, 1936
Austria	October 9, 1931	September 1931	April 5, 1933
Bulgaria	October 15, 1931	n.a.	n.a.
Estonia	November 18, 1931	June 1933	June 28, 1933
Romania	December 18, 1931	November 1936	n.a.
Lithuania	October 1, 1935	n.a.	n.a.
Poland	April 26, 1936	n.a.	n.a.

Sources: Bulgaria: (Dimitrova and Ivanov 2014, pp. 202–203); Greece: (Lazaretou 2014, p. 127); Romania: (Stoenescu et al. 2007, pp. 247, 254); Yugoslavia: (Hinić et al. 2014, pp. 297–298); Austria (League of Nations 1934, p. 206, Table 101); other countries: (League of Nations 1940, pp. 194–195, Table 101)

conventional view on depression and recovery in the 1930? How and why did economic policy of CESEE countries differ from Western Europe?

Table 8.7 documents the dates of policy measures affecting exchange rate regimes in 11 CESEE countries during the 1930s. It reports when countries imposed exchange control, depreciated or devalued their currency in relation to gold parity, and officially left the gold standard. Over the course of the 1930s, 11 CESEE countries resorted to exchange control. Nine countries – Hungary, Greece, Czechoslovakia, Yugoslavia, Latvia, Austria, Bulgaria, Estonia, and Romania (in that order) – did so by the end of 1931. Greece followed the sterling bloc and devalued its currency early. Poland followed the gold bloc and stayed on gold until 1936. What explains these different policy choices?

Foreign indebtedness forced many CESEE countries to impose exchange controls without formally abandoning gold. For all CESEE countries except Czechoslovakia, currency devaluation was not readily available given the high levels of foreign denominated sovereign debt. While devaluation may have improved international competitiveness, it would have necessitated a larger amount of domestic currency to acquire foreign exchange in order to service foreign debt. Having a large share of debt denominated in French francs and/or debt with gold clauses only worsened the debtor's position. Unlike the pound or the dollar, the franc did not devalue in the first half of the 1930s. And having the gold clause meant debt was to be repaid in gold or its equivalent even if the currency in which the debt was denominated was devalued.

Staying on gold required that the stipulated cover ratio (central bank gold and foreign exchange reserves relative to monetary base) be maintained. This proved increasingly hard in the second half of 1931 due to losses of central bank reserves (Nikolić 2017). Exchange controls were an effort to defend fixed exchange rates and stop the drain on reserves (Ellis 1941, pp. 878–879). Exchange controls were, however, insufficient to stop capital outflows from Greece. Only seven months after introducing exchange controls, Greece devalued its currency and officially left the gold standard. Despite suffering severe losses of central bank reserves and a banking crisis, Poland was able to stay on the gold standard given its large cover ratio (Nikolić 2017). Poland's "strategic partnership" with France also played a role (Wolf 2007, 2008).

How did the different monetary policy choices affect the recovery from the depression of CESEE countries? All else equal, for two countries at the extreme the relation seems clear – Greece devalued early and recovered faster than Poland, which remained on gold until 1936. For other countries that imposed exchange controls the picture looks more complicated. As Table 8.7 shows, some of these countries indeed officially devalued their currencies at certain points of the 1930s. Moreover, all of them relied on a so-called premium system to make their exports more competitive internationally.[43] Indeed, currency depreciation in the 1930s took many forms (Eichengreen and Sachs 1985, p. 931). Nevertheless, judging by the belated or incomplete recovery of the exchange control group, this practice seems to have been sub-optimal to official devaluation.

The imposition of exchange controls across CESEE during the 1930s had serious implications on the way these countries conducted international trade. The introduction of exchange controls involved concentrating all foreign exchange transactions at the central bank (Ellis 1941). With each transaction involving foreign currencies being supervised by the state, governments were effectively put in charge of international trade. Faced with the problem of foreign exchange scarcity, CESEE countries increasingly relied on trade through clearing – a system of international trade that reduced the need for foreign currency. Clearing arrangements allowed for a more or less reciprocal exchange of goods between countries with foreign exchange being required only at the end of the year when outstanding balances were being cleared (Ránki and Tomaszewski 1986, pp. 27–29). In Bulgaria, Hungary, and Yugoslavia, as much as 70 per cent of entire trade was conducted on a clearing basis already by 1932–1933, while Poland and Czechoslovakia resorted less to this practice during the 1930s (Drabek 1985, pp. 451–452).

Regulation of trade opened the way for protectionist trade policy that went far beyond the measures of the 1920s (Ránki and Tomaszewski 1986, p. 29). CESEE countries made use of their control over international trade by reducing the share of consumer goods and final manufactures in imports (Drabek 1985, pp. 460–465). Reduced imports of finished goods opened a larger share of the home market to domestic producers. Thus import substitution policies were directed at limiting the outflow of foreign exchange and improving the balance of trade but at the same

time also to protecting domestic industries. In this way, exchange rate, trade, and industrial policy were closely related.

While using protectionist economic policy during the 1930s, the CESEE countries did not turn to autarky. Table 8.8 shows the developments of the openness ratio – exports plus imports as share of GDP – for eight CESEE countries for 1929, 1933, and 1937. During the depression trade fell more vigorously than production (Kindleberger 1986; Feinstein et al. 2008, 93–97) and accordingly the openness ratio of CESEE countries declined. From 1933 to 1937, the openness ratio increased. This shows that trade played an increasing role towards the end of the interwar. In South-East Europe, vast improvements in transport infrastructure promoted trade and outweighed the negative effects of protectionism (Morys and Ivanov 2015, p. 497). Still, with the exception of Romania, CESEE openness ratios did not recover to their 1929 levels.

How large was fiscal policy space in CESEE during the 1930s? Production and trade were greatly reduced during the Great Depression (Feinstein et al. 2008, pp. 93–97). This led to a drop in government revenues across Europe. Faced with budget deficits, CESEE governments were reluctant to cut spending (Spigler 1986, p. 128). Insofar as continued spending could not be met by increased taxation, closing budget deficits entailed borrowing domestically or abroad. The collapse of international long-term lending came in 1931 (Accominotti and Eichengreen 2015). With the financial crisis of 1931 depleting already low domestic savings, instead of issuing bonds on the domestic capital markets, for the most part CESEE governments turned to the treasury for funds to finance pressing needs. For South-East European countries faced with continuous budget deficits, debt monetisation became the norm (Morys 2015, p. 24).

Most CESEE countries defaulted on their foreign debt in the course of the 1930s. Decrease of exports and foreign exchange earnings, increased government subsidies, and a wanting reduction in the sizeable share of government expenditures

TABLE 8.8 Exports plus imports as share of GDP (openness ratio), CESEE 1929–1937

	1929	*1933*	*1937*[1]
Austria	45.1	21.3	27.2
Bulgaria	26.2	14.2	21.5
Czechoslovakia	43.3	16.3	27.1
Greece	62.5	35.4	43.8
Hungary	32.7	15.6	20.0
Poland	22.8	13.0	*15.5*
Romania	21.8	15.0	22.0
Yugoslavia	25.9	17.3	25.6

Sources: GDP data for Czechoslovakia, Hungary, and Poland from (Lethbridge 1985, p. 550), Eckstein (1955 p. 165), and (Lethbridge 1985, p. 571) respectively. Trade data are from Mitchell (2013). Openness ratio of other countries from (Morys and Ivanov 2015, p. 397).

Note: [1] Openness ratio for Poland refers to 1936.

committed to foreign debt service made it increasingly difficult for CESEE countries to service their foreign debt. The concentration of foreign exchange transactions at the central bank as part of exchange control policy meant that countries that introduced exchange controls effectively prohibited foreign payments and made the government the mediator between domestic debtors and foreign creditors. In many cases, however, even taking control over foreign exchange proved insufficient in gathering enough foreign currency to keep servicing foreign debt. According to the League of Nations (League of Nations 1936, pp. 298–303) and subsequent research (Ellis 1939, pp. 53, 91; Gnjatović 1991, p. 172; Dimitrova and Ivanov 2014, p. 221; Hinić et al. 2014, p. 298; Lazaretou 2014, pp. 102, 123, 131; Stoenescu et al. 2014, pp. 247, 273), the following CESEE countries partially or fully defaulted on their foreign debt: Hungary in December 1931, Bulgaria in April 1932, Greece in May 1932, Austria in July 1932, Yugoslavia in October 1932, and Romania in August 1933.

The reduction in the foreign debt burden and increased budget revenues opened more fiscal policy space. The reduction in foreign debt was a result of defaults, debt conversions, and the devaluation of the dollar (Spigler 1986, p. 146; Nötel 1986, pp. 261–264). Increasing budget revenues came along with economic recovery. Increased fiscal policy space was used for public works and defence programmes (Ránki and Tomaszewski 1986, pp. 40–48). CESEE governments were able to fund productive infrastructure projects such as building new roads and railways but also to engage in "frantic rearmament" (Hauner 1986, p. 49) needed to defend their newly established independence. By the end of the interwar CESEE countries had developed a much improved infrastructure that was nevertheless still far behind that of Western Europe (Ehrlich 1985, p. 369). No doubt both light (e.g. food and textiles) and heavy industries (e.g. metals and machinery) benefited from the demand produced by government spending. But it is unclear to what extent this translated into economic growth.

Poor economic conditions, aggravated by the Great Depression, contributed to the rise of economic nationalism. While starting the interwar period as democracies, most European countries and all CESEE countries succumbed to some form of authoritarian rule by the end of the interwar (Aldcroft 2006, pp. 15–16). Authoritarian rule made it easier to conduct nationalist economic policies. Economic nationalism in CESEE included exchange controls, protectionism, import substitution, and state promotion of agriculture and industry (Batou and David 1998, pp. xviii–xix). These policies aimed to open up space for political manoeuvre and reduce relative economic backwardness, and were a consequence of the Great Depression and overall external conditions rather than based on a preconceived and clearly defined ideology (Kofman 1990, pp. 49–54).

Economic nationalism gained increasing momentum in the 1930s (Aldcroft 1998, p. 131), but was not exclusive to this period. Nostrification policies – transfer of real and financial assets from foreign to domestic owners under the legislative process (Teichova 1985, p. 6) – were pursued already in the aftermath of the First World War and the 1920s. Agricultural reforms, discussed in the previous section,

are one example. The purchase of shares in enterprises and banks from their foreign owners is another. Nostrification was also conducted without necessarily changing the ownership structure, by substituting the "domestic" (ethnic majority) workforce for "alien" nationals (ethnic minorities) on all levels – from the board of directors to unskilled workers (Boyer 2000, p. 272; Koll 2000, p. 367).

The increasing role of the state in CESEE during the interwar did not, however, lead to the emergence of Western-type welfare states. During the 1930s the share of CESEE budget expenditure captured by government spending on public health and social welfare as well as education remained more or less constant (Spigler 1986, pp. 167–169). It is therefore hard to argue that CESEE participated in the acceleration of social spending recorded in developed economies during the interwar (Lindert 2004). Nevertheless, CESEE governments did implement a set of welfare policies intended to alleviate the negative effects that the fall in prices of agricultural produce had on these predominantly agrarian economies. For example, governments set up institutions that would purchase goods from agricultural producers above market prices. Further, laws were introduced that allowed peasant debt to be rescheduled, partially or completely written off, or even taken on by the state. Finally, governments supported the creation of cartels across several industries (especially in food processing) with the aim of stabilising prices at a higher level (Ránki and Tomaszewski 1986, pp. 22–25, 30–31).

Russia and the Soviet Union (1917–39)

Though most CESEE countries moved towards authoritarianism and state-interventionism, it would be wrong to liken them to the Bolshevik experiment launched in the aftermath of the October Revolution of 1917.[44] Convinced that backward Russia needed to overcome the capitalist system in order to become a rich and powerful nation, the revolutionaries brought the economy under nearly total control of the government. As Ellman (2014) points out, socialist planning "originated in a backward country, and its major purpose was to propel the countries which adopted it into the ranks of the advanced countries."[45] The most influential thinker who used Marxism to develop a new theory was Vladimir Lenin (1870–1924), the leader of the Bolsheviks. He was convinced that Russia needed full nationalisation and a dictatorship in order to catch up.[46] The Bolshevik leadership did not have a blueprint when they started their experiment, however. As Lenin explained in April 1918: "We know about socialism, but knowledge of organisation on a scale of millions, knowledge of the organisation and distribution of goods, etc., – this we do not have."[47]

First steps towards government control of the economy were taken shortly after the October Revolution. According to Harrison (2016), three crucial elements of the command system were established: the principle of unconditional confiscation of private property, the control of industrial supply, and the control of food produce that was judged to be surplus to the farmers' own basic consumption. As became the rule, economic policies were always closely linked to political goals.

The confiscation of private property weakened the enemies of the revolution and helped secure the support of important segments of the population, especially in the countryside. Further measures in the early stage of the Soviet experiment were the nationalisation of industry and banking, the establishment of state monopolies over domestic trade in foodstuffs and foreign trade, and the takeover of management of large manufacturers and transport. Finally, in order to avoid a revolt by workers and soldiers, the Bolshevists took over the distribution of food by using violence against farmers and traders.[48]

The command economy was further strengthened by measures taken during the civil war that escalated in early 1919 and lasted until late 1922. The government nationalised the whole industrial sector down to the smallest units and monopolised all domestic trade. Government control of industry was enlarged to producers of intermediate goods, and farmers were forced to cede food that was not needed for subsistence. The command economy was not fully realised yet, but at this point Bolshevik economic policies had gone far beyond any historical experience. Even Germany's economic policies during the war were much less intrusive. The nationalisation and control of a large part of the economy and the use of violence were unprecedented and formed an important basis for the shift to a command system that, beginning with the launch of the first Five-Year Plan in October 1928, consisted of the five elements: nearly complete nationalisation of all economic sectors, collectivisation of agriculture, central planning, rapid industrialisation by the means of five-year plans, and decoupling from the world economy.

The road to the first Five-Year Plan was not predetermined, however. The first attempt to form a command economy and the civil war of 1919–1920 precipitated famine and a monetary and economic collapse, leading the Bolshevik leadership to change course and to opt for the New Economic Policy (NEP) in 1921. The NEP allowed for market mechanisms under the umbrella of socialism and consisted of a peculiar mixture of private and public elements. The land remained nationalised (since November 1917), but agriculture was controlled by the peasants. Fuel, heavy industry, railways, foreign trade, and the financial system – the "commanding heights" of the Russian economy – were still in the hands of the Bolshevik government; the rest, in particular agriculture, crafts and domestic trade, were left to private firms. Most importantly, state control was replaced by market transactions across and between the economic sectors. In addition, the NEP encouraged foreign trade and stabilised the currency.[49]

The new regime achieved its ultimate goal, namely to reinvigorate the economy. By 1928 real national income had climbed back to the level of 1913 – corresponding to an increase by more than 150 percent relative to 1921.[50] Nevertheless, Stalin ended the experiment in 1928. Gregory and Stuart (2001) cite four reasons.[51] First, the NEP had always been considered a temporary regime, as the private and market elements contradicted the core of Marxist-Leninist theory. Second, the NEP strengthened private traders (*nepmen*) and prosperous farmers (*kulaks*) who were seen as threats to economic and political stability. Third, the Bolshevik leadership feared that the NEP had reached its potential and was based on an outmoded

capital stock. New capital accumulation was needed. And finally, the NEP was seen as a straitjacket for a coordinated industrialisation effort. In sum, ideological motives as well as political and security considerations were at the forefront of the decision.[52]

Originally, the Bolshevist leadership was divided on the question of whether or not to end the NEP. Roughly speaking, there were two sides in the debate that started after Lenin's death in 1924. The left side, led by Leon Trotsky, advocated an ambitious industrialisation strategy and the expropriation of prosperous peasants (kulaks). The other side favoured a continuation of the NEP and a rapprochement with the capitalist world. Its most important proponent was Nikolai Bukharin, the editor of the party paper *Pravda*. Joseph Stalin, general secretary of the Communist Party since 1922, first sided with the moderate view and expelled leftist proponents, most notably Trotsky, but then shifted his position and removed the group of Bukharin and his followers. By manoeuvring from one side to the other, Stalin succeeded in consolidating his power, while changing his ideological outlook. Politics and policy were closely intertwined.

Stalin did not simply adopt a well-formulated plan, but went beyond the ideas developed in the mid-1920s.[53] The first Five-Year Plan launched in October 1928 defined output targets for each year, both for economic sectors and individual firms. Profits, prices, and interest rates were secondary, and firms were not constrained by bank credit. The bulk of investment went into heavy industry and machinery production, thus creating a supply that was not dictated by consumption, but by the goal to accumulate capital in order to meet future needs, including for military use. And once the plan started, the Soviet authorities always increased the targets in order to accelerate production.

In the course of the first Five-Year Plan, Stalin proceeded to the collectivisation of the agricultural sector. Sanctioned by the decision of the Central Committee of the KPSU in November of 1929, the government forced all peasants to cede their land to collective farms (*kolkhoz*). By the end of the 1930s more than 90 per cent of the peasant households were collectivised.[54] The immediate reason for this decision was a shortage of grain that Stalin falsely blamed on the kulaks. The collectivisation together with forced savings allowed the government to use the agricultural surplus to sell it to foreign markets, thereby obtaining the means to finance industrialisation. The tight control of the peasantry also made it easier to bring part of the inefficient employee population in the countryside move to the industrial cities. The second and third Five-Year Plans, launched in 1933 and 1938, respectively, continued the path opened by nationalisation and collectivisation.

How successful was Stalin's industrialisation strategy? First and foremost, there is no doubt that the human toll was enormous. According to Livi-Bacci (1993), the collectivisation famine in 1932–33 cost between 6 and 13 million lives, predominantly in the Ukraine. The purges of the 1930s led to nearly a million killed citizens. Millions were deported to the gulag. The industrialisation strategy required a political system that was totalitarian and in many ways inhumane.

Economic and political control were two sides of the same coin.[55] As for the success in economic terms, there are two different camps. According to Allen (2003), "big push industrialisation" was the only realistic option that was available to Russia at the time.[56] A more gradual approach would not have removed the traditional bottlenecks – the low productivity of handicraft production and small-scale agriculture – that had hampered industrialisation. Allen also claims that between 1928 and 1940 Soviet GDP increased by 85 percent, the urban standard of living improved, and income per head of peasant household were not lower at the end of the 1930s than in 1928 (i.e. before collectivisation started). And thanks to mass schooling, human capital was upgraded. For these reasons, Allen considers Stalin's forced industrialisation successful.

This view has been challenged by a number of scholars. Ellman (2004) questions the idea that politics and economics can be separated when it comes to measuring living standards in the 1930s. Some urban dwellers may have had a higher living standard in 1937 than in 1928, but 1937–1938 were also the years of mass state terror. About a million people died, more than a million people were sent to the gulag, bringing misery to their families, and about 200,000 people were deported. Ellman is also sceptical about Allen's estimates demonstrating that rural per capita consumption in 1938–1939 was not lower than in 1928, although the collectivisation had brought famine and hardship. Applying a two-sector neoclassical growth model to Russian economic history, Cheremukhin et al. (2017) reject Allen's claim that Tsarist agricultural institutions were a significant barrier to labour reallocation to manufacturing, or that "big push" mechanisms were a major driver of Soviet growth. Thus, the jury on the potential economic merits of socialist industrialization strategies is still out.

Conclusion

The interwar years saw important economic policy changes in Eastern Europe. The most radical shift occurred in Russia after the October Revolution of 1917. Following a brutal civil war and the interlude of the NEP, the Bolshevists under the leadership of Joseph Stalin almost entirely nationalised the economy, pushed industrialisation on the basis of five-year plans, and decoupled the country from the world market, resulting in a human toll unheard of. The changes in the other Eastern European countries were less radical than in the Soviet Union but also profound. Whereas the pre-war era was dominated by liberal economic policies, the interwar years witnessed growing state interventionism and economic nationalism. In the 1920s, governments experimented with tariffs and tax subsidies in order to protect domestic sectors and foster exports. In the 1930s they introduced capital and exchange controls, devalued their currencies, reneged on their foreign debt, regulated foreign trade, and initiated industrial policies. Measured against the difficult starting point after the First World War, the economic policies of the CESEE countries were successful. At the end of the 1930s, GDP per capita levels were everywhere higher than in

1918. On the other hand, circumstances proved too challenging to allow these countries to escape from their peripheral status. The divide between East and West persisted throughout the period.

Notes

1 See e.g. Møller and Skaaning (2014, p. 6) for an overview of political regime change.
2 See David (2009, pp. 199–200), following Szlaifer (1990), Kofman (1997), and Stemplowski (1990).
3 Gerschenkron (1962, p. 28).
4 Preamble to the League of Nations Covenant, see Northedge (1986).
5 Patricia Clavin showed that the severe hunger catastrophe that haunted Central Europe during the first post-war winters convinced League officials that to safeguard peace they had to occupy themselves with economic reconstruction. Clavin (2013).
6 Many of the new political borders seem to have followed older economic fractures, ethnic or linguistic, so that their adverse effect on trade might have been no larger than that of the previously existing barriers. Wolf et al. (2011). Heinemeyer (2007). Ranki and Tomaszewski (1986, p. 6).
7 Berend (1985, pp. 152–162). Müller (2015, p. 190).
8 Müller (2015, pp. 184–185.
9 Walters (1988, p. 153).
10 Tyler (1945, pp. 11–12).
11 Aldcroft (2001, p. 30). Fink (1993, pp. 232–252).
12 Most of the League's financial and economic work was directed towards Central, Eastern and South-Eastern Europe. On this see foremost Clavin (2013). Flores and Decorzant (2016).
13 Spigler (1986, pp. 117–169, 118, 287–295).
14 Tyler (1945, pp. 74–75, 109–110, 132–137). We leave out Danzig, which had become a Free City under the protection of the League of Nations, from this analysis.
15 Spigler (1986). For the data see League of Nations, *International Statistical Yearbook* (Geneva: League of Nations), 1926–1929 and *Statistical Yearbook of the League of Nations 1930/31* (Geneva: League of Nations, 1931).
16 Meyer (1970), Nötel (1986, pp. 287–295), and Aldcroft (2006, pp. 94–105).
17 Not all of them were formally independent, but all aimed at holding exchange rates stable. The Yugoslav central bank, established in 1920 was under government control and British demands to grant it independence in 1928 were refused. The prewar Romanian National Bank remained under heavy government influence, but the Polish central bank established in 1924 remained independent until the Great Depression, as did the Czech National Bank founded in 1925. The Austrian and Hungarian central banks, established as parts of the League intervention, were independent from government, and the Bulgarian National Bank gained full autonomy in 1927 in preparation of its League Stabilisation loan of 1928. Also in 1928, Estonia established a new central bank and currency and the Bank of Greece began its function. Spigler (1986, pp. 146–148). Tyler (1945, pp. 80, 109, 135).
18 Radice (1985, pp. 23–65, 40–41).
19 Feinstein et al. (2008, pp. 77–92).
20 Lampe (2014, pp. 7–28).
21 Bulgaria 12.3% and Yugoslavia 18.1%. Aldcroft (2006, p. 55).
22 Greek net foreign liabilities had by 1930 grown to $20 million per annum, amounting to more than $3 per capita. The Greek state debt service was well matched by capital inflows, but left the large trade deficit uncovered. Aldcroft (2006, p. 55). Lampe and Jackson (1982, pp. 386, 428, 512). Radice (1985, pp. 23–65, 39–40).
23 US capital issues for foreign accounts fell from $841 to $409 million between the first and second halves of 1928. Between 1928 and 1929 new issues for account of the six

largest borrowers (Germany, Japan, Australia, Argentina, Brazil, and Colombia) fell from $570 to just $52 million. Aldcroft (1977, pp. 261–267).

24 In 1929, global trade as a share of GDP was 68% of what it had been in 1913. Estevadeordal, Frantz and Taylor (2003, p. 395). Drabek (1985, pp. 379–531, 402). As pointed out by Radice (1985, p. 35), it would be wrong to view the Austro-Hungarian customs area before 1914 as a unified, economic space, but besides the Baltics, Bulgaria, and Albania, all countries were grappling with trade problems arising from its breakup.

25 In 1925, the Danubian states (Austria, Czechoslovakia, Hungary, Romania, and Yugoslavia) were importing less from outside the confines of the former Austro-Hungarian Empire than before 1914. The Baltic States had directed their exports to Germany and Great Britain, and by 1927 over 60 per cent of Estonian and Latvian exports went to these two countries. For Lithuania this figure was above 75 per cent. Aldcroft (2006, p. 105). Tyler (1945, pp. 94, 140–141, 150–155). Ménil and Maurel (1994, p. 564). Paslovsky (1928, p. 565).

26 Drabek (1985, pp. 379–531, 406).

27 Nautz (1992). de Ménil and Maurel (1994).

28 On the Balkans, compared to 1906–1910, export figures for 1926–1930 had risen by 47 per cent in the case of Bulgaria, 45 per cent for Greece, and 61 per cent for Yugoslavia, even though in Romania they were 26 per cent lower. The corresponding import figures were +27 per cent for Bulgaria, +124 per cent for Greece, +104 per cent for Yugoslavia and −13 per cent for Romania. However, these figures do not take account of important territorial adjustments. Yugoslav figures are matched with those of pre-war Serbia, Greater Romania's with those of the Old Kingdom. In the case of Bulgaria, which lost territory, these figures are more informative. Lampe and Jackson (1982, p. 343). Trade relations beyond the region improved, too: e.g. Austrian exports to Germany rose by 62 per cent, to France 187 per cent, to Britain 35 per cent, to Russia 594 per cent and to the United States by more than 300 per cent. Nautz (1992, pp. 539–359).

29 Walters (1988, p. 154).

30 Only Albania was in a worse position than Greece. The Greek trade deficit could not be covered by remittances from émigrés or invisible exports. After its new central bank began operation in late 1928, Greek foreign reserves diminished by 25 per cent in 1929, a trend made worse by capital flight the following year. Hungary, a typical agrarian producer, faced difficulties servicing its $700 million foreign obligations when the fall in prices of primary products reduced exports. Poland, Yugoslavia and Bulgaria feared similarly. Tyler (1945, p. 94). Feinstein et al. (2008, p. 36).

31 The pre-war overall average, excluding the Austro-Hungarian Empire, had been 28 per cent. Tyler (1945, p. 32).

32 See de Ménil and Maurel (1994, pp. 555–575).

33 Diamond (1941, pp. 250–269). Mazower (1991, pp. 44, 87, 97). Pryor and Pryor (1975, pp. 500–533). Ránki and Tomaszewski (1986). Spigler (1986, pp. 123–124, 163–165).

34 Spigler (1986, p. 165).

35 Ránki and Tomaszewski (1986, pp. 3–48). Bandera (1964, p. 65). Spigler (1986).

36 "Protocols and Agreements Concluded at the Portorose Conference, November, 1921," *International Conciliation* 176 (1922, pp. 252–312). Fink (1993, pp. 247–248), Hertz (1947) and Berend and Ránki (1969). Drabek (1985, p. 410).

37 Thus in 1925, the so-called Layton-Rist Report noted that Austria could not fully recover until "the tariff barriers of Central Europe are appreciably reduced." Austria, prevented from joining Germany by international treaties in fact looked favorably upon the establishment of a Danubian economic union, but its sentiments were not shared. Hungary was governed by irredentism, which led it to embark on a policy of autarky. The Little Entente – Czechoslovakia, Romania, and Yugoslavia – while threatened by Hungarian revisionism, were equally opposed to a return of Austrian hegemony. Layton and Rist (1925).

38 Bank of England Archives OV 9/394: Niemeyer to Salter, 2 Mar. 1925. Tyler (1945, p. 21). Abdelal (2002, p. 905).

39 Findlay and O'Rourke (2007, pp. 429–472).
40 Radice (1985, pp. 23–65, 45–47).
41 Ehrlich (1985, pp. 323–378, 329–336). In 1920, about 75 per cent of the Polish population was engaged in agriculture (i.e. peasants), but 20 years later that figure had dropped to 60 per cent. See Walters (1988, p. 181).
42 Walters (1988, p. 152).
43 A premium was paid above the official exchange rate when converting hard foreign currency into domestic currency. In this way CESEE exports were made cheaper to importers paying in foreign currency without officially changing the exchange rate. On the other hand, imports were made more expensive as more domestic currency was needed to acquire foreign exchange required for imports (Ránki and Tomaszewski 1986, p. 28).
44 For an overview of the period, see Nove (1982), Hunter and Szyrmer (1992), Davies, Harrison and Wheatcroft (1994), Gregory and Stuart (2001), Ellman (2014) and Harrison (2016).
45 Ellman (2014, p. 4).
46 On the ideas underlying the Bolshevist experiment, see e.g. Barnett (2004).
47 Session of the All-Russian Central Executive Committee of 29 April 1918, cited in Ellman (2014, p. 2).
48 Harrison (2016, pp. 9–11).
49 Johnson and Temin (1993).
50 Markevich and Harrison (2011, p. 680), table 5.
51 Gregory and Stuart (2001, pp. 47–48).
52 The close relationship between economic policies and power and security considerations is highlighted by several recent studies that are based on archival research. A summary of the new approach is given by Kontorovich and Wein (2009).
53 Allen (2003, p. 91).
54 Gregory and Stuart (2001, p. 74), table 5.4 (data drawn from L. Violin, A Century of Russian Agriculture, Cambridge University Press, 1970, p. 211).
55 Gregory (2004).
56 Allen (2003, 2011).

Bibliography

Data sources

Broadberry, S., & Klein, A. (2012), "Aggregate and per capita GDP in Europe, 1870–2000: continental, regional and national data with changing boundaries," *Scandinavian Economic History Review*, 60(1), 79–107.

League of Nations (1934), *Statistical Year-book of the League of Nations 1933/1934*, Geneva: League of Nations, Economic Intelligence Service.

League of Nations (1936), *Statistical Year-book of the League of Nations 1935/1936*, Geneva: League of Nations, Economic Intelligence Service.

League of Nations (1940), *Statistical Year-book of the League of Nations 1939/1940*, Geneva: League of Nations, Economic Intelligence Service.

Mitchell, B. (2013), *International Historical Statistics*, London: Palgrave Macmillan Ltd. (last accessed on 29 January 2016): www.palgraveconnect.com/pc/doifinder/10.1057/9781137305688.

SEEMHN (2014), *South-Eastern European Monetary and Economic Statistics from the Nineteenth Century to World War II*, edited by Austrian National Bank, Bank of Greece, Bulgarian National Bank and National Bank of Romania, Vienna: Austrian National Bank.

References

Abdelal, R. (2002), "Purpose and privation: nation and economy in post-Habsburg Eastern Europe and post-Soviet Eurasia," *Eastern European Politics and Societies*, 16(3), 898–933.

Accominotti, O., & Eichengreen, B. (2015), "The mother of all sudden stops: capital flows and reversals in Europe, 1919–32," *The Economic History Review*, 69(2), 469–492.

Aldcroft, D. H. (1977), *From Versailles to Wall Street, 1919–1929*, Berkeley and Los Angeles: University of California Press.

Aldcroft, D. H. (1998), "Europe's third world? The peripheral European countries in the inter-war period," in J. Batou & T. David (eds.), *Uneven development in Europe 1918–1939*, Genève: Librarie Droz, pp. 115–138.

Aldcroft, D. H. (2006), *Europe's Third World: The European Periphery in the Interwar Years*, Aldershot: Ashgate.

Aldcroft, D. H., & Morewood, S. (2001), *The European Economy 1914–2000*, London: Routledge.

Allen, R. C. (2003), *Farm to Factory: A Reinterpretation of the Soviet Industrial Revolution*, Princeton: Princeton University Press.

Allen, R. C. (2011), *Global Economic History: A Very Short Introduction*, Oxford: Oxford University Press.

Almunia, M., Benetrix, A., Eichengreen, B., O'Rourke, K. H., & Rua, G. (2010), "From great depression to great credit crisis: Similarities, differences and lessons," *Economic Policy* 62, 219–265.

Bandera, V. N. (1964), *Foreign Capital as an Instrument of National Economic Policy*, The Hague: Nijhoff.

Barnett, V. (2004), *The Revolutionary Russian Economy, 1890–1940: Ideas, Debates and Alternatives*, Abingdon: Routledge.

Batou, J., & David, T. (1998), "Nationalisme économique et industrialisation de la périphérie européenne: de la révolution industrielle à la Deuxième Guerre mondiale," in J. Batou & T. David (eds.), *Uneven Development in Europe 1918–1939*, Genève: Librarie Droz, pp. 1–58.

Berend, I. T. (1985), "Agriculture," in M. C. Kaser & E. A. Radice (eds.), *The Economic History of Eastern Europe 1919–1975*, Volume 1, Oxford: Oxford University Press, pp. 148–209.

Berend, I., & Ránki, G. (1969), "Economic problems of the Danube Region after the breakup of the Austro Hungarian monarchy," *Journal of Contemporary History*, 4(3), 169–185.

Boyer, C. (2000), "Nationality and competition: Czechs and Germans in the economy of the First Czechoslovak Republic (1918–1938)," in A. Teichova, H. Matis & J. Pátek (eds.), *Economic Change and the National Question in Twentieth-century Europe*, Cambridge University Press, pp. 262–276.

Cheremukhin, A., Golosov, M., Guriev, S., & Tsyvinski, A. (2017), "The industrialization and economic development of Russia through the lens of a neoclassical growth model," *Review of Economic Studies* 84(2), 613–649.

Clavin, P. (2013), *Securing the World Economy: The Reinvention of the League of Nations, 1920–1946*, Oxford: Oxford University Press.

David, T. (2009), *Nationalisme économique et industrialisation: l'expérience des pays d'Europe de l'Est* (1789–1939), Genève: Librarie Droz.

Davies, R. W., Harrison, M., & Wheatcroft, S. G. (1994), *The Economic Transformation of the Soviet Union, 1913–1945*, Cambridge: Cambridge University Press.

Diamond, H. S. (1941), "Experiment in tariff-making: Czechoslovakia," *Political Science Quarterly* 65(2), pp. 250–269.

Dimitrova, K., & Ivanov, M. (2014), "Bulgaria: From 1879 to 1947," in: *South-Eastern European Monetary and Economic Statistics from the Nineteenth Century to World War II*, BoG, BNB, NBR, OeNB, pp. 199–242.

Drabek, Z. (1985), "Foreign trade performance and policy," in M. C. Kaser & E. A. Radice (eds.), *The Economic History of Eastern Europe, 1919–1975*, Volume 1, Oxford: Oxford University Press, pp. 379–466.

Eckstein, A. (1955), "National income and capital formation in Hungary, 1900–1950," *Review of Income and Wealth* 5(1), 152–223.

Ehrlich, E. (1985), "Infrastructure," in M. C. Kaser & E. A. Radice (eds.), *The Economic History of Eastern Europe, 1919–1975*, Volume 1, Oxford: Oxford University Press, pp. 323–378.

Eichengreen, B. (1992), *Golden Fetters: The Gold Standard and the Great Depression, 1919–1939*, New York: Oxford University Press.

Eichengreen, B., & Sachs, J. (1985), "Exchange rates and economic recovery in the 1930s," *The Journal of Economic History* 45(4), 925–946.

Ellis, H. S. (1939), "Exchange control in Austria and Hungary," *The Quarterly Journal of Economics* 54(1), 1–185.

Ellis, H. S. (1941), *Exchange Control in Central Europe*, Cambridge, MA: Harvard University Press.

Ellman, M. (2014). *Socialist Planning*. Cambridge: Cambridge University Press.

Estevadeordal, A., Frantz, B., & Taylor, A. M. (2003), "The rise and fall of world trade, 1870–1939," *The Quarterly Journal of Economics* 118(2), 359–407.

Feinstein, C. H., Temin, P., & Toniolo, G. (1995), "International economic organization: Banking, finance, and trade in Europe between the wars," in C. H. Feinstein (ed.), *Banking, Finance, and Trade in Europe Between the Wars*, Oxford: Clarendon Press.

Feinstein, C. H., Temin, P., & Toniolo, G. (2008), *The World Economy between the World Wars*, Oxford: Oxford University Press.

Findlay, R., & O'Rourke, K. H. (2007), *Power and Plenty: Trade, War, and the World Economy in the Second Millennium*, Princeton and Oxford: Princeton University Press.

Fink, C. (1993), *The Genoa Conference: European Diplomacy, 1921–1922*, Syracuse: Syracuse University Press.

Flores Zendejas, J. H., & Decorzant, Y. (2016), "Going multilateral? Financial markets' access and the League of Nations loans, 1923–8," *The Economic History Review* 69(2), 653–678.

Gerschenkron, A. (1962), *Economic Backwardness in Historical Perspective: A Book of Essays*, Cambridge, MA: Harvard University Press.

Gnjatović, D. (1991), *Stari državni dugovi: prilog ekonomskoj I političkoj istoriji Srbije i Jugoslavije 1862–1941* [*Old State Debts: A Contribution to the Economic and Political History of Serbia and Yugoslavia 1862–1941*]. Ekonomski institut i Jugoslovenski pregled [Economic Institute and Yugoslav Review].

Gregory, P. (2004), *The Political Economy of Stalinism: Evidence from the Soviet Secret Archives*, Cambridge: Cambridge University Press.

Gregory, P. R., & Stuart, R. C. (2001), *Russian and Soviet Economic Performance and Structure*, Boston: Addison Wesley.

Harrison, M. (2016), "Foundations of the Soviet Command Economy, 1917 to 1941," *CAGE Working Paper* 283.

Hauner, M. (1986), "Military budgets and the armaments industry," in M. C. Kaser & E. A. Radice (eds.), *The Economic History of Eastern Europe, 1919–1975*, Volume 2, Oxford: Oxford University Press, 49–116.

Heinemeyer, H.-C. (2007), "The treatment effect of borders on trade. The great war and the disintegration of Central Europe," *Cliometrica* 1(3), 177–210.

Hertz, F. (1947), *The Economic Problem of the Danubian States: A Study in Economic Nationalism*, London: Victor Gollancz.

Hinić, B., Đurdević, L., & Šojić, M. (2014), "Serbia/Yugoslavia: from 1884 to 1940," in *South-Eastern European Monetary and Economic Statistics from the Nineteenth Century to World War II*, BoG, BNB, NBR, ONB, pp. 291–354.

Hunter, H., & Szyrmer, J. M. (1992), *Faulty Foundations: Soviet Economic Policies, 1928–1940*, Princeton: Princeton University Press.

Irwin, D. A. (2011), *Trade Policy Disaster: Lessons from the 1930s*, Cambridge, MA: The MIT Press.

Johnson, S., & Temin, P. (1993), "The macroeconomics of NEP," *Economic History Review* 46(4), 750–767.

Kaser, M. C., & Radice, E. A. (eds.) (1985), *The Economic History of Eastern Europe 1919–1975, vol. 1: Economic Structure and performance between the two Wars,* Oxford: Oxford University Press.

Kindleberger, C. P. (1986), *The World in Depression, 1929–1939*, Berkeley, CA: University of California Press.

Kofman, J. (1990), "How to define economic nationalism? A critical review of some old and new standpoints," in H. Szlajfer (ed.), *Economic Nationalism in East-Central Europe and South America, 1918–1939*, Geneva: Librairie Droz, pp. 17–54.

Kofman, J. (1997), *Economic Nationalism and Development: Central and Eastern Europe Between the Two World Wars*, Boulder, CO: Westview Press.

Köll, A.-M. (2000), "Economy and ethnicity in the hands of the state: Economic change and the national question in twentieth-century Estonia," in A. Teichova, H. Matis & J. Pátek (eds.), *Economic Change and the National Question in Twentieth-century Europe*, Cambridge: Cambridge University Press, pp. 357–381.

Kontorovich, V., & Wein, A. (2009), "What did the Soviet rulers maximise?" *Europe-Asia Studies* 61(9), 1579–1601.

Lampe, J. R. (2014), *Balkans into Southeastern Europe, 1914–2014: A Century of War and Transition*, Basingstoke: Palgrave Macmillan.

Lampe, J. R., & Jackson, M. R. (1982), *Balkan Economic History, 1550–1950: From Imperial Borderlands to Developing Nations*, Bloomington: Indiana University Press.

Layton, W., & Rist, C. (1925), *Report on the Economic Situation of Austria*, Geneva: League of Nations.

Lazaretou, S. (2014), "Greece: From 1833 to 1949," in *South-Eastern European Monetary and Economic Statistics from the Nineteenth Century to World War II,* BoG, BNB, NBR, OeNB, pp. 101–170.

Lethbridge, E. (1985), "National income and product," in M. C. Kaser & E. A. Radice (eds.), *The Economic History of Eastern Europe, 1919–1975*, Volume 1, Oxford: Oxford University Press, pp. 532–598.

Lindert, P. H. (2004), *Growing Public: Social Spending and Economic Growth Since the Eighteenth Century* (*Volume I, The Story*), New York: Cambridge University Press.

Livi-Bacci, M. (1993), "On the human costs of collectivization in the Soviet Union," *Population and Development Review* 19(4), 743–766.

Maddison, A. (2003), *The World Economy, Historical Statistics*, Paris: OECD.

Markevich, A., & Harrison, M. (2011), "Great War, Civil War, and recovery: Russia's national income, 1913 to 1928," *The Journal of Economic History* 71(3), 672–703.

Mazower, M. (1991), *Greece and the Inter-War Economic Crisis*, Oxford and New York: Oxford University Press.

Ménil, G., & Maurel, M. (1994), "Breaking up a customs union: The case of the Austro-Hungarian Empire in 1919," *Review of World Economics* 130(3), 553–575.

Meyer, R. H. (1970), *Bankers' Diplomacy. Monetary Stabilization in the 1920s*. New York: Columbia University Press.

Møller, J., & Skaaning, S-E. (2014), "Mapping political regime developments in interwar Europe: A multidimensional approach," Paper prepared for presentation at the ECPR joint sessions of workshops, April 10–15, Salamanca.

Morys, M. (2015), "Any lessons for today? Exchange-rate stabilisation in Greece and South-East Europe between economic and political objectives and fiscal reality 1841–1939," *EHES Working Papers in Economic History* 84.

Morys, M., & Ivanov, M. (2015), "The emergence of a European region: Business cycles in South-East Europe from political independence to World War II," *European Review of Economic History* 19(4), 382–411.

Müller, U. (2015), "The impact of land reforms on the constitution of 'National Economies' in East Central Europe during the interwar period," in C. Kreutzmüller et al. (eds.), *National Economies: Volks-Wirtschaft, Racism and Economy in Europe between the Wars (1919–1939/45)*, Newcastle upon Tyne: Cambridge Scholars Publishing, pp. 181–195.

Nautz, J. (1992), "Die Entwicklung der Handelsbeziehungen Österreichs zu den anderen Nachfolgestaaten nach dem Ersten Weltkrieg," *Wirtschaft und Gesellschaft* 18(4), 539–559.

Nikolić, S. (2017), *New Economic History of Interwar Yugoslavia, 1919–1939: Industrial Location, Market Integration and Financial Crises* (Doctoral dissertation, University of York).

Northedge, F. S. (1986), *The League of Nations: Its Life and Times, 1920–1946*, Leicester: Leicester University Press.

Nötel, R. (1986), "International credit and finance," in M. C. Kaser & E. A. Radice (eds.), *The Economic History of Eastern Europe, 1919–1975*, Volume 2, Oxford: Oxford University Press, pp. 170–295.

Nove, A. (1982), *The Soviet Economic System*, London: George Allen & Unwin.

Paslovsky, L. (1928), *Economic Nationalism of the Danubian States*, New York: Macmillan.

Pryor, Z. P., & Pryor, F. L. (1975), "Foreign trade and interwar Czechoslovak economic development, 1918–1938," *Vierteljahreszeitschrift für Sozial- und Wirtschaftsgeschichte* 62(4), 500–533.

Radice, E. A. (1985), "General characteristics of the region between the wars," in M. C. Kaser & E. A. Radice (eds.), *The Economic History of Eastern Europe, 1919–1975*, Volume 2, Oxford: Oxford University Press, pp. 23–65.

Ránki, G., & Tomaszewski, J. (1986), "The role of the state in industry, banking and trade," in M. C. Kaser & E. A. Radice (eds.), *The Economic History of Eastern Europe, 1919–1975*, Volume 2, Oxford: Oxford University Press, pp. 3–48.

Spigler, I. (1986), "Public finance," in M. C. Kaser & E. A. Radice (eds.), *The Economic History of Eastern Europe, 1919–1975*, Volume 2, Oxford: Oxford University Press, pp. 117–169.

Stemplowski, R. (1990), "State socialism in Chile 1932: Economic nationalism?" in H. Szlajfer (ed.), *Economic Nationalism in East-Central Europe and South America, 1918–1939*, Geneva: Librairie Droz, pp. 133–189.

Stoenescu, G. V., Aloman, A., Blejan, E., & Costache, B. (2014), "Romania: From 1880 to 1947," in *South-Eastern European Monetary and Economic Statistics from the Nineteenth Century to World War II*, BoG, BNB, NBR, ONB, pp. 243–290.

Stoenescu, G. V., Blejan, E., Costache, B., & Iarovici, A. (2007), "Foreign exchange regime in Romania between 1929 and 1939," in *The Experience of Exchange Rate Regimes in Southeastern Europe in a Historical and Comparative Perspective* (Conference proceedings of the 2nd meeting of the South-Eastern European Monetary History Network), OeNB, pp. 244–260.

Straumann, T. (2009), "Rule rather than exception: Brüning's fear of devaluation in comparative perspective," *Journal of Contemporary History* 44(4), 603–617.

Szlajfer, H. (ed.) (1990), *Economic Nationalism in East-Central Europe and South America, 1918–1939*, Geneva: Librairie Droz.

Teichova, A. (1985), "Economic policies in interwar East Central Europe: Freedom and constraints of action," *Uppsala Papers in Economic History*.

Tyler, R. (1945), *The League of Nations Reconstruction Schemes in the Inter-War Period*, Geneva: League of Nations.

Walters, E. G. (1988), *The Other Europe: Eastern Europe to 1945*, Syracuse, NY: Syracuse University Press.

Wandschneider, K. (2008), "The stability of the interwar gold exchange standard: Did politics matter?" *The Journal of Economic History* 68(1), 151–181.

Wolf, N. (2007), "Should I stay or should I go? Understanding Poland's adherence to gold, 1928–1936," *Historical Social Research/Historische Sozialforschung*, 351–368.

Wolf, N. (2008), "Scylla and Charybdis: Explaining Europe's exit from gold, January 1928 – December 1936," *Explorations in Economic History* 45(4), 383–401.

Wolf, N., Schulze, M.-S., & Heinemeyer, H.-C. (2011), "On the economic consequences of the peace: Trade and borders after Versailles," *The Journal of Economic History* 71(4), 915–949.

10

POPULATION AND LIVING STANDARDS

Central, East and South-East Europe, 1918–1939

Matthias Morys and Martin Ivanov

Introduction

Improving the living standard is the ultimate objective of economic growth. This chapter will discuss to what extent the macroeconomic progress documented in Chapter 7 translated into rising living standards in Central, East and South-East Europe (CESEE) in the interwar period. Two questions will dominate. First, how did total population numbers develop between 1920 and 1939, and what were the driving factors? We will show that the economically advanced countries in the region such as Czechoslovakia, Hungary and Latvia exhibited a demographic experience similar to many West European countries at the time: the demographic transition came to an end and countries reached a new equilibrium of low population growth. By contrast, the poorer countries of the region experienced a late demographic transition with population growth rates of 1.5% per annum (and more) over a period of two decades. In a European perspective, countries such as the Soviet Union and Bulgaria were among the last ones to enter into and exit from this crucial transformational process.

Second, how did living standards evolve over time? Living standards improved in all countries, but the catch-up with Western Europe remained limited when judged by income-based indicators such as gross domestic product (GDP) per capita. A more positive assessment emerges only when other factors such as longevity and education are taken into account (so-called non-income-based living standard indicators). Different types of living standard indicators point, in some cases, to different conclusions for the same country. The Soviet Union will turn out to be such a case, where the widely used Historical Index of Human Development (HIHD) suggests a considerable improvement in the interwar period. How much credence should we give this finding in light of the 13 million human losses produced by

the 1918–1922 and 1932–1933 famines and the Great Terror of 1936–1938? (Cf. section 2.4 for details on these numbers.)

Providing an answer will lead us to one of the most intriguing questions of 20th-century European economic history, which first posed itself in the Soviet Union. What did forced structural change (collectivisation of agriculture and state-led industrialisation based on Five-Year Plans) mean for living standards? Was there only *long-run* gain, but at the expense of heavy short-term pain? Or did industrialisation pay off relatively quickly, at least for the urban population? Structural change happened throughout CESEE in the interwar period, but it was particularly large than in the Soviet Union. We will try to find an answer by means of comparing the Soviet Union with Bulgaria – two countries which stood at approximately the same level in 1913. Based on a large number of indicators, including wages and nutritional intake, we will show that the Bulgarian approach delivered higher living standards in the 1930s, whereas the short-term pain, including for the urban population, was considerable in the case of the Soviet Union.

Countries included in this chapter and data availability

The disintegration of the Habsburg and Romanov Empires during and at the end of World War I led to a doubling of CESEE countries compared to the 19th century – from 6 (Austria-Hungary, Russia, Bulgaria, Greece, Serbia and Romania) to 12 (in descending order of population for each group):

Eastern Europe	*Central Europe*	*South-East Europe*
Soviet Union	Poland	Romania
Lithuania	Czechoslovakia	Yugoslavia
Latvia	Hungary	Greece
Estonia		Bulgaria
		Albania

Data availability is unproblematic except for the four small countries in our sample (Albania, Estonia, Latvia and Lithuania) and the Soviet Union. In the Albanian case, statistical material is generally in poor condition. The main reason for the paucity of the Baltic data is the systematic neglect of their economic and social history as independent countries in the interwar period after their incorporation into the Soviet Union in 1940. There has been increased (and promising) research activity since regaining political independence in 1991, but more time will be needed to write the interwar economic and demographic history of the three Baltic countries.

Data availability for the Soviet Union constitutes a problem of a very different nature. Data are available but often not deemed trustworthy. For instance, scholars agree that deaths were under-reported during the two great famines of 1918–1922 and 1932–1933, but the exact size of the bias has remained controversial among scholars (cf. section 2.4). A great deal of this uncertainty stems from the censuses of 1937 and 1939. The Soviet authorities refused to publish the results of the

first census, as it contained data the Soviet leadership was uncomfortable with (in particular the vast population losses in Ukraine in the 1932–1933 famine). They subsequently ordered a new census but manipulated many of its contents. Stalin confidently referred in public to the main conclusions of the census even before the statisticians had finalised their work (Applebaum 2019: 376–379). Yet for present-day researchers, the 1939 census remains an important source to this day. Fortunately, a group of scholars led by Yurii Polyakov, a Russian historian and member of the Russian Academy of Sciences, published in 1992 the full census material behind the 1939 census (Polyakov 1992). While not changing the 1939 census in itself, the wider range of material available since 1992 points to different conclusions. In the 1992 publication, for instance, the editors critically discuss in their introduction the total population figure of 170.1 million as recorded in the 1939 census and suggest as more plausible 167.6 million. In 2007, Polyakov also made the full census material of the (unpublished) 1937 census available (Polyakov 2007). Notwithstanding this important step towards historical accuracy, many problems persist with the Soviet data. More strongly than in any other country in our sample, the choice of the data itself is likely to determine the historical narrative in the case of the Soviet Union. With this important caveat in mind, we now proceed to describe and analyse population trends for the CESEE countries in the interwar period.

Population trends and late demographic transition

Population trends

Table 10.1 shows interwar population levels and growth rates for all 12 CESEE countries, differentiating between Central Europe, Eastern Europe and South-East Europe and comparing them to Western Europe. By Western Europe we mean the 30 West European countries listed in Maddison (2009) but excluding Greece (which we treat as a South-East European country, in line with the overall approach of this volume). As a more meaningful point of comparison, we divide Western Europe into core Western Europe (seven countries: Britain, France and Germany plus Austria, Belgium, the Netherlands and Switzerland), the Nordic countries (Denmark, Finland, Norway and Sweden) and Southern Europe (Italy, Portugal and Spain).

The years 1920 and 1939 constitute natural boundaries of our analysis. The immediate post-war period exhibited considerable migration, typically related to the emergence of new nation states and border changes. By 1920 the majority of such movements had run their course, with the notable exceptions of Greece (at least 900,000 refugees following the 1922 Asia Minor catastrophe) and Latvia (approximately 180,000 refugees from other parts of the late Tsarist Empire into the new state between political independence in 1918 and 1925). The last possible choice of year still unaffected by World War II is 1939 (population numbers are typically mid-year data).

For the 12 CESEE countries, we rely on Rothenbacher (2002, 2013), who reports population numbers as well as vital rates (crude birth rate and crude death rate) on an annual basis. These two different types of data allow us to calculate not only population growth rates (which includes migration patterns) but also natural

TABLE 10.1 Population in Europe in 1913, 1920 and 1939 and onset of fertility decline

Panel A: Central, East and South-East Europe (CESEE)

	Eastern Europe					*Central Europe*				*South-East Europe*						*CESEE total*
	SovietUnion	*Estonia*	*Latvia*	*Lithuania*	*total*	*Czechoslovakia*	*Hungary*	*Poland*	*total*	*Albania*	*Bulgaria*	*Greece*	*Romania*	*Yugoslavia*	*total*	
Population (in million)																
1913	133.2[3]	n.a.	n.a.	n.a.		n.a.	18.7	n.a.		n.a.	4.5	4.8	7.3	3.0[4]		
1920[1]	142.9	1.1	1.6	2.2	**147.8 (30.4%)**	13.0	8.0	27.1	**48.1 (9.9%)**	0.8	4.8	5.0	15.5	12.0	**38.1 (7.8%)**	**234.0 (48.1%)**
1939[2]	174.2	1.1	2.0	2.6	**179.9 (31.3%)**	14.7	9.2	34.8	**58.7 (10.2%)**	1.0	6.3	7.2	19.8	15.7	**50.0 (8.7%)**	**288.6 (50.2%)**
Average annual population growth 1920–1939 (in percent)																
	1.0	0.6	1.2	1.1	**1.0**	0.7	0.8	1.4	**1.1**	1.6	1.4	1.9	1.3	1.4	**1.3**	**1.1**
Average annual natural population growth 1920–1939 (in percent)																
	1.6[5]	n.a.	0.6	1.1	**1.6**	0.7	0.8	1.4	**1.1**	n.a.	1.5	1.2	1.3	1.4	**1.3**	**1.4**
Onset of the fertility decline according to the European Fertility Project (year)																
	1922	1899	1877	n.a.		1903	1910	1909		n.a.	1912	1913	1908	1911		

Panel B: Western Europe

	Western Europe (29 countries[6])	*Europe total*	*Core Western Europe[7] (7 countries)*	*Southern Europe[8] (3 countries)*	*Nordic countries[9] (4 countries)*
Population (in million)					
1913	**255.6**				
1920	**252.4**	**486.4**	171.4	64.7	14.9
	(51.9%)	**(100%)**			
1939	**285.4**	**574.0**	187.2	77.0	16.8
	(49.8%)	**(100%)**			
Average annual population growth 1920–1939 (in percent)					
	0.6%	**0.9%**	0.5%	0.9%	0.6%
Onset of the fertility decline according to the European Fertility Project (year)					
			France 1827	Italy 1913	Denmark 1898
			Belgium 1881	Portugal 1916	Sweden 1902
			Switzerland 1887	Spain 1920	Norway 1903
			Germany 1888		
			England 1892		

Sources: Population numbers: Rothenbacher (2002) and Rothenbacher (2013) for 12 CESEE countries, except for 1913 population on the territory of the later Soviet Union (Markevich & Harrison 2011) and 1913 population of Serbia (Austrian National Bank 2014). All other countries based on Maddison (2009). Onset of fertility decline is based on Coale & Watkins (1986: 38) for the Soviet Union, Hungary, Greece and panel B. Entries for Estonia, Latvia (average of Kurland and Livonia), Czechoslovakia (average of Bohemia and Moravia), Poland, Bulgaria, Romania and Yugoslavia are own calculations based on the data and methodology provided in Coale & Watkins.

Notes: [1] 1920 was replaced for reasons of data consistency: Albania (1922), Lithuania (1923), Yugoslavia (1921). [2] 1939 was replaced for reasons of data consistency: Albania (1938), Estonia (1928), Latvia (1938), Lithuania (1938), Poland (1938). [3] Population on the territory of the later Soviet Union. [4] Serbia. [5] Based on data for 1925–1938 only. [6] 30 Western European countries as in Maddison (2009) but without Greece. [7] Austria, Belgium, France, Germany, Netherlands, Switzerland, United Kingdom. [8] Italy, Portugal, Spain. [9] Denmark, Finland, Sweden, Norway.

population growth rates (crude birth rate minus crude death rate). Subtracting the two from each other delivers the net migration rate:

(1) net migration rate = population growth rate − natural population growth rate

Multiplying the net migration rate with the population of the particular year gives net migration:

(2) net migration = net migration rate × mid-year population

In the cases of Greece and Latvia, for instance, average annual population growth between 1920 and 1939 was considerably higher than natural population growth rates for the reasons alluded to earlier (Table 10.1). Distinguishing between the two indicators is important, as typically the natural population growth rate is more relevant to understanding the demographic experience. It is precisely for this additional information that we have preferred the Rothenberger data over possible alternatives such as Bardet and Dupâquier (1999). Only in the cases of Albania and Estonia can this distinction not be made for the lack of data on vital rates.

The European population grew from 486.4 million to 574.0 million in the interwar period (18%, or 0.9% p.a.). Yet population growth was highly uneven across the continent. It grew at roughly half the speed in the West compared to the East (0.6% vs. 1.1%). The divergent demographic dynamics allowed CESEE to overtake in absolute population numbers in the interwar period (48.1% of total European population in 1920, but 50.2% in 1939), almost certainly for the first time in European history. There also were pronounced differences within the two halves. The natural population growth rates for core Western Europe and the Nordic countries were as low as 0.5% and 0.6%, respectively, but it reached 0.9% for Southern Europe. A similar divergence is encountered in CESEE, where Central Europe grew the slowest and Eastern Europe the fastest, with South-East Europe falling in the middle. Yet stark regional differences can wither away in a country-by-country comparison. Latvia (0.6%), Czechoslovakia (0.7%) and Hungary (0.8%), for instance, grew at rates comparable to core Western Europe.

The concept of the demographic transition

The unifying framework to understand cross-country differences and similarities in population dynamics is the theory of the demographic transition. In essence, while all European countries went through this transformational process, many CESEE countries experienced a late but rapid demographic transition whose crucial intermediate phase – fertility still high but mortality already low – took place during the interwar period. In the following, we will first explain the concept of the demographic transition. Then we will provide statistical evidence according to which some CESEE economies entered the transition at around the time that the core Western European countries did, whereas others came late in the process.

Finally, we will explain the well-researched cases of Bulgaria and the Soviet Union, the two countries with the highest natural population growth rates in our sample, and ask how they were able to sustain such high rates.

The theory of the demographic transition posits that countries will move through three distinct states in the course of their economic development (Livi-Bacci 2007: 101, figure 4.2; Chesnais 1992). Initially, population growth is low (or even absent), as high birth rates are offset by high death rates. High mortality is the result of epidemics, harvest failures, poor sanitation and insufficient medical care, and it affects infants (children of up to 12 months of age) in particular. The demographic equilibrium of this stage subsequently unravels as mortality declines but fertility remains high, resulting in substantial population growth. The exact reasons for the mortality decline have been a matter of debate, with some emphasising "collective" factors (and improvements in public health and overall hygienic conditions in particular) and others stressing "individual" contributions (and better nutrition in particular) (cf. Deaton 2006). Crucially, the long-term decline in mortality started in the second half of the 19th century throughout Europe, with only a limited connection to the level of economic development in a particular country. After a slow start in the late 19th century, the decline was step by step and pervasive between 1914 and 1945. Figure 10.1 shows this pattern for Bulgaria, where mortality halved over five decades (28.8 per thousand in 1893 vs. 13.5 per thousand in 1939).

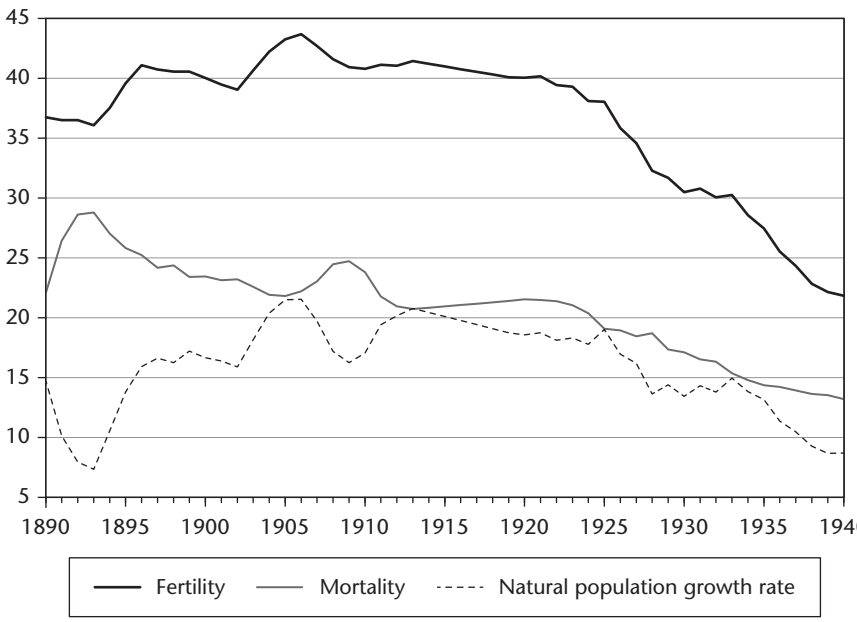

FIGURE 10.1 Vital rates of Bulgaria, 1890–1940.

Sources: Own calculations based on Bulgarian Statistical Yearbooks, various issues.

Notes: Vital rates are 3-year moving averages of annual data spanning 1889–1941. Data are interpolated for 1913–1919.

Finally, fertility rates decline to prevent excessive population growth; consequently, the country reaches a new equilibrium (that is, zero or low population growth) characterised by both low mortality and fertility rates. Not unlike the mortality decline, the exact reasons for the decline in fertility have remained more controversial. In the schematic version of the demographic transition, the mortality decline not only precedes the fertility decline but drives it: the reduction in fertility is interpreted as an endogenous response to the mortality decline in "nature's attempt" to re-establish sustainable population growth rates. Yet two objections can be raised against such a simple mechanism. On a theoretical level, how and why would household decisions on offspring be driven by the macroeconomic rationale to lower population growth? Furthermore, the mortality decline in itself might be driven by the decline in fertility: fertility decline often involved longer spaces between births, thereby reducing infant mortality. On an empirical level, several well-studied cases (in particular on the French demographic experience) showed that the fertility decline often occurred before or coincided with the mortality decline.

Consequently, a sizeable body of literature has developed to explain the fertility decline independent of the mortality decline (for an overview, cf. Guinnane 2011). Some of these theories emphasise costs, be they direct costs (e.g. raising children in cities might be more expensive than in the countryside) or opportunity costs (e.g. industrial work created new opportunities and trade-offs for women by offering better-paying work that could not be combined easily with child-minding); others focus on changes in social insurance and old-age support or innovations in contraceptive methods. All of these theories interpret the fertility decline as the result of modernisation (broadly defined), and many of them rely on the twin processes of urbanisation and industrialisation. Unfortunately, most of this literature reflects the historical experiences of Western Europe and North America. Future research will need to apply their analytical questions to the CESEE experience.

The timing of the demographic transition in CESEE

Given the competing theories on the fertility decline but the lack of relevant studies on the CESEE experience, it seems prudent to establish first when this process commenced in the various CESEE countries. For this purpose, we draw on the results and the data of the European Fertility Project (EFP). This large-scale project, centred around Princeton University and conducted between 1963 and 1986, aimed at understanding the demographic transition in all European countries during the 19th and 20th centuries, with the main focus on understanding the pattern and the timing of the fertility decline. While not all aspects of the EFP have found universal support (Brown & Guinnane 2007), it remains unchallenged in terms of width and depth of coverage in analysing the fertility transition on the regional level. A key finding was that before the onset of the fertility decline, regions tended to have their own fertility plateau which often remained remarkably stable over

decades if not centuries. Yet once the decline had begun (defined as a 10% decline from the initial fertility plateau; for details, cf. Coale & Watkins 1986: 37–41), the fertility transition became irreversible. Fertility rates would continue to fall for a prolonged period of time, after which they would stabilise on a new, much lower level.

Table 10.1 also provides the date of the fertility decline (for the most part directly from the EFP calculations but partly complemented by own calculations based on the methodology and the data provided by the EFP). The decisive fertility decline for most core West European countries took place in the 1880s but started only two decades later in CESEE. It began in the 1900s in Central Europe, was followed approximately a decade later in South-East Europe and another ten years later in European Russia (EFP data are confined to the European part of the country). Consequently, the much higher interwar population growth in CESEE is largely explained by their late demographic transition. Crucially, there was considerable regional variation within CESEE (as there was in other parts of Europe). In the 73 provinces included for Hungary, for instance, the onset of the fertility decline stretched over a full eight decades from 1850 to 1930, yet on the aggregate level the 10% decline from the initial fertility plateau took place only in 1910 (Coale & Watkins 1986: 38). Large cities often played an important pioneering role in the fertility transition. For instance, while European Russia as a whole experienced the onset of the fertility transition only in 1922, its capital city St. Petersburg did so as early as the 1870s (Moscow: 1886). Other regional early comers include the Russian provinces of Kurland (1869) and Livonia (1886), which after World War I came to form the nucleus of Latvia.

The Latvian case – for which we report the average value of the two constituent provinces in Table 10.1 – demonstrates that the CESEE countries with a relatively early demographic transition hardly differed from the West European experience. Czechoslovakia and Hungary – incidentally the most economically advanced CESEE countries at the time – fell into the same category. What really requires an explanation is the experience of the CESEE latecomers to the fertility transition: how can we explain that countries such as Bulgaria and the Soviet Union were able to accommodate a natural population growth rate of 1.5% and above for such an extended period of time?

The late demographic transition in the Soviet Union and in Bulgaria

The Bulgarian case nicely demonstrates the interaction between overall economic development of the country and its demography. It appears to be one of the arguably rather rare (Guinnane 2011) standard cases where the dramatic mortality decline beginning in the 1890s eventually forced a change in reproductive behaviour and a fall in fertility. Yet this was a long-drawn-out process, and for a long period the essentially agrarian economy was able to absorb rising population numbers. To begin with, for more than three decades (mid-1890s to late 1920s) the population

grew at more than 1.5% per year (Figure 10.1), almost doubling the population from 3.3 million to 5.7 million. Constant (and indeed increasing) fertility until the early 20th century can be interpreted as a demographic response to the agricultural demand created by industrialisation in Western Europe (cf. Chapter 3 by Kopsidis and Schulze in this volume).

In the Bulgarian case, the international demand for agriculture was satisfied by an extensification of agriculture rather than an intensification. Given the relative poverty of the peasants and the high interest rates they faced, farmers were not able to introduce more capital per unit of land in order to meet the growing (foreign) demand for wheat, barley and maize. Instead, they adopted low-cost, labour-intensive methods of farming coupled with increasing fertility which allowed them to cultivate hitherto unused plots of land for export. Such extensification was possible only because of extremely low initial population densities of about 30 people per square kilometer during the 1870s. Common pastures and forests constituted an additional reservoir of "free" land which was also put under the plough. According to recent calculations (Lyberatos 2011: 146) the arable land almost doubled between roughly 1870 and 1910.

Yet this process was bound to come to an end by its very nature. Land became even more scarce after World War I, when several hundred thousand ethnic Bulgarians from the neighbouring countries were forced to flee to Bulgaria. Coupled with the global agricultural crisis of the interwar period, the situation of the farming population became increasingly difficult and incomes stagnated. In this situation, where new lands could no longer be secured, the only solution was to increase agricultural productivity (on henceforth constant land) and to limit fertility (in order to prevent parcelisation in the next generation). Thus, in the Bulgarian case at least, the schematic version of the demographic transition (i.e. that the decline in mortality will eventually force a fertility decline) still seems to hold.

By contrast, the case of Russia and the Soviet Union is extraordinarily complex. Three partially overlapping aspects preclude a straightforward interpretation. First, in addition to World War I and the 1918–1921 Russian Civil War, there were two major famines (1918–1922 and 1932–1933) and Stalin's Great Terror (1936–1938). These three events resulted, by any account, in millions of premature deaths, but the exact numbers have remained the subject of scholarly debate. Frequently used numbers are 6 million, 6 million (roughly half in the Ukraine alone) and 1 million for these three demographic catastrophes, respectively, but estimates differ widely (O'Grada 2009: 233–241; Allen 2003: 114–115). Second, scholars disagree on the numbers, as much hinges on assumptions about the under-registration of deaths at the time. This in turn has brought much of the statistical evidence into disrepute (for an overview of the controversial discussion, cf. the first six articles in the *Slavic Review*, vol. 58 (1999), issue 1). We already mentioned in the introduction to this chapter the censuses of 1937 and 1939. The first was suppressed by Stalin and the second was published, but only in embellished form.

Finally, some key developments are open to alternative interpretations, with important implications on where the Soviet Union stood in the 1930s with respect

to the demographic transition. In particular, the substantial fertility decline in the mid-1930s, before returning to much higher levels in the late 1930s, has received different treatment. Allen (2003: 113, 115) brings the fertility decline in connection with the industrialisation and urbanisation stemming from Stalin's first Five-Year Plan in 1928, while leaving open the reasons for the sizeable fertility rebound in the late 1930s (1927 peak: 45.8; 1934 trough: 30.0; 1937 peak: 40.0). O'Grada (2009: 237), by contrast, views the mid-1930s fertility trough as a consequence of the 1932–1933 famine (i.e. the famine not only increased mortality but also decreased fertility); in this view, the late 1930s fertility rebound was a "return to normal" for a country which found itself still in the early stages of the demographic transition. As the collectivisation and the associated high grain procurements contributed to the 1932–1933 famine, it is easy to see that the perspective on the early Soviet Union's demographic experience is often closely tied to the view of a particular scholar on the broader economic transformation under Stalin's first two Five-Year Plans (1928–1937).

What then is a possible "minimalist" interpretation in the face of such uncertainty? Following sizeable human losses in World War I, the Russian Civil War (1918–1921) and the post-war famine (1918–1922), population growth in all likelihood resumed only after 1923. Yet it is not until the first Soviet census of 1926 that population numbers and vital rates can be established with greater accuracy (Markevich & Harrison 2011: 675–679). We therefore confine our discussion to 1926–1939, for which Rothenbacher (2013) calculates an average natural population growth rate of 1.6% – a very high number which (as opposed to the Bulgarian case) shows no tendency to fall towards the end of the period. Fertility rates (deemed more trustworthy than mortality numbers) remained close to 40 per one thousand immediately before World War II; while they had come down from the 50 per one thousand from four decades earlier, fertility remained much higher than in any other CESEE country at the time (Romania, the country with the second-highest fertility, stood at 29.8 per one thousand in 1938). Likewise, while there was a clear downward movement in mortality (a trend which even the crude death rates of the two world wars, the two famines and the Great Terror cannot obfuscate; cf. Wheatcroft 1999: 38), mortality values in the interwar period remained higher compared to all other CESEE countries bar Romania. In sum, the Soviet Union experienced a retarded demographic transition even by the standards of the CESEE countries.

Can this assessment be squared with the positive evaluation of the Soviet demographic experience proposed by Allen? (2003: 111–131). In his view, education, economic development and rising living standards were the main factors responsible for smaller families and slower population growth in the Soviet Union, thereby avoiding a population explosion on the scale of 20th-century India (the reference point chosen by Allen). While this interpretation has much to commend, it strongly relies on taking a larger period of time into account. Only in the 1950s did mortality in the Soviet Union fall below Central and South-East European levels (Millward & Baten 2010: 234) and fertility converge with the country's Western

neighbours. Seen in isolation, the interwar period only shows the early signs of the demographic transition in the Soviet Union, and connecting this process in an unequivocal way to industrialisation and urbanisation after 1928 is probably not possible. As we will see again in the section on living standards, the Allen perspective relies too strongly on the urban areas; they were growing and changing rapidly at the time, but the overall dynamics, including demography, were still driven predominantly by the countryside.

Living standards

Living standard indicators can be classified into two broad categories: income-related measures and non-income-related measures. In assessing well-being across countries and over time, it is often instructive to draw on both, as they might well convey a different message. Only taken together will they give an adequate picture of living standards. In the following, we will sketch the theoretical concepts behind GDP per capita and the Human Development Index (HDI) as the two most widely used indicators (section 3.1) and then show potentials and pitfalls of both measures when applying them to the CESEE interwar experience (section 3.2).

We will find neither indicator fully convincing in measuring the living standard of the rapidly developing CESEE economies. Not only are they highly aggregate, but they cannot capture, by design, what was arguably the most important feature of the CESEE economies at the time: the rural-urban divide and the structural transformation of essentially agrarian economies towards a larger share of industry. Sections 3.3 and 3.4 address both issues. Based on data for life expectancy, literacy and school enrolment, we will outline the fundamental changes undergone by all CESEE countries in the interwar period. We will then pay particular attention to the rural-urban divide, focusing on the Soviet Union and Bulgaria as two iconic examples of different developmental trajectories. Was "big push industrialisation" à la Stalin better for living standards than the more conventional approach pursued by Bulgaria?

GDP per capita and the Human Development Index (HDI) as living standard indicators

The basic idea of income-centred welfare measures is that command over commodities matters most in assessing well-being: income is an argument in any individual's utility function, and a rise in real income means an increase in welfare. The most important such measure is real GDP per capita as taken from national accounts and population statistics. The ready availability of this type of data (for the post–World War II period anyway) partly explains the continued attraction of GDP per capita for comparative studies, and it remains the most popular measure to this day.

Yet income-centred measures have been criticised for a long time, partly on practical and partly on more substantive grounds. On a practical level, GDP per

capita has been seen as blind to income inequality and unduly concerned with income rather than consumption. Solutions to such objections have been found in a wide range of minor (and sometimes major) modifications to GDP per capita, such as multiplying the measure with one minus the country's Gini coefficient (the Gini coefficient is a standard measure of income distribution, where an equal income distribution is attributed a value of zero; the more unequal the distribution, the higher the value, with an upper bound of unity).

A more fundamental challenge to GDP per capita as a living standard indicator arose from the capability school of Nobel laureate Amartya Sen (born 1933). In this view, human development – that is, the human progression of an individual over time – is seen as the overriding purpose of (the macreconomic process of) economic development. This approach is often framed in terms of whether people are able to "be" and "do" desirable things in life (beings: well fed, sheltered, healthy; doings: work, education, voting, participating in community life). Consequently, underdevelopment is perceived as the lack of certain basic capabilities rather than lack of income per se. In this framework, "well-being" has to do with *being well* (as opposed to *having the financial means* to spend on something): Do people live long? Do they escape preventable morbidity? Are they literate, allowing them to lead more purposeful lives? Are they free from hunger and undernourishment? Put differently, while GDP per capita is essentially a macroeconomic indicator (except for the very last step, i.e., dividing by population), the capability school searches for measures that conceptually begin with the individual.

The most important measure emanating from this alternative view of well-being is the Human Development Index (HDI), as inspired by the work of the development economist Mahbub ul Haq (1934–1998) and used in the (annual) Human Development Report of the United Nations Development Programme. While the HDI has undergone several important changes since the first Human Development Report in 1990, it has continued to give equal weight to indicators for (1) longevity, (2) knowledge and (3) income (the latter in clear concession to the income-centred measures of well-being). Longevity has consistently been proxied by life expectancy at birth. Knowledge was initially measured by the weighted average of adult literacy (two-thirds weighting) and gross enrolment (one-third weighting). This particular specification of the knowledge indicator came to create problems over time, as adult literacy rates in most countries approached 100% and even gross enrolment rates converged remarkably among countries. Consequently, the 2010 Human Development Report dropped literacy altogether and replaced enrolment rates (a flow variable looking only at currently enrolled pupils and students) with "mean years of schooling" (expected years of schooling for those in school and mean years of schooling obtained for those out of it). Switching to mean years of schooling is more consequential than meets the eye initially. As a stock variable of educational attainment, it preserves for a long-time differences in schooling in periods past: it makes it more difficult for countries with previously poor educational systems to catch up. The 2010 changes to the "knowledge" variable helped reintroduce heterogeneity into the data. Finally, income has consistently

been measured as GDP per capita adjusted for purchasing power parity (PPP) in different countries.

Each of the three components is given equal weight and is measured in terms of percentage of the distance travelled between an assumed minimum ("natural zero") and assumed maximum value ("aspirational target"). In the case of life expectancy, for instance, 20 years acts as a "natural zero" based on historical evidence that no country in the 20th century had a life expectancy of less than 20 years. Maximum life expectancy is set at 85, a realistic target for many countries today. Having defined minimum and maximum values, the dimension indices are calculated as:

> dimension index = (actual value − minimum value)/(maximum value − minimum value)

or, applied to life expectancy:

> longevity index = (life expectancy of country X − 20)/(85 − 20)

In addition to a new proxy for knowledge since 2010, two more changes have been introduced over time. First, the arithmetic average has been replaced by the geometric average of the three individual indicators as a means to ensure that equal development along all three dimensions is reflected in a higher HDI value. Second, it has been argued that each dimension should be treated as non-linear. Increasing income from $15,000 to $45,000 will be easier than increasing it from $45,000 to $75,000 ($75,000 in 2011 PPP is the assumed maximum value in the 2019 Human Development Report). Consequently, a logarithmic form has been introduced which "rewards" countries more strongly for achievements at the upper end than at the lower end.

> income index = (ln(GDP per capita in country X) − ln(100))/(ln(75,000) − ln (100))

The Human Development Report in its current form applies such discounting at the lower end only to the income indicator. Yet the same logic applies in principle to the other two indicators: for example increasing life expectancy from 25 to 55 years will be much easier than extending it from 55 to 85 years.

The Historical Index of Human Development (HIHD) of Prados de la Escosura (2015)

The most systematic attempt in recent years to import the methodology of the HDI into the field of economic history is by Prados de la Escosura (2015), who constructs a Historical Index of Human Development (HIHD) for 96 countries from 1870 to 2015 (with the number of countries rising to 164 for the latter periods). Adopting the HDI principles but adjusting them to the requirements of

historical data, he forms three indicators similar to the pre-2010 HDI: LEB (longevity: life expectancy at birth), EDU (knowledge/education: literacy and enrolment, with equal weighting) and UNY (income: adjusted income per capita). Each of the three indicators (and not only income, as in the case of the current HDI) is subject to a logarithmic transformation, rewarding achievements at the upper end more strongly. The values obtained for the three components are then aggregated by forming the geometric average:

$$HIHD = LEB^{1/3}\ EDU^{1/3}\ UNY^{1/3}$$

Table 10.2 provides data for GDP per capita and the HIHD for nine CESEE countries for selected benchmark years. The Baltic countries are excluded for the lack of GDP estimates. In the case of the upper panel, we also exclude Albania and Romania for the reasons discussed in Chapter 7. By contrast, Prados de la Escosura (2015) deems the GDP data for both countries of sufficient quality and produces HIHD estimates. We add data for Britain, Germany, Italy and Sweden as points of comparison (Table 10.3).

The two indicators exhibit important similarities. First, Czechoslovakia and Hungary offered the highest standard of living both in the beginning and at the end of the interwar period. Living standards rose more rapidly in some of the other countries, but their initial lead was sufficiently strong to maintain their overall position (with Czechoslovakia marginally better than Hungary). Second, certainly until the late 1920s and potentially well into the 1930s, living standards (and overall economic development) continued to follow a well-established, longer-term pattern documented in Chapters 3 and 6 of this volume for the 1800–1914 period: the standard of living in Central Europe was higher than in East and South-East Europe. Greece was the first country to break out from this pattern in the 1930s, at least in comparison to Poland. Third, living standards in CESEE continued to lag behind not only countries such as Britain and Germany but also Southern European and Nordic countries such as Italy and Sweden.

Yet there also are crucial differences between the indicators, two of which are particularly important in our context and will propel us to go beyond aggregate measures (sections 3.3 and 3.4). First, an income-centred approach suggests hardly any relative improvement in CESEE living standards vis-à-vis Britain (the European country with the highest income level at the time). Czechoslovakia and Hungary, for instance, caught up only marginally but remained below 50% of British income levels throughout the interwar period. Convergence forces were stronger elsewhere (Soviet Union, Greece), but this partly reflected lower initial levels. By contrast, HIHD gains throughout the region were higher than for Britain, and often by a considerable margin. This suggests that economically backward countries typically find it easier to improve health conditions and educational achievements rather than to close the income gap with advanced economies.

The relative position of Russia and the Soviet Union constitutes the other important discrepancy between the two indicators. Between 1860 and 1913,

TABLE 10.2 *Living standard indicators for Central, East and South-East Europe, interwar period*

	Soviet Union	*Central Europe*			*South-East Europe*				
		Czechoslovakia	*Hungary*	*Poland*	*Albania*	*Bulgaria*	*Greece*	*Romania*	*Yugoslavia*
Panel A: GDP per capita. Absolute values (in 1990 USD) and relative to the United Kingdom									
1913	1414	2096	2098	1739		1137[3]	1177		973
	28.7%	42.6%	42.6%	35.3%		24.1%	23.9%		19.8%
1920	575	1933	1709	n.a.		1000[3]	1433		949
	12.6%	42.5%	37.6%			22.0%	31.5%		20.9%
1939	2237	2882[1]	2838	2182[2]		1676	2638		1300
	35.7%	46.3%	45.3%	34.8%		26.8%	42.1%		20.8%
growth p.a.									
1913–1939	1.8%	1.3%	1.2%	0.9%		1.4%	3.2%		1.1%
1920–1939	7.4%	2.4%	2.7%	n.a.		2.9%	3.3%		1.7%
Panel B: Historical Index of Human Development of Prados de la Escosura (2015)									
1860	0.045						0.080		
1870	0.055	0.137	0.099	0.092		0.089	0.101	0.064	0.056
1880	0.060	0.156	0.122	0.109		0.098	0.114	0.073	0.076
1890	0.074	0.180	0.145	0.122		0.109	0.125	0.085	0.090
1900	0.097	0.208	0.166	0.145		0.135	0.139	0.108	0.109
1913	0.111	0.241	0.183	0.162	0.073	0.168	0.151	0.140	0.130
1925	0.150	0.272	0.224	0.211	0.080	0.181	0.191	0.158	0.144
1929	0.170	0.298	0.252	0.227	0.082	0.197	0.211	0.165	0.163
1933	0.197	0.312	0.269	0.232	0.089	0.228	0.231	0.180	0.166
1938	0.267	0.340	0.292	0.259	0.119	0.256	0.255	0.209	0.194
1950	0.348	0.383	0.339	0.331	0.225	0.302	0.287	0.247	0.248

Sources: Panel A: Own calculations based on Maddison (2013). Panel B: Data underlying Prados de la Escosura (2015).

Notes: [1] Data refer to 1937. [2] Data refer to 1938. [3] Data refer to 1911 and 1921, respectively.

TABLE 10.3 Living standard indicators for the United Kingdom, Germany, Italy and Sweden, interwar period

	United Kingdom	*Germany*	*Italy*	*Sweden*
Panel A: GDP per capita. Absolut values and relative to U.K.				
1913	4921	3648	2305	2874
	100.0%	74.1%	46.8%	58.4%
1920	4548	2796	2153	3004
	100.0%	61.5%	47.3%	66.1%
1939	6262	5406	2981	5251
	100.0%	86.3%	47.6%	83.9%
growth p.a.				
1913–1939	0.9%	1.5%	1.0%	2.3%
1920–1939	1.7%	3.5%	1.7%	3.0%
Panel B: Historical Index of Human Development				
1860	0.191	0.197	0.091	0.194
1870	0.206	0.210	0.112	0.212
1880	0.227	0.227	0.125	0.236
1890	0.254	0.260	0.149	0.258
1900	0.282	0.290	0.166	0.278
1913	0.331	0.314	0.197	0.328
1925	0.356	0.341	0.230	0.344
1929	0.367	0.367	0.251	0.353
1933	0.371	0.373	0.259	0.365
1938	0.390	0.406	0.285	0.382
1950	0.464	0.423	0.326	0.451

Sources: Panel A: Own calculations based on Maddison (2013). Panel B: Data underlying Prados de la Escosura (2015).

Russia's HIHD was consistently the lowest of all CESEE countries,[1] yet by World War I the country had achieved a mid-range per head income: lower than the (nascent) Central European countries but higher than some of the Balkan countries (cf. Chapter 3). Three decades of rapid industrialisation starting in the 1880s resulted in high growth rates but transformed mostly a small number of (rapidly growing) urban centres. Late Tsarist Russia made few inroads into the countryside, and life expectancy, literacy rates and school enrolment for the vast majority of the population remained far behind the Central European and even the South-East European economies. Yet, according to Table 10.2, a role reversal had occurred by the late 1930s. Rapid economic growth continued (though interrupted by World War I and the Russian Civil War; cf. Chapter 7), and increasingly translated into better living standards for the population at large. The HIHD suggests that by 1938, the Soviet Union offered the third-highest living standard after Czechoslovakia and Hungary. In recent years, Allen (1998, 2003) has interpreted similar

data as evidence of successful economic development of the early Soviet Union, a process which in his view not only laid the foundation for large-scale industrialisation but also raised consumption and improved living standards within a relatively short time period. Should we concur with this revisionist assessment of Bob Allen? Or should we side with the conventional view which argues that any meaningful improvement of living standards in the Soviet Union materialised only in the 1950s?

Finding an answer to the controversial question of living standards in the early Soviet Union is important but difficult. Collectivisation of agriculture, state-led industrialisation and Five-Year Plans were first implemented there (after 1928), but they became the template for the entire region after World War II. Consequently, the 1930s allow a comparison between two different development paths for a last time: "big push industrialisation" in the Soviet Union versus a process of slower, market-led structural transformation which we will refer to as "organic growth."

Developing our own position will require going beyond aggregate measures, which reveal as much as they conceal. Even Allen (2003: 132–152), the protagonist of a more positive assessment of living standards in the Soviet Union, does not claim that the standard of living improved throughout the country. His work is solely concerned with cities and urban areas, and his argument is more subtle: he concedes that living standards in the cities might not have improved a great deal, yet he argues that Stalin's policies unleashed a large movement from the countryside to the cities, allowing a larger number of people to take advantage of a better urban life. Aggregate measures not only assume a homogeneity that was absent in the interwar period. They also make it more difficult to understand the CESEE experience, where heterogeneity was the defining feature we need to understand.

We will first disaggregate the HIHD into its components (section 3.3). What do the individual indicators suggest about absolute and relative living standards? Second, we need to understand better the differences between cities and countryside in a region that was essentially rural and agricultural but became – in all parts, not only in the Soviet Union – increasingly urban and industrial (section 3.4).

Evaluating living standards beyond aggregate measures

Decomposing the HIHD of Prados de la Escosura (2015) reveals that its component time series often do not rely on country-specific historical data. Instead, they constitute proxy measures based on assumed similarities to neighbouring countries (or even to countries in the same "region"). For example life expectancy data are reported for all 12 CESEE countries, but only for three of them are they based on historical data pertaining to the particular country (Srb 1962 for Czechoslovakia, Valaoras 1960 for Greece and Pressat 1985 for the Soviet Union). Such an approach might be legitimate for global comparisons in which regions are compared with each other, yet it is of little use in a study specifically devoted to Eastern Europe.

Tables 10.4, 10.5 and 10.6 provide life expectancy at birth, literacy rates and school enrolment based on country-specific data only. All three tables come with

TABLE 10.4 Life expectancy at birth in Central, East and South-East Europe, 1879–1941

	Eastern Europe			*Central Europe*			*South-East Europe*					*Other European countries*			
	Soviet Union	*Estonia*	*Latvia*	*Czechoslovakia*	*Hungary*	*Poland*	*Albania*	*Bulgaria*	*Greece*	*Romania*	*Yugoslavia*	*Britain*	*Germany*	*Italy*	*Sweden*
1879									36.7						
1896/1897	32.0														
1899								40.2							
1900						34.2						49.2	47.5	43.6	54.0
1900/1901					37.3										
1903–1905															
1910/1911					39.8			42.1							
1913												54.5	50.0	46.1	59.2
1920										40.0					
1921				47.8	42.1										
1922						49.0									
1923															
1924															
1925												60.5	58.6	52.6	64.0
1926								46.3							
1927	44.3														
1928									44.7						
1929															
1930			57.3	53.5				48.4		42.3					
1931					50.2										
1932						49.8					52.1				
1933		56.4													
1934															
1935			58.1												
1936								51.8							
1937				56.8											
1938							38.3					64.9	64.2	59.3	68.5
1939	46.8														
1940									54.4						
1941					56.6										

Sources: Latvia, Poland and Romania: Bardet & Dupâquier (1999). Soviet Union, Estonia, Czechoslovakia, Hungary, Albania, Bulgaria, Greece and Yugoslavia: Rothenbacher (2013). Britain, Germany, Italy and Sweden are taken from the data underlying Prados de la Escosura (2015).

Notes: Where our sources report male and female life expectancy separately, we form the average of the two values.

TABLE 10.5 Literacy rates in Central, East and South-East Europe, 1807–1965

	Eastern Europe				*Central Europe*			*South-East Europe*					*Other European countries*			
	Soviet Union	*Estonia*	*Latvia*	*Lithuania*	*Czechoslovakia*	*Hungary*	*Poland*	*Albania*	*Bulgaria*	*Greece*	*Romania*	*Yugoslavia*	*England and Wales*	*Germany*	*Italy*	*Sweden*
1807	3.9															
1837	9.4															
1850					**>60**	**20–30**					**<10**		**55–60**	**80–85**	**20–25**	**90**
1867	17.8															
1869						32										
1870					**>70**	**36**				**20–25**	**<15**		**70–75**	**87–92**	**31**	**90–95**
1877	21.6															
1880									3							
1887	22.0															
1890	**15–20**				**85–95**	**50–55**			**15–20**	**28–32**	**15–20**	**25–35**	**85–90**	**92–99**	**44–46**	**95–99**
1897	30.1															
1907	35.3															
1910	**40–50**				**92–97**	**68.7**	**50–60**		**37.8**	**40.3**	**30–40**	**43–48**	**90–95**	**95–99**	**60.7**	**98–99**
						67			34							
1912											39					
1917	42.3															
1930	**55–65**	**90-95**	**87**	**70-75**	**95.9**	**90.4**	**74.7**		**59–63**	**54.9**	**57.1**	**55.4**	**95–99**	**98–99**	**66.9**	**99.9**
1939	87															
1950	**90–95**				**97–98**	**95.3**	**90–95**	**70–75**	**75–80**	**74.1**	**83**	**65.6**	**98–99**	**100**	**85.6**	**98–99**
1965	**95–99**				**98–99**	**97–98**	**95–99**	**75–80**	**92–97**	**80–85**	**92–97**	**80–85**	**98–99**	**100**	**90–95**	**98–99**

Sources: Values in bold are based on Flora (1973: 245). Values in normal script are based on Berend & Ranki (1974: 25–26) for Hungary (1869, 1910) and Romania (1912); Mishkova (1994) for Bulgaria (1880, 1910) and Mironov (1991: 240, 245) for Russia and the Soviet Union.

TABLE 10.6 Percentage of children aged 5 to 14 years enrolled in primary schools, 1850–1950

		Central Europe			*South-East Europe*					*Other European countries*			
	Soviet Union	*Czechoslovakia*	*Hungary*	*Poland*	*Albania*	*Bulgaria*	*Greece*	*Romania*	*Yugoslavia*	*Britain*	*Germany*	*Italy*	*Sweden*
1850	1.8	56.9	22.3									**12.4**	
1860	2.8	60.3	20.9							**52.1**	**71.9**	**24.7**	
1870	3.7	62.7	**33.4**	19.8			**25.3**		3.8	**55.9**		**28.6**	**58.9**
1880	4.6	72.3	**45.7**	24.4			**29.3**		6.9	**54.9**	**71.1**	**34.6**	**70.5**
1890	**9.9**	78.3	**51.3**	32.7		**23.8**	**31.2**		9.3	**64.6**	**74.2**	**37.0**	**68.3**
1900	**14.9**	81.9	**54.2**	31.9		**33.2**	**32.4**	**25.6**	12.1	**72.0**	**73.2**	**38.2**	**68.9**
1910		79.7	**52.6**			**41.2**	**40.8**	**35.4**		**72.9**	**72.0**	**44.6**	**69.9**
1913	16.6			30.7	6.9				16.1				
1920			**48.4**			**44.4**	**58.9**	**29.3**		**70.1**	**75.8**	**50.6**	**64.0**
1925	25.5			35.6	8.5				19.8				
1929	29.3			39.2	8.4				26.2				
1930			**49.5**			**47.2**	**61.7**	**58.8**		**74.5**	**69.9**	**59.4**	**77.9**
1933	42.1			47.7	9.0				30.2				
1938	73.2			50.9	16.6				31.2				
1950	44.5			54.5	35.4				41.5				

Sources: Data in **bold** are based on Lindert (2004: 91–93). Data in normal script for Czechoslovakia are reproduced from chapter 6 of this book (table 7). All other entries are from the data underlying Prados de la Escosura (2015).

sizeable gaps, which we understand as an aspiration for future research. Table 10.4, for example, provides data for life expectancy at birth for 11 CESEE countries (Lithuania is missing). But only four of them offer reliable pre–World War I estimates as well as good data for the end of the interwar period: Bulgaria, Greece, Hungary and the Soviet Union. Estimating life expectancies requires age-specific mortality profiles and is considerably more data intensive than the crude death rate (the latter is essentially a counting exercise, which explains why statistical yearbooks reported them on an annual basis). Typically, census data are used to produce life expectancy estimates. Russia and the Soviet Union are a good case in point. The three observations shown in Table 10.3 for 1896/1897, 1926/1927 and 1938/1939 build on the three censuses of 1897, 1926 and 1939. For the other seven countries, the data are of less use for establishing long-term patterns. Estonia, Albania and Yugoslavia, for instance, offer only a single observation for the entire interwar period. Czechoslovakia, Poland and Romania constitute intermediate cases as far as data coverage is concerned.

Life expectancy at birth

Life expectancy remained far below the values for other European countries but improved considerably over time, both in absolute and relative terms. It is worth beginning with Albania, where life expectancy at birth remained below 40 years as late as 1938. This constitutes the lowest value recorded for any European country by this point (Rothenbacher 2013, 2002). The Soviet Union exhibited the second lowest value in the region and allows to establish a pattern of consistent longevity increases: 32.0 years in 1896/1897 to 44.3 years in 1926/1927 and 46.8 years in 1938/1939.

Longevity patterns look more benign for all other countries. Greece, for which the longest record is available, gained 18 years over six decades, or 50% (from 36.7 to 54.4 years). Britain and Germany, over the same period, achieved 19.8 and 24.8, respectively (Britain, from 45.1 years in 1880 to 64.9 in 1938; Germany, from 39.4 to 64.2 over the same time span). By the late 1930s, the top-performing economies (Czechoslovakia, Hungary and Greece, and potentially also Latvia and Estonia) also had the highest life expectancies.

What light does Table 10.4 shed on the controversial question of living standards under Stalin's rapid industrialisation? Two comparisons are relevant. First, longevity increases in the Soviet Union slowed down after 1927 – precisely during the period which revisionists claim led to a significant improvement of living standards (Allen 1998). Second, both Bulgaria and Greece offer observations at roughly the same points in the 1920s and the 1930s, but longevity increases were considerably higher in these two cases (Greece, 9.7 years; Bulgaria, 5.5 years; Soviet Union, 2.5 years). Longevity improvements in the early Soviet Union do not look impressive in a regional perspective.

Literacy and school enrolment

Literacy is defined as the percentage of the population aged 15 years or over that is able to read and write. Enrolment rates are the number of pupils divided by the relevant school age population cohort (typically children aged 5–14 years). While different in theory, the two indicators are in practice highly correlated, not least because in the absence of historical data, literacy rates are often projected backwards with the rate of primary enrolment.

Entries in bold in Tables 10.5 and 10.6 are taken from two standard references with pan-European coverage, namely Flora (1973) for literacy and Lindert (2004) for school enrolment. We add to this, in normal script, data coming from a variety of sources, containing typically data belonging to one country only. The pan-European and country-specific data fit nicely and validate each other.

The Czech provinces of Austria (Bohemia and Moravia) and Hungary led on education for a long time, with a notable difference between the two. Austria's first attempt at establishing a modern educational system dates back to 1774, but compulsory schooling in both Austria and Hungary began only in the late 1860s (Berend & Ranki 1974: 24). Practice differed from theory, as evidenced from enrolment rates, but the upward trend is clear.

How do we account for the slow rise of schooling in the rest of Eastern Europe? For a long time, there was no particular need for a literate workforce. The bulk of the population performed agricultural work in a rural context. The history of the emerging Balkan nation states suggests that education was not, or only partly, a means to foster skills and productivity; full command over the language was first and foremost important in pushing back competing nationalisms (Mishkova 1994). The literacy rates demonstrate this pattern, with countries obtaining autonomy/independence earlier (Greece, 1832; Romania, 1859; Bulgaria, 1878) also exhibiting earlier increases in literacy. The absence of this nation-building element helps explain why literacy rates remained so low in Russia, where ordinary people saw little value in acquiring reading skills until the abolishment of serfdom in 1861 (Mironov 1991; Chaudhary et al. 2012).

Only at around the turn of the century had all CESEE countries introduced compulsory schooling, but even then actual enrolment probably did not surpass a third (outside of Austria-Hungary). By World War I, only the Czech provinces had achieved near-universal literacy and schooling, with Hungary following at a certain distance. In all other countries, literacy remained low by European standards. By World War I, none of them had probably surpassed the 50% threshold; and even by 1930 many of them had not yet reached two-thirds. But then, by means of substantial investment into primary and secondary schooling, literacy and school enrolment increased quickly. By the end of the interwar period, most countries had achieved near-universal literacy (Benavot & Riddle 1988).

Indicators speaking to rural-urban divide and structural transformation

Yet even breaking down the HIHD index into its components leaves us with measures which do not speak to distinctions which greatly mattered for people's lives. Literacy, for instance, averages over substantial differences between male and female, urban versus rural, different age cohorts, various national and religious groups within one country, and different regions and estates (in Tsarist Russia), to name but the most important dimensions. For example Mironov's (1991: 243) data suggest that Russia's urban population in 1920 was twice as literate as the rural population (73.5% vs. 37.8%). Other indicators frequently used in the living standard debate are arguably even less representative. Real wages are a good example: they reflect urban working conditions that were not relevant for more than 25% of the working population in interwar CESEE. The bulk of the population worked in agriculture, and they either worked their own land as subsistence farmers (and hence earned no salary) or they received a salary in addition to remuneration in kind (the size of which we do not know).

The examples of literacy and wages challenge us to explore in greater detail the rural-urban divide. On the micro level, this divide stands for living standard differences between the cities and the countryside. On the macro level, it explains the speed of structural transformation. Both are connected: poor rural living standards will act as a push factor to the cities, and high urban living standards will act as a

pull factor. In the following, we will draw on five specific indicators that speak to the differences between rural and urban areas: urbanisation and shares of sectoral output as macro indicators of structural change (Tables 10.7 and 10.8), and literacy rates, wages and calorie intake as living standard indicators (Tables 10.9 and 10.10; Figure 10.2).

We confine ourselves to two countries, namely the Soviet Union and Bulgaria. We include the Soviet Union as we are specifically interested in the impact of collectivisation and forced industrialisation on living standards. We choose Bulgaria as arguably the most suitable point of comparison. Both countries had a particularly low income position in 1913 (Chapter 3) and were held up already by Gerschenkron (1962) as quintessential cases of economically backward countries. Both also underwent a late demographic transition, with high population growth in the interwar period. As explained in section 2.4, this forced a change in the Bulgarian growth model from extensification to intensification of agriculture and absorbing rural surplus population into the cities. The interwar period in Bulgaria

TABLE 10.7 Urbanisation in Russia/the Soviet Union and Bulgaria, 1870–1946

	1870	*1910*	*1920*	*1926*	*1934*	*1939*	*1946*
Russia/Soviet Union	6.7	20.0		17.9		32.9	
Bulgaria	16.7	19.1	20.0	20.6	21.4		24.7

Sources: Bulgaria: Own calculations based on the 1900, 1920, 1926, 1934, and 1946 censuses. Russia/Soviet Union: Data for 1870 kindly communicated by Paolo Malanima. Data for 1910 based on Bairoch (1976: 312). Data for 1926 and 1939 as reproduced in Vsesouznaya Perepis Naselenia 1939 goda. Osnovnie Itogi. Moskva, 1992: 22.

Notes: Urbanisation is the share of the total population living in towns. Towns are typically defined as having more than 5,000 inhabitants. Definitions may vary (e.g., official classification as "town" for historical reasons), but the Bulgarian data – with its three different definitions – suggest that such minor differences do not matter for the broad point made in this chapter.

TABLE 10.8 Sectoral shares in Russia/the Soviet Union and Bulgaria, 1900–1945

Bulgaria	*1900*	*1911*	*1921*	*1928*	*1939*	*1945*
Primary sector	56.5	56.7	51.8	52.9	52.1	42.9
Secondary sector	14.6	13.1	15.8	15.9	15.0	18.2
Tertiary sector	28.9	30.2	32.4	31.2	32.9	38.9
Russia/Soviet Union	*1897–1901*	*1913*	*1921*	*1928*	*1937*	*1940*
Primary sector	51.4	44.4	52.3	44.9	31.0	29.5
Secondary sector	21.0	26.0	14.7	26.2	32.2	32.8
Tertiary sector	27.6	29.7	33.0	29.0	36.8	37.7

Sources: Bulgaria: Ivanov (2012). Russia/Soviet Union: Gregory (1982) for 1883–1887; Markevich & Harrison (2011) for 1913, 1921 and 1928; Davies et al. (1994) for 1937 and 1940.

TABLE 10.9 Literacy rates in Russia/the Soviet Union and Bulgaria, 1897–1946

	1890s	*1920s 1st. obs.*	*1920s 2nd obs.*	*1930s*	*1940*
Russia/Soviet Union	**1897**	**1920**	**1926**	**1939**	
urban	52.3	68.5	76.3	89.5	
rural	19.6	32.8	45.2	76.7	
total	24.0	39.1	51.1	81.2	
Bulgaria	**1900**	**1920**	**1926**	**1934**	**1946**
urban	54.6	62.9	64.1	69.5	86.8
rural	28.5	39.9	43.6	51.9	73.7
total	33.5	44.5	47.9	55.6	77.0

Sources: Bulgaria: Own calculations for 1900, 1920, 1926, 1934, and 1946 are based on census publications: Obshti rezultati ot prebroyavane na naselenieto v Tsarstvo Balgaria na 31 dekemvrii 1910 god. T. 1. S., Darzhavna pechatnitsa, 1923, s. 154. Obshti rezultati ot prebroyavane na naselenieto v Tsarstvo Balgaria na 31 dekemvrii 1920 god. T. 1. S., Darzhavna pechatnitsa, 1927, s. 22. Obshti rezultati ot prebroyavane na naselenieto v Tsarstvo Balgaria na 31 dekemvrii 1926 god. T. 2. S., Darzhavna pechatnitsa, 1931, s. 2–11. Prebroyavane na naselenieto na 31 dekemvrii 1934. Obshti rezultati. T. 1. S., Darzhavna pechatnitsa, 1938, s. 46 Rezultati ot prebroyavane na naselenieto na 31 XII 1946 godina. T. 2., S., DUI pri MD, 1970, s. 17–30. Russia/Soviet Union: Data for 1897, 1926 and 1939 are based on census data as reproduced in Vsesouznaya Perepis Naselenia 1939 goda. Osnovnie Itogi. Moskva, 1992: 39. Data for 1920 are from Mironov (1991: 243), but adjusted for different definitions of literacy by Mironov (9–49 year olds) and our own calculations (the entire population above 7 years old).

Notes: Literacy is defined as the ability to read and write of the entire population above 7 years old.

saw structural transformation as the result of economic and demographic pressures (Ivanov & Tooze 2007). We will ask, from a living standard perspective, how this compares to the Soviet Union's big push industrialisation.

How much higher was the speed of structural transformation in the Soviet Union? Good indicators are urbanisation levels and the share of industry as part of GDP. Table 10.7 compares urbanisation levels in both countries from 1870 to World War II. In the early 1920s both countries were rural economies, with only 1 in 5 living in towns. Yet the Soviet Union increased this number by 15% between 1926 and 1939 (a period roughly coinciding with the first two Five-Year Plans implemented between 1928 and 1937), while Bulgaria advanced by less than 5%. The share of the secondary sector as part of GDP points to the same conclusion. Both indicators suggest that structural transformation progressed much quicker in the Soviet Union than in Bulgaria.

What did rapid structural change mean for the two-thirds of the Soviet population still living in rural areas by the outbreak of World War II? There is a dearth of quantitative studies on this question, and protagonists of a more positive assessment of the living standard in the early Soviet Union have confined their work suspiciously to the cities. One of the few available indicators is literacy. Until World War I, the Bulgarian population, both rural and urban, was more literate (Table 10.9). But then the Soviet Union overtook and subsequently widened the gap both in

TABLE 10.10 Daily calorie intake per adult person in Bulgaria, 1848–1963

	1848	*1884*	*1906*	*1925*	*1936*	*1939*	*1941*	*1963*
peasant (rural)		3044	3753		3408	3785	4079	2920
worker (urban)	1934			2562				3314
clerck (urban)				2432				3201

Sources: Own calculations based on Todorov, N. 'Budgetat na balgarskoto rabotnichesko semeistvo ot sredata na XX v.', *V chest na akademik D. Kosev*. Sofia, 1974: 377–396 for 1848; for 1884: *Sbornik ot statistichesky svedeniya za stopanskoto polojenie na Zlatishka okolia. Sofia*, 1888: 33–35; for 1906: Popov, K. and P. Penchev, *Selo Kasilak: Opit za statistichno-ikonomicheska monografia*. Sofia, 1909. Several budgets with outliers on grain consumption, reporting 1.8 kg (and above) of bread per person per day were excluded; for 1925: Domakinski budget: Anketa varhu semeinite prihodi i razhodi na chinovnicheski, zanayatchiiski i rabotnicheski domakinstva prez mart 1925 god. V. 2. Sofia 1928: 160, 234; for 1936: Mocheva, H. *Selskoto zemedelsko domakinstvo prez 1935/36*. Sofia, 1938: 40; for 1939: Mocheva, H. *Hranata na balgarskiya selyanin*. Sofia, 1946: 85; for 1941: recalculation of data from 48 peasant account books reported in Ivanov, M. 'Nevidimite granitsi na modernizatsiyata', *Istoricheski pregled*, 2001, 1–2: 121–145; for 1963: Dohodi, razhodi i potreblenie na nabljudavanite semeistva v NRB za 1962, 1963 i 1964 godina. Sofia, 1965: 92–93, 112–113, 132–132. We used original quantities of foods and drinks from the source to which we have applied the same caloric values described above, rather than borrowing the officially calculated calorie intake which tended to overestimate peasant consumption.

Notes: Daily calorie intake is defined as the amount of energy contained in the food and beverages that an adult consumes on a daily basis. According to contemporary Bulgarian studies (Mocheva, 1938: 40), a peasant doing hard agricultural labour requires daily intake of at least 3,400 calories.

In most cases, the available sources provided information on the amount of grain consumed in the surveyed households. Based on the information kindly provided by Mariana Kukusheva, Chairwoman of the Bulgarian National Branch Union of Bakers and Pastry Makers, Anketa na nasarchavanata industria (1912: 97, 102) and a series of peasant account books from 1939–41 deposited in the Bulgarian National Archives (fond 505k) and analyzed in Ivanov (2011, 1–2: 121–145), we assume that 1,07 kg of bread are made by one kilo of wheat and 1,54 kg. of bread from one kilo of wheat flour (as well as a 1 : 0.7 wheat to flour ratio).

The caloric value of different foods and beverages is taken from US Department of Agriculture Calories Database. For country specific foods (e.g. some types of cheese, varieties of beans, some vegetables and meat), data on caloric value is from bb-team.org and hranite.info. In line with contemporary estimate of about 10 percent waste of food in peasant households due to luck of refrigeration and feed for domestic animals (Mocheva, 1938: 39), we have reduced rural calorie intake in all years by the corresponding amount (10 percent).

urban and rural areas. This might suggest that while Stalin's policies were primarily concerned with the cities, they were not confined to them: the government aimed at raising human capital as a precondition for economic growth in urban and rural areas alike. Yet it is also possible that the high value for rural literacy simply is an exaggeration (it goes back to the controversial 1939 census; cf. section 1) and that living standards in the countryside remained appallingly low in the 1930s, in line with the conventional literature on this topic (which is largely based on anecdotal evidence). After all, keeping living standards low in the countryside would force people to leave for the cities, providing the workforce for the new industries. We will return to the logic of this developmental approach for the case of Bulgaria,

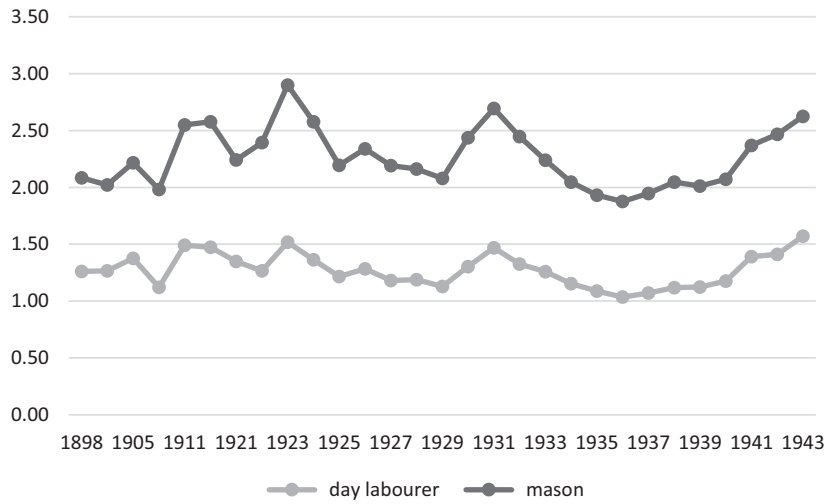

FIGURE 10.2 Real wages in Bulgarian cities, 1898–1943

Sources: Own calculations based on price and nominal wage data from Bulgarian Statistical Yearbooks (various issues).

Notes: In calculating Bulgarian real wages, we follow closely the methodology of estimating a subsistence basket as described in Allen and Khaustova (2019: 26–30). In order to adapt the Soviet basket to Bulgarian consumption patterns, we substituted rye bread with wheat bread, lamb with mutton, and potatoes with beans, and use the nutritioal value of these foods from Allen (2001: 421) and Allen and Khaustova (2019: 26–30).

where life in the countryside was "too good" to act as a push factor towards the cities.

What did rapid structural change mean for the living standard in the cities? Did living standards rise in tandem with industrialisation, or were there time lags between both processes? This question has generated considerable interest for the case of the Soviet Union, and three stages of the academic debate can be distinguished. The long-held view was one of stagnant, or even declining, living standards (Chapman 1954, 1963; Bergson 1961; Hunter & Szyrmer 1992). While some of the scholars were not unsympathetic to Stalin's economic approach, they took a view of "no long-term gain without short-term pain": any living standard increases were reserved for the 1950s and thereafter. In the short term, Stalin's big push industrialisation achieved the intended structural change but at the expense of a decline in both rural and urban living standards. Rural living standards were squeezed by expropriating farmers and forcing them to deliver food to the cities (both as part of a process known as collectivisation). Urban living standards, for their part, were low, as mass migration to the cities kept wages low and made living conditions precarious.

Allen, in two important contributions (Allen 1998, 2003), challenged this view by presenting evidence that suggested mildly rising wages in the urban areas in the

1930s as well as better nutritional intake. In this view, cities not only offered better living conditions than the countryside; big push industrialisation also meant that a larger share of people was able to take advantage of them. Yet the most recent literature has, in many respects, returned to the older literature. Allen and Khaustova (2019) construct urban real wages for skilled and unskilled workers for the cities of St. Petersburg, Moscow and Kursk for 1853–1937. Their findings suggest that real wages fell – sometimes by more than 50% – between 1928 and 1937, as the investment needs of big push industrialisation forced a sizeable reduction in consumption (a process also known as "forced savings"). As far as the entire interwar experience is concerned, they find that in all six cases they study (skilled and unskilled workers in three cities), real wages were lower in the late 1930s than they had been in 1913.

We have constructed real wages in Bulgarian cities in an attempt to put the Russian case in a regional perspective. Following closely the methodology of Allen (2001) and Allen and Khaustova (2019), Figure 10.2 shows real wages – as multiples of a standardised subsistence basket – of skilled workers (mason) and unskilled workers (day labourer) for the 1898–1943 period. Comparing Allen and Khaustova's (2019) findings for the cities of Moscow, St. Petersburg and Kursk (figures 4–6) and our Figure 10.2 suggests three main differences. First, the standard of living was typically higher in Bulgaria: the welfare ratio was consistently above unity, whereas unskilled workers in Russia and the Soviet Union could often not afford even one subsistence basket of Allen's unified approach. Second, Bulgarian wages were far less volatile. The dramatic fall in real wages under Stalin's first two Five-Year Plans (1928–1937) – wages more than halved in some cases – has no equivalent in the Bulgarian case. The rapid changes in the economic regime from war communism (1918–1921) to the New Economic Policy (1921–1928) to big push industrialisation (after 1928) did not allow for a smoother path in the Soviet case. Finally, the trajectories started to diverge in the interwar period. Before World War I, both countries saw wages for skilled and unskilled workers rise. In the interwar period, by contrast, Soviet wages on balance fell whereas Bulgarian wages increased.

The Soviet Union forced structural change but made the urban standard of living worse in the process. In the Bulgarian case, the question poses itself differently. If urban living standards were moderately comfortable, why did not more people move from the countryside into the towns? We were unable to reconstruct Bulgarian rural wages, but nutritional evidence allows a comparison with the countryside. Table 10.10 suggests that Bulgarian peasants were well nourished, and certainly better than their counterparts in the cities. They were small-scale subsistence farmers working their own plots of land, and universal suffrage meant that their interests were politically well represented. Bulgarian peasants had little incentive to move during the interwar period. While they were not rich in money terms, their overall condition – nutritional situation, security of property rights and political representation – did not push them away from the countryside. Neither did the countryside push nor did the cities pull (sufficiently); consequently, structural change was painfully slow. The simple logic of this approach is vindicated by a comparison with the post-war period, when the new communist government in Bulgaria

imposed collectivisation and forced industrialisation in ways similar to what Stalin had done two decades earlier in the Soviet Union. Food requisitions eroded the position of the farming population to the point that urban dwellers became better off.

A comparison between the interwar experiences of Bulgaria and the Soviet Union therefore suggests a trade-off between structural change and living standards. Governments were able to accelerate structural change, but only with a substantial decline of living standards in the short run.

Conclusions

This chapter has reviewed the demographic experience and the development of living standards in 12 CESEE countries during the interwar period. Due to strong population growth, the Eastern half of the European continent became more populous than the Western half for the first time in European history. The CESEE population grew more strongly, as countries entered the demographic transition later than their Western European counterparts; fertility remained higher but mortality had already fallen considerably. The Soviet Union and Bulgaria constituted paradigmatic cases, with annual population growth of 1.5% and more. Not all CESEE countries were in this intermediate phase during the interwar period, and we singled out Czechoslovakia, Hungary and Latvia which essentially followed an earlier Western European path.

High population growth put pressure on living standards throughout the region, but governments responded with policies to promote economic growth and improve education and health. Living standards improved in all countries, but the catch-up with Western Europe remained limited when judged by income-centred measures such as GDP per capita. A more positive assessment emerged only when other factors such as longevity and education were taken into account as part of the Historical Index of Human Development (HIHD), an indicator similar to the Human Development Index (HDI) but for historical periods.

Judging by the HIHD, a particularly successful country was the Soviet Union. We asked how much credence we should give this finding in light of the very considerable human losses produced by the famines of 1918–1922 and 1932–1933 and Stalin's Great Terror of (1936–1938) (a total of 13 million premature deaths in mid-range estimates). Were we dealing here – quite literally – with "survivor bias," or was there something to the revisionist account by scholars such as Robert Allen? Given the controversies surrounding living standards in the early Soviet Union, we probed deeper and contrasted the Soviet experience with Bulgaria, an equally poor country in 1913 but which underwent its own big push industrialisation only after World War II. The Soviet Union achieved structural change, but living standards improved nowhere near as strongly as revisionists claim. In fact, they almost certainly fell when judged by urban wages and nutritional intake. Life in the countryside was even worse, although reliable statistical evidence to support this view is difficult to muster. Conversely, living standards in the Bulgarian countryside were relatively high, disincentivising the peasants from moving to the

cities. The experience of the two countries suggests that governments can force structural change, but any improvements in living standards will materialise only with a considerable time lag.

Note

1 With the exception of Albania, for which Prados de la Escosura (2015) provides values as early as 1913, the year of the country's independence. We know very little about Albania's economic and social history in the 20th century, but the available evidence suggests that the country performed consistently worse and offered lower living standards than any other CESEE country.

References

Anketa na nasarchavanata of darjavata industria prez 1909 god. V: Industria za hrani i pitieta [*Survey of state encouraged industry in 1909 V: Food and beverage industry*]. Sofia: Darjavna pechatnitsa, 1912.

Dohodi, razhodi i potreblenie na nabljudavanite semeistva v NRB za 1962, 1963 i 1964 godina [Incomes, expenditures and consumption of the surveyed households in 1962, 1963 and 1964]. Sofia: TSU pri MS, 1965.

Domakinski budget: Anketa varhu semeinite prihodi i razhodi na chinovnicheski, zanayatchiiski i rabotnicheski domakinstva prez mart 1925 god [*A survey of family income and expenditures of clerical, craftsmen and workers households in March 1925*]. Vol. 2. Sofia: Darjavna pechatnitsa, 1928.*Obshti rezultati ot prebroyavane na naselenieto v Tsarstvo Balgaria na 31 dekemvrii 1910 god*. T. 1. [*General results of the census of the population in the kingdom of Bulgaria on December 31, 1910*. Vol. 1.]. Darzhavna pechatnitsa, 1923.

Obshti rezultati ot prebroyavane na naselenieto v Tsarstvo Balgaria na 31 dekemvrii 1920 god. T. 1 [*General results of the census of the population in the kingdom of Bulgaria on December 31, 1920*. Vol. 1]. Darzhavna pechatnitsa, 1927.

Obshti rezultati ot prebroyavane na naselenieto v Tsarstvo Balgaria na 31 dekemvrii 1926 god. T. 2. [*General results of the census of the population in the kingdom of Bulgaria on December 31, 1926*. Vol. 2.]. Darzhavna pechatnitsa, 1931.

Polakov, Yu A. (1992). *Vsesouznaya Perepis Naselenia 1939 goda: Osnovnie Itogi* [*All-union population census in 1939: General results*]. Moskva: Nauka.

Prebroyavane na naselenieto na 31 dekemvrii 1934. Obshti rezultati. T. 1 [*Population census on December 31, 1934: General results*. Vol. 1]. Darzhavna pechatnitsa, 1938.

Rezultati ot prebroyavane na naselenieto na 31 XII 1946 godina. T. 2 [*Population census results on 31 XII 1946*. Vol. 2]. DUI pri MD, 1970.

Tsentralen Darjaven Arhiv [Central State Archive of Bulgaria], fond 505k. Archival collection of peasant account books from late 1930s and early 1940s.

Bibliography

Allen, Robert C. (2001). The great divergence in European wages and prices from the middle ages to the First World War. *Explorations in Economic History* 38: 411–447.

Allen, Robert C. (2003). *From farm to factory: A reinterpretation of the Soviet industrial revolution*. Princeton: Princeton University Press.

Allen, Robert C. (1998) The standard of living in the Soviet Union, 1928–1940. *Journal of Economic History* 58: 1063–1089.

Allen, Robert C. and Khaustova, Ekaterina (2019). Russian real wages before and after 1917. *Explorations in Economic History* 72: 23–37.

Applebaum, Anne (2019). *Roter Hunger: Stalins Krieg gegen die Ukraine*. Munich: Siedler.

Austrian National Bank, Bank of Greece, Bulgarian National Bank, and National Bank of Romania (2014). *South-Eastern European monetary and economic statistics from the nineteenth century to World War II*. Vienna: Austrian National Bank.

Bairoch, Paul (1976). Population urbaine et taille des villes en Europe de 1600 à 1970. *Revue d'histoire économique et sociale* 54: 304–355.

Bardet, J. P. and Dupâquier, J. (eds.). (published between 1997 and 1999 in 3 volumes). *Histoire des populations de l'Europe*. Paris: Fayard.

Benavot, A. and Riddle, P. (1988). The expansion of primary education, 1870–1940: Trends and issues. *Sociology of Education* 61: 191–210.

Berend, Ivan and Ranki, Gyoergy (1974). *Economic development in East-Central Europe in the 19th and 20th centuries*. New York: Columbia University Press.

Bergson, Abram (1961). *The real national income of Soviet Russia since 1928*. Cambridge, MA: Harvard University Press.

Brown, John C. and Guinnane, Timothy (2007). Regions and time in the European fertility transition: Problems in the Princeton project's statistical methodology. *Economic History Review* 60: 574–595.

Chapman, Janet G. (1963). *Real wages in Soviet Russia since 1928*. Cambridge, MA: Harvard University Press.

Chapman, Janet G. (1954). Real wages in the Soviet Union, 1928–52. *Review of Economics and Statistics* 36: 134–156.

Chaudhary, Latika, Musacchio, Aldo, Nafziger, Steven and Yan, Se (2012). Big BRICS, weak foundations: The beginning of public elementary education in Brazil, Russia, India and China. *Explorations in Economic History* 49: 221–240.

Chesnais, J. C. (1992). *The demographic transition*. Oxford: Oxford University Press.

Coale, Ansley J. and Watkins, Susan Cotts (eds.). (1986). *The decline of fertility in Europe: The revised proceedings of a conference on the Princeton European fertility project*. Princeton: Princeton University Press.

Deaton, Angus (2006). The great escape: A review of Folgel's *The escape from hunger and premature death, 1700–2100*. *Journal of Economic Literature* 44: 106–114.

Flora, Peter (1973). Historical processes of social mobilization: Urbanization and literacy, 1850–1965. In S. N. Eisenstadt and S. Rokkan (eds.), *Building states and nations: Models and data resources*. London: Sage, pp. 213–258.

Gerschenkron, Alexander (1962). *Economic backwardness in historical perspective: A book of essays*. Cambridge, MA: Belknap Press.

Guinnane, Timothy (2011). The historical fertility transition: A guide for economists. *Journal of Economic Literature* 49.

Hunter, Holland and Szyrmer, Janusz M. (1992). *Faulty foundations: Soviet economic policies, 1928–1940*. Princeton: Princeton University Press.

Ivanov, M. (2011). Nevidimite granitsi na modernizatsiyata: Balgarskoto selo prez 1940–1941 g [Invisible borders of modernization: Bulgarian village in 1940–41]. *Istoricheski pregled* 67: 1–2, 121–145.

Ivanov, M. and Tooze, A. (2007). Convergence or decline on Europe's Southeastern periphery? Agriculture, population, and GDP in Bulgaria, 1892–1945. *Journal of Economic History* 11: 672–704.

Lindert, Peter H. (2004). *Growing public: Social spending and economic growth since the eighteenth century*. Cambridge: Cambridge University Press.

Livi-Bacci, Massimo (2007). *A concise history of world population*. 4th ed. Oxford: Blackwell.

Lyberatos, A. (2011). From imperial to national lands: Bulgarian agriculture from Russian-Ottoman (1877–78) to the Balkan wars (1912–13). In E. Eldem and S. Petmezas (eds.), *The economic development of Southeast Europe in the 19th century*. Athens: Historical Archive of Alpha Bank, pp. 137–172.

Maddison, Angus (2013). *Project up-date*. http://www.ggdc.net/maddison/maddison-project/data.htm.

Maddison, Angus (2009). *Historical statistics of the world economy: 1–2008 AD*. http://www.ggdc.net/maddison/oriindex.htm.

Maddison, Angus (2003). *The world economy: Historical Statistics*. Paris: OECD Development Centre Studies.

Markevich, Andrei and Harrison, Mark (2011). Great war, civil war, and recovery: Russia's national income, 1913 to 1928. *Journal of Economic History* 71: 672–703.

Millward, Robert and Baten, Joerg (2010). Population and living standards, 1914–1945. In S. Broadberry and K. O'Rourke (eds.), *The Cambridge economic history of modern Europe. Volume 2: 1870 to the present*. Cambridge: Cambridge University Press, pp. 232–263.

Mironov, B. N. (1991). The development of literacy in Russia and the USSR from the tenth to the twentieth centuries. *History of Education Quarterly* 31: 229–252.

Mishkova, Diana (1994). Literacy and nation-building in Bulgaria 1878–1912. *East European Quarterly* 29: 63–93.

Mitchell, Brian R. (2007). *International historical statistics*. 6th ed. Basingstoke: Palgrave Macmillan.

Mocheva, H. (1946). *Hranata na balgarskiya selyanin* [*The food of Bulgarian peasant*]. Sofia: Darjavna pechatnitsa.

Mocheva, H. (1938). *Selskoto zemedelsko domakinstvo prez 1935/36* [*The rural agricultural household in 1935/36*]. Sofia: Darjavna pechatnitsa.

O'Grada, Cormac (2009). *Famine: A short history*. Princeton: Princeton University Press.

Popov, K. and Penchev, P. (1909). *Selo Kasilak: Opit za statistichno-ikonomicheska monografia [The village of Kasilak: An attempt at statistical-economic monograph]*. Sofia: Darjavna pechatnitsa.

Prados de la Escosura, Leandro (2015). World human development 1870–2007. *The Review of Income and Wealth* 61: 220–247.

Pressat, R. (1985). Historical perspectives on the population of the Soviet Union. *Population and Development Review* 11: 315–334.

Rothenbacher, Franz (2013). *The Central and East European population since 1850*. Basingstoke: Elgar.

Rothenbacher, Franz (2002). *The European population 1850–1945*. Basingstoke: Elgar.

Sbornik ot statistichesky svedeniya za stopanskoto polojenie na Zlatishkata okolia (Sofiisko Okrujie) [A collection of statistical information for the economic situation of the Zlatitsa district (Sofia region)]. Sofia: Darjavna pechatnitsa, 1888.

Srb, V. (1962). Population development and population policy in Czechoslovakia. *Population Studies* 16: 147–159.

Todorov, N. (1974). Budgetat na balgarskoto rabotnichesko semeistvo ot sredata na XX v [The budget of the Bulgarian worker's family from the middle of the nineteenth century]. In *V chest na akademik D. Kosev*. Sofia: BAN, 377–396.

Valaoras, V. (1960). A reconstruction of the demographic history of modern Greece. *Miliband Memorial Fund Quarterly* 38: 114–139.

Wheatcroft, S. G. (1999). The great leap forward: Anthropometric data and indicators of crises and secular change in Soviet welfare levels, 1880–1960. *Slavic Review* 58.

The state socialist period

1945–1989/1991

12

ECONOMIC POLICY UNDER STATE SOCIALISM, 1945–1989

Andrei Markevich and Tamás Vonyó

Introduction

The rise and fall of state socialism dominated the political and economic history of Central, East, and South-East Europe in the second half of the 20th century. The post-war settlement and the East-West tensions that emerged from it divided the continent into two opposing ideological and military blocs. Under Soviet domination, the CESEE countries adopted Soviet-style political institutions and the Stalinist model of economic management. Given their extensive experience with state intervention during the war and the widespread perception that the state had to assume a vital role in post-war reconstruction, all governments in Europe pursued active and development-oriented economic policies. The share of public spending in national income rose to levels never seen before, factor markets were much restricted, strategic industries nationalized, and key resources publicly allocated. Thus, state socialism emerged in an international environment that heavily favored a strong public presence in the economy (Eichengreen 2007). However, state socialism went beyond the extent of government intervention that Western societies envisaged or ever put in practice; the socialist state directly commanded economic agents. Marxist ideology was the main source of divergence from the experience of Western market economies, but the relatively much greater extent of destruction and dislocation that the war had caused in Eastern Europe had important legacies, too (Vonyó 2020).

In this chapter, we demonstrate how ideology interacted with economic and geopolitical conditions in shaping the economic institutions and economic policy between the end of the war and the fall of communism. We begin by describing the classical model of the command economy, which was implemented first in the Soviet Union by Joseph Stalin (1878–1953) during the 1930s and remained in place until the death of the dictator (section 2). While this takes us outside of our

time frame, it builds the foundations upon which we can explain the development of central planning after 1945. The Soviet system represented a template that other countries in the region had to adopt as a matter of principle. Thus, it will remain the focal point of our exposition for the post-war period as well. We then describe (section 3) the convergence to the Soviet model in Central and South-East Europe during the late 1940s, followed by a discussion of the significant departures from Soviet policy and the classical model of the command economy in the decades that followed (section 4). Finally, we discuss the contribution of economic policy to the collapse of state socialism in the late 1980s, and ask to what extent political factors rather than the intrinsic inefficiency of the socialist system determined its fate (section 5).

The origins of the command economy: the Stalinist model, 1928–1953

The origins of the command economy in the USSR were closely associated with Stalin's policy of rapid industrialization and forced collectivization in the late 1920s and during the 1930s (Nove 1992).[1] This program required huge investments into industry that would have been difficult to accumulate in a backward economy with inadequate domestic savings and underdeveloped capital markets (Erlich 1960). The collectivization of agriculture allowed the communist regime to eliminate peasant farms as an independent source of economic decision-making (in addition to the already established state ownership of the land, nationalized industries, and the state monopoly over foreign trade) and to finalize the construction of a vertical hierarchy that governed the entire economy like a single public corporation. The state came to own almost all productive resources other than labour. There were no markets for land or capital, and in particular for any type of machinery that could be legally bought, sold or leased. Central planning provided the tool to mobilize recourses and to shift them from agriculture into industry. Prices were fixed and became an accounting category rather than an economic one; crucially they did not signal the relative scarcity of goods any longer. Central planners assigned plan targets to individual producers and directly allocated the necessary resources to them. Since the output of many state firms was the input of others, central planners set up plans on the distribution of produced goods establishing who would receive (buy) what and from whom. Legally, buyers could not refuse to implement these plans and not to buy these goods or to buy them from different sellers. This led to the domination of the seller rather than the buyer in the counteragent relationship. The seller could extract resources from the buyer, for example by economizing on the quality of the product sold. Money followed the plan expressed in physical units. The nationalized banking system was the only source of credit, and the state provided credit only for the realization of the tasks stipulated in the plan. The plan was the law, and the government could use coercion to enforce its realization (Gregory and Stuart 2001; Gregory and Harrison 2005).

The speed with which the new policy and the new economic system were introduced was remarkable. It is more difficult to reveal the final objectives of these transformations and, more generally, the policy objectives of the command system. Official ideology envisaged the building of a communist society, where 'all human material needs will be satisfied' (Communist Party, 1961). In other words, the raising of living standards was advocated as the ultimate target. However, the allocation of national income by end-use in the Soviet Union under Stalin (as well as under his successors) did not conform to this principle, as the shares of investment and government consumption increased at the cost of household consumption. Living standards remained modest, especially in the rural sector, and dropped significantly during the crisis of the early 1930s and the war years after 1940. The theoretical predictions of Preobrazhensky (1926) and Feldman (1928), that rapid capital accumulation at the early stage of industrialization would lead to long-run consumption levels higher than what could be achieved with more balanced growth, proved erroneous. As the previous chapter has shown, investment shares across the CESEE region were growing until the 1970s (and in the Soviet Union until the very end of communism), while economic growth was slowing down. This points to investment and growth in heavy industry for its own sake as the likely true goals of the communist regimes (Gregory 2003). Shares of governmental expenditures, in particular on defence, were also high in the communist countries (Kontorovich and Wein 2009). The order of objectives changed over time and varied across countries as a result of both internal politics and changing geopolitical conditions. Communist governments began to part with repression and purchased loyalty after Stalin's death in 1953 (Pikhoja 2000). This required the reallocation of recourses in favour of consumption and public building projects to maintain the economic legitimacy of communism. Yet the intensification of the Cold War worked in the opposite direction. The defence burden proved significant, in particular for the Soviet Union, which had to pay a heavy price for maintaining its East European empire and engagement in the nuclear arms race (Chapter 11).

Regardless of the objective function of the communist government, the command system had fundamental drawbacks that complicated the implementation of any chosen policy. First, as early critics had already noted (Hayek 1944), planning at the national level required tremendous amounts of information as well as computational power to allocate recourses efficiently. Even though linear programming (first developed by Leonid Kantorovich, 1912–1986) and the invention of computers softened these constraints, they remained pressing and arguably even grew over time, as the complexity of the economy increased. Second, economic agents pursued their own interest, which often contradicted the objectives of the central planners (the principle), and behaved opportunistically, creating a principle-agent problem or agency dilemma. The centre needed to employ agents and had to delegate authority to them to run the system, but could not monitor all their actions.

To tackle the information problem, the first generation of Soviet planners had already developed the so-called material balance method to assure equality between

the supply of the main inputs and the intermediate products on the one hand, and their utilization in the economy on the other. The material balance method alleviated, but did not eliminate, information asymmetries. It secured a development path balanced across sectors without substantial industry-specific bottlenecks, but it did not help to choose between various potentially possible resource allocations and select the one that would maximize output. Second, as a result of the limited computational power at their disposal, the planning authorities constructed material balances at relatively high levels of aggregation – sector or sub-sector and regional levels. This practice simply transferred the problem of unbalanced supply and demand for particular intermediate goods to a lower level of decision-making.

In practice, as the detailed research on the performance of industrial planning in the USSR shows, the central government tended to use planning as a tool to impose its 'vision of the future of the economy' (Zaleski 1980) rather than as a device to coordinate the efforts of the various economic agents. This approach caused planning mistakes and produced shortages of particular inputs. In turn, these problems required corrections of approved plans at a stage when they had already been put into operation. Another issue was that the center, and its chief planning organization, the Gosplan, required information from below to elaborate coherent plans; yet the lower-level agents contacted to provide this local information often had an incentive to manipulate it in an attempt to secure more favorable plan tasks that would be easier to implement. An exchange of information between planners and producers and effective bargaining over future plan targets and resources necessary for their implementation contributed to the practice of ex-post changes to the plans as well as to delays in their preparation. In particular, few economic agents started the corresponding planning period with a full-scale plan at hand (Markevich 2003). In other words, the communist state possessed complete ownership control over productive assets, but the capacity of the planning system to employ these assets efficiently was limited. From this perspective, Zaleski (1980) suggested to treat the Soviet-type economies as command economies rather than planned economies, underlining the priority of management over planning.

Insufficient efforts because of weak incentive schemes were another manifestation of opportunistic behaviour by economic agents (Berliner 1957; Belova and Gregory 2002; Gregory and Markevich 2002). From the early years, the central planners faced the problem of 'success indicators' to evaluate achievements of industrial units (Nove 1958). Plans consisted of many targets (gross output in physical units and roubles, the wage fund, utilization of capital inputs, sales, profits, etc.), the most important of which was gross output. Managers received bonuses if the plan was fulfilled in gross terms. Yet as described above, economic agents were heavily involved in the elaboration of plans and could manipulate information to get lower plan targets to begin with. Monitoring was the other main concern. The central planners observed the output produced rather than the efforts applied by economic agents, making it difficult for them to establish whether the agent's own efforts or external factors (either positive or negative) secured the results. Finally, a dynamic aspect to the principal-agent problem, known as the 'ratchet effect', produced

further difficulties. Higher achievements in the first period resulted in higher plan targets in the next period, demotivating agents to work hard (Weitzman 1980).

The command system was constructed as a hierarchical pyramid along the vertical lines of production; it suffered from the principal-agent problem at all levels of bureaucracy. Many agents were also principals for their subordinates, further complicating the governing procedure. Figure 12.1 illustrates the organization of the governing structure of the command economy as a unitary form hierarchy (U-form), where each division at a lower level specialized in the production of particular types of output. The government at the top (broadly defined, including its party component) made policy decisions and transmitted them to industrial ministries. The ministries specified these objectives and transmitted them along hierarchical lines to chief administrations responsible for corresponding sub-sectors of the economy. These departments elaborated detailed plans and communicated them to factories and other production units. Under normal conditions, principals dealt only with their immediate subordinates, delegating authority to them to specify plan targets and orders. This U-form hierarchy facilitated gains from specialization and economies of scale. On the downside, in such hierarchy, achievements of industrial units were poorly comparable with each other, which complicated the task of creating optimal incentives (Maskin et al. 2000; Qian et al. 2006).

Did the command economy leave any space for market allocation of goods and recourses mediated by supply and demand rather than through government decisions? The answer is 'yes' even in the strictest Stalinist model. First, state agents at all levels initiated horizontal quasi-legal or even illegal market exchanges. De jure sales and usage rights of resources belonged to the state, but agents assumed control over these rights in practice (Belova and Gregory 2002; Gregory and Markevich 2002; Markevich and Harrison 2006). Authorities tended to overlook such illegal contracts as long as they mitigated the drawbacks of the command system and contributed to plan fulfilment. Second, the labour market, albeit heavily regulated, remained in operation in all command economies throughout the socialist period.

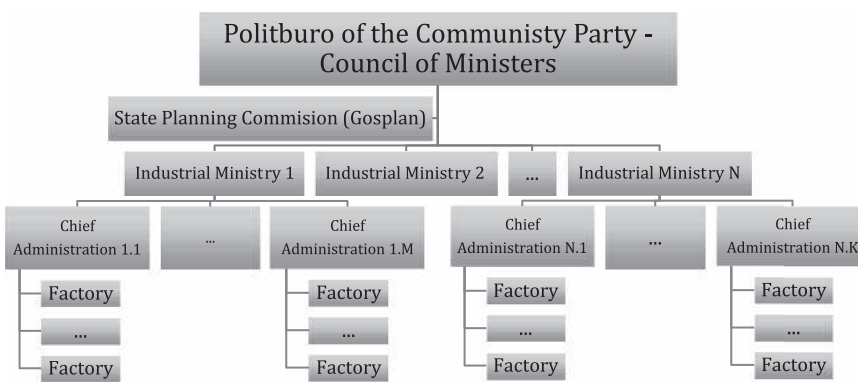

FIGURE 12.1 A command-economy hierarchy

Individuals had an opportunity to choose where to work and to change their workplaces.[2] Moreover, the right to work guaranteed by the law led to almost no unemployment, which improved the reservation options of labour and accordingly its bargaining position (Granik 1987).[3] Third, elements of market allocation remained in the sector of retail trade. Prices were fixed in state trade, but citizens could still make their choice as consumers. Shortages or inventories of particular goods were outcomes of this system if demand did not meet supply. Semi-legal private petty trade and black markets for consumer goods were an important part of the command economy, while the scale of such trade varied over time and space (Grossman 1977; Osokina 2001).

In the classical Stalinist model, the political dictatorship was a complement of the command economy. However, this was a sufficient but hardly necessary condition of a command economy. Many non-communist democratic countries employed elements of strategic planning and politically driven allocation of resources during the First and Second World Wars (Harrison 1998; Broadberry and Harrison 2005).[4] It is the scale of non-market allocation of recourses that makes the experience of command economies unique. Unlimited political power and an opportunity to use coercion brutally provided the means to implement the allocation of recourses and to enforce plan fulfilment along the lines of government objectives, even if the latter were at odds with consumer preferences. As famously argued by Lange (1958), the command economy was a 'permanent war economy'.

Many authors underline the high level of militarization in the Soviet economy. Military spending rose from 1% to 18% of national income between 1928, the start of Stalin's first Five-Year Plan and 1940 (Davis 1999), and remained high in the post-war period (Chapter 11). The dictator, however, did not maximise defence spending or investments into heavy and defence industry at all costs; the 1930s as well as the post-war years saw striking fluctuations in both types of outlays. There was a clear trade-off between maximizing investment and the necessity to secure sufficient standards of living to avoid social unrest (Gregory 2003). The same can be said about the role of state terror in economic management. While the dictator relied extensively on terror and harsh punishment for political and economic reasons, the imprisonment and liquidation of citizens had both opportunity and direct costs that shaped the implementation of such policy in practice (Belova and Gregory 2009).

Post-war reconstruction and Stalinization in Eastern Europe, 1945–1953

The Stalinist model is essential to understand the evolution of economic institutions in the broader CESEE region after World War II. As Chapter 11 has outlined, the economic consequences of the war were much more severe in the east than in the west of Europe. They brought not only physical destruction but also

an immense loss of economically productive manpower and the near total disintegration of many economies in the region (for comparative estimates see Harrison 1998). Therefore, state management, rather than mere intervention, was initially an imperative, not an outcome of policy choice. Governments, whether formed by communist parties or by national-unity coalitions, swiftly nationalized large-scale industry, the transport network, the energy sector, and financial institutions. Wages and prices remained fixed after the war, and practically all the key consumer products as well as industrial inputs were state-rationed. In East Germany and Hungary, military occupation and the reparations regime created further justifications for state control (Berend 1997).

The enormous reconstruction needs also meant that government policy was bound to prioritize the growth of industrial output over technological efficiency or the quality of products and services. For example, production in the Hungarian textile industry was restarted after 1946 with outdated British machinery acquired at scrap-metal prices (Berend 2006). To alleviate critical food shortages in urban areas necessitated the direct requisitioning of food by public authorities, especially where markets were still dislocated. Finally, the Holocaust, the expulsion of millions of ethnic Germans and the post-war population exchanges between countries (especially of ethnic Poles and Ukrainians between Poland and the Soviet Union) left a plethora of private assets without owners and often the skills necessary to operate them. Thus, there were often no practical alternatives for the state ownership of the means of production. Ownership structures were further shaken up by popular land reforms, which, in most countries, only gave de jure recognition for what had already been de facto established by the rural communities. A powerful swing in economic policies towards the left was bound to happen even without Soviet intervention and shake Eastern European societies to their foundations. Public legitimization for state control over the commanding heights of the economy was widespread for the redistribution of private wealth, for the administrative setting of wages and prices, and even for the rationing of scarce commodities and living space.

Public support for a transition to a totalitarian political regime and subjugation to Soviet dominance was much weaker. The Stalinist state and terror faced significant resistance everywhere and was impossible to achieve without Soviet intervention in the form of direct support to local communist parties, the liquidation of opposition figures and the manipulation of elections. Soviet intervention did come, and it pushed authoritarian controls and state management of the economy throughout the CESEE region close to the Soviet model. The final breaking point came in 1947, when the by then predominantly left-wing governments rejected Marshall Plan aid at the Kremlin's insistence. The following years witnessed communist takeovers, the Berlin Blockade (1948/1949), and the division of Germany (1949). In response to the European Recovery Program (Marshall Plan) and the establishment of the North Atlantic Treaty Organization (NATO), the Soviet Union created the Council of Mutual Economic Assistance (COMECON)

in 1949 that called explicitly for the Sovietization of Eastern European economies and eventually developed into a military bloc known as the Warsaw Pact (1955).

Sovietization introduced the Stalinist command economy in all CESEE countries,[5] in conjunction with the establishment of totalitarian governance. Coalition governments in Czechoslovakia and Hungary were dissolved and dissidents within communist parties, such as Władisław Gomulka (1905–1982) in Poland or Lucretiu Patrascanu (1900–1954) in Romania, were eliminated and replaced by Stalin loyalists. Most industrial firms were nationalized by the early 1950s, and the collectivization of agriculture (with the exception of Poland) was gradually completed until the early 1960s. Following the classical model, governments employed central planning to promote industrialization and the structural transformation of the predominately agrarian economies, largely in favour of heavy industry and defence firms (Berend 2006). Initial economic conditions affected the scale of such transformations. There was more room for the shift away from agriculture to industry in less developed Bulgaria or Romania than in economically more advanced Czechoslovakia or East Germany. There was greater urgency in developing new capacity in capital goods in countries that until 1945 had relied on German imports then in countries like Czechoslovakia, which had developed their own heavy industry earlier. In the Soviet Union itself, Stalin's government maintained its policy course established in the 1930s, now with a view towards accumulating the recourses necessary for rapid reconstruction and recovery.

There was little variation among the command economies of the region in the Stalinist era. The evolution of the socialist economic system conformed to the Soviet model even in Yugoslavia until the early 1950s. Despite the rift between Josip Tito (1892–1980) and Stalin in 1947 and 1948, the Yugoslav government adopted rigid central planning, stressing heavy industrialization along the classical Soviet model. Most private assets were expropriated, industrialization was pursued through forced savings extracted from agriculture and from consumers, while the heavy hand of the government channelled capital to the manufacturing sector through budget transfers (Lampe 2000). By 1951, a quarter of private land holdings had been forcefully collectivized, leading to violent clashes with the peasantry and the collapse of farm output (Woodward 1995). Although Yugoslavia eventually became known for its unique model of market socialism, the economic system of all CESEE countries initially converged towards the same unitary model.

Kornai (1980, 1992) famously described this unitary economic model of socialism. His work has influenced many scholarly interpretations of the command economy. Kornai defined linkages between the fundamental building blocks of the socialist system. The single-party dictatorship enforced public property over the means of production, which, once nationalized, were managed by bureaucratic coordination. The central bureaucracy consolidated the political system and created the conditions for central planning, making market incentives redundant. State enterprises operated under so-called soft budget constraints, meaning that the central government covered their losses in the case of poor plan fulfilment. The command economy was marked by forced growth, the simultaneous existence of

shortages and waste, and a limited role for international trade. In turn, the 'shortage economy' further increased the dependence on state coordination, which further consolidated the political system and the power of the communist party. Kornai's description of the socialist economic system in the post-war era is fully consistent with the classical Stalinist model.

After Stalin: reforming the command economy, 1953–1974

Stalin's death in 1953 triggered important changes in all socialist countries in Eastern Europe. The new Soviet government under Nikita Khrushchev (1894–1971) took a lead in de-Stalinization that affected all policy aspects across the communist bloc, including substantial changes in the allocation of resources and the management of economic relations. Sectors producing consumer goods and services were given higher priority in order to lift living standards. The 'virgin land' campaign pursued under Khrushchev aimed at extending arable land and increasing grain production. Massive programs of social housing construction and other initiatives directly targeted the improvement of urban welfare. In sharp contrast to the Stalinist era, per capita consumption in the Soviet Union rose significantly and increased by almost half between 1953 and 1964 (Schroeder and Denton 1982). Similar shifts away from heavy industry as the main priority occurred in other communist countries. Agricultural investments in Hungary and in South-East Europe nearly doubled in the mid-1950s, supported by a temporary halt in collectivization. Simultaneously, the socialist governments began to rely more on economic incentives rather than direct regulation and coercive enforcement (Berend 1997). The Soviet government dismantled the infamous gulag system of forced labour camps, gradually releasing approximately half of its prisoners and completely reorganizing the system of penal labour (Elie 2013). Terror, which had been an inalienable part of the Stalinist dictatorship, became less characteristic of state socialism.

De-Stalinization was driven from above. Based on detailed archival documents describing Stalin's inner circle in the early post-war era, Gorlizki and Khlevniuk (2005) argue that the main defects of the Stalinist model and the need for change were well recognized by almost all of Stalin's closest subordinates; they simply feared to take the initiative as long as the dictator was alive. The supply of reforms from above fitted the demand from below very well. In most countries of the region, the immediate social consequences of Stalinization had been catastrophic. Living standards had dropped alarmingly, fuelling popular unrest, and the authoritarian regimes had been able to maintain social order only by instilling the fear of repressions. Once Stalin died, a more open articulation of political and economic demands became possible, as evidenced by the first uprising against communist rule and Soviet domination in East Germany in June 1953 and subsequently the general strike and full-blown revolution in Hungary in 1956.

The 'new course' towards reforms was a trial-and-error process heavily affected by the Soviet political economy and the power struggle among Stalin's successors.

The *Sovnarkhoz* reform initiated in 1957 offers an illustrative example. The reform shifted the balance of power away from industrial officials in the central apparatus in Moscow towards local party elites in the regions; in this way, it contributed to the victory of Khrushchev as the new party leader over his political rivals more committed to continue Stalin's policy and linked more closely to the industry ministries. The reform reshuffled the Soviet bureaucracy and replaced the U-form hierarchy with a multi-divisions hierarchy (M-form), where each region stood for a single division. Regions (and regional party secretaries) rather than industry ministries (and corresponding central authorities) became responsible for economic outcomes. The new hierarchy made the achievements of its divisions directly comparable with each other: parallels in the industrial structure of the regions were clearer to detect than between the highly specialized industrial branch ministries. This allowed the centre to organize a yardstick competition among regional leaders, linking career promotions to relative performance as powerful incentives. However, Soviet regional divisions remained highly inter-related economically, creating incentives for regional leaders to pursue policies aimed at undermining industrial growth in neighbouring regions in order to make their own regions look better (Markevich and Zhuravskaya 2011). After eight years in operation, the reform was eventually abandoned (closely linked to Khrushchev's dismissal in 1964), and the new Brezhnev government restored the traditional Soviet U-form hierarchy.

De-Stalinization revived earlier debates going back to the 1920s on planning, prices, and the role of incentives in the socialist economy (e.g. von Mises 1920 [1990], 1922 [1932]; Hayek 1944). The discussion on optimal planning in the late 1950s and 1960s highlighted the concept of 'opportunity costs' and focused on how prices should be set in a command economy. Soviet economists, often coming from a mathematical background (e.g. Leonid Kontorovich, the only Soviet winner of the Nobel Prize in Economics), recognized that a benevolent planner should know how different goods would be valued on the demand side in order to be able to maximize total output. In other words, the efficient allocation of recourses requires prices reflecting the relative scarcity of goods and resources. Yet such insight conflicted with both the Marxist theory of labour value (which argued for labour driven prices in contrast to prices defined by supply and demand) and the prevalent practices of planning that paid more consideration to the consistency of plans (with the use of material balances) than to efficient resource allocation. As a consequence, optimal planning methods elaborated by theorists were rarely put into practice. Nevertheless, they drew attention to another weak point of planning in the command economy, namely the information problem and the insufficient computational power of the centre to construct an optimal plan. The recognition of this problem initiated a debate on the extent to which decision-making should be delegated to economic agents at lower levels of the hierarchy in order for economic incentives to work better. The speed and degree of these institutional changes varied substantially across the CESEE countries.

The ambitious reforms introduced across the region in the late 1960s were inspired by the Soviet decentralization reform launched in 1965 by Alexei Kosygin

(1904–1980), prime minister under Leonid Brezhnev (1906–1982), the new general secretary. The Kosygin reform provided substantial autonomy to the managers of state enterprises. The number of plan indicators, which the centre delivered to economic agents, was reduced from about 30 to only 8, with a special focus on sales rather than gross output. 'Production development funds' comprising a share of profits were set up at the enterprise level. Firms could use these funds on their own, including for the purpose of capital investments. Simultaneously, the central government revised prices in order to allow the average enterprise to generate a profit under 'normal conditions' (prices subsequently remained fixed at the new level). As a result of the reform, profits were channelled into the incentive funds of the enterprises, strengthening the role of bonuses as incentives for managers (Kontorovich 1988).

These measures, however, did not achieve their main objective, namely faster growth and structural development. The Kosygin reform did not alter the basic features of the command economy: it transformed but did not replace the fundamental components of the system. Sales as a new main plan target made no real effect on efficiency as long as the economy continued to operate as a sellers' market. The introduction of market relationship between state firms when they could buy and sell to each other following demand and supply rather than state plans, called the wholesale market for state firms, was under discussion but never realized. The role of profits as an incentive was also limited under the Soviet realities. Enterprises remained in public ownership, and the state was still supposed to cover their potential losses, thereby maintaining soft budget constraints. Incentives for the implementation of risky projects and the overuse of recourses remained powerful, while the incentives to innovate remained weak (Kornai 1992). In addition, the law prohibited the accumulation of reserves, and the use of the 'enterprise development fund' was strictly regulated. When the focus shifted to profits, this contributed to inflation: managers received incentives to produce more expensive items, as they secured higher returns. The reform faced substantial opposition from within the industrial bureaucracy, especially at the higher levels, as the decentralization of resource allocation contradicted the basic concept of central planning. Therefore, officials in the industrial ministries sabotaged and delayed the implementation of the reforms as much as they could (Schroeder 1973).

Governments in Central Europe began to discuss far-reaching reform proposals in the early 1960s and launched reform programs far more ambitious than the Kosygin plan, beginning with East Germany in 1965, followed by Czechoslovakia in 1967, Hungary in 1968, and Poland in the early 1970s. Quasi-market prices were reintroduced in several sectors, managers of state enterprises were expected to maximize profits rather than (or besides) output targets, and they were given substantial autonomy in allocating resources, investment funds, and labour. By the late 1960s, approximately half of all investments were financed from enterprise profits and thus were allocated in a de-centralized manner, in contradiction to the classical model of the command economy. Yet while far-reaching on some level, all these reforms failed to change the development trend, as the figures reported in

Chapter 11 suggest. But economic liberalization and decentralization of economic decision-making did contribute to the growing demand for political change, most vividly in Czechoslovakia, culminating in the Prague Spring of 1968, the greatest uprising against Soviet domination in Eastern Europe since Hungary's supressed revolution of 1956. The Prague Spring convinced conservatives both in the USSR and other socialist countries to limit, or even terminate, reforms of the command economy (Berend 2006).

Only Hungary and Yugoslavia continued to embark on reforms. The introduction of the New Economic Mechanism in Hungary in 1968 was supported by a strong political consensus within the communist party and followed earlier policies of relaxing authoritarian controls; policies which were designed to heal the wounds of Hungarian society after the brutal repression of the 1956 revolution and forced collectivization until 1961. While the reforms slowed down in the early 1970s, they were never rolled back completely, and even received new impetus in the early 1980s. Most raw material and energy prices remained fixed, but the majority of prices for finished goods fluctuated. The system of plan targets was abolished and replaced by incentives for enterprises, which came to have substantial autonomy in deciding what and how much to produce. Managers of state enterprises were expected to maximize profits, which were an increasingly important source of both investments and wages (for further details see Kornai 1986).

From the early 1950s, Yugoslavia began to embark on building a unique version of socialism that for many developing countries represented a 'third-way' alternative to the Western capitalist and the Soviet communist models. Collectivization and binding output targets were abandoned, and most decision-making power was delegated to state enterprises (Prout 1985). Firms became effectively labour-managed, organized along the principles of self-management. Work councils, designed to represent the interests of workers, could, in conjunction with the local government, hire and fire the managers of the enterprise and take many decisions on marketing and production. Such a system was meant to provide better incentives for labour and to make better use of local information, mitigating two fundamental problems of the command economy. While the means of production remained in state property, workers claimed effectively rights over the income derived from these assets. The federally controlled General Investment Fund was the only powerful tool left in the hands of the central government to steer economic development. The economic reforms of 1965 went further down this road towards 'market socialism'. Besides the liberalization of most prices, enterprises were granted greater autonomy in the distribution of profits between wages and investment. They were also allowed to directly engage in foreign trade and even to establish banks, in cooperation with local governments, to manage their investments and trade transactions. Even though Yugoslavia did not yield to Soviet pressure, local conservatives in the communist party and the central bureaucracy became wary of the increased powers of local political leaders and enterprise managements. The constitutional reform of 1974 was a backlash against decentralization and created an

overregulated economy of overlapping institutions that undermined the efficiency of investment decisions (Uvalić 1992).

The 1974 Yugoslav constitution has often been blamed for the breakup of the country in the 1990s, partly because it granted the six constituent republics a right to self-determination – a stipulation which became politically important after the death of Tito in 1980. With its 406 articles, it was the longest constitution in the world and also one of the most complex ones. It created an excessive bureaucracy that undermined central control in economic management, but at the same time repressed local and firm-level initiatives by delegating powers to much-strengthened administrations and assemblies in the constituent republics (Rich 1993).

It is difficult to establish whether reforms towards a different version of socialism had any positive effects on economic growth. We do not observe any major shift in the macro trends discussed in the previous chapter between the pre- and post-reform periods. Rates of productivity growth or the direction of structural development in the most reform-oriented countries did not differ fundamentally from the rest of the CESEE region, even though services seem to have become slightly more important for economic growth in Hungary and Yugoslavia from the 1970s onwards than they were elsewhere. The reforms may have had important secondary effects by allowing for a more open discussion: raising public awareness for the most pressing challenges of state socialism may have prepared these societies better for the later transition to the market economy, but this proposition must remain speculative.

Bulgaria and Romania remained largely isolated from the reform movement within the Soviet bloc. Until the 1970s, the classical command economy delivered industrialization and generated high rates of economic growth, as Chapter 11 has demonstrated. Economic growth was sustainable only at sharply rising rates of investment, but it did lead to an unprecedented increase in living standards and public service provisions. Amidst the crisis of the 1980s, there may have been popular demand for reforms, but austerity in both countries was carried through with brute political repression, thwarting any initiative pressing for change. Not surprisingly, the downfall of communism and the severity of the shock that followed was more dramatic in Bulgaria and Romania than in other countries within the broader region.

Why did socialism fail? The role of economic policy, 1975–1989

Economic development in socialist countries was slowing down for at least a decade before the demise of communism in the late 1980s. However, very few contemporary observers foresaw the downfall of the communist regimes even a few years before the fall of the Berlin Wall in 1989. This is true even though economists and policymakers were well aware of the defects and the fundamental inefficiencies of the command economy. The ex-post discussion on the reasons of this unexpected

failure revolves around quite different types of explanations, in addition to the role of exogenous shocks highlighted in Chapter 11. The interpretations advanced in this context either stress the intrinsic drawbacks of the command economy; or, alternatively, they hold specific policy mistakes and related political factors for responsible. One fact should be acknowledged: the fundamental problems of the command economy cannot explain the rapid and sudden collapse of socialism, and thus the role of politics and exogenous factors cannot easily be ignored. Berliner (2001) offers an analogy to racing: whom should we blame, the horse (the command system), the jockey (the policymakers who operated it), or maybe the racetrack (the international environment) that was changed in the middle of the derby?

Some advocated that multiple mistakes in policymaking led to the inefficient allocation of recourses or even their complete loss. Allen (2003) reconsidered the fall of the Soviet economy and the gradual demise of productivity in the post-war period from this perspective. Massive investments into the Asian regions of the USSR with harsh climate represent one example of such decisions. Mikhailova (2004) estimated that economic activities in the Soviet Union were skewed to the East compared to what would have happened under market conditions (using Canada as the benchmark); at least 14 million people or 35% of the population in these regions would not have settled there, if it had not been for specific Soviet government policies. In a similar way, the state increased investments in collectivized agriculture despite poor returns (Hanson 2003).

The growing complexity of national economies increased the probability of planning mistakes to occur (Banerjee and Spagat 1991). After the oil shocks, the Soviet government got extra resources to cover potential losses from such mistakes that made them politically more affordable. Oil prices increased more than four times over the 1970s and then more than doubled again in the early 1980s. The Soviet Union, being one of the leading exporters of hydrocarbons in the world, exploited its newly gained comparative advantage. Soaring oil exports increased annual Soviet net revenue from foreign trade more than five times during the 1970s that eliminated incentives to reform. Extra oil revenues allowed the Soviet government to let consumption to grow faster than output and to prolong public support for the regime for some time without any major changes in the system (Gaidar 2007). However, as explained in Chapter 11, the oil shocks had the diametrically opposite impact on the oil-importing CESEE countries: drastically increased import bills, dramatically worsened credit positions, and severe austerity, especially compared to the reckless overspending in the 1970s. This made these countries more rather than less vulnerable to potential planning mistakes.

For the critics of the command economy, like von Mises (1922) and Hayek (1944), mass-scale planning mistakes were inevitable at some point. The lack of market prices reflecting relative scarcities in goods and resources made planners unable to process the vast amount of information needed for efficient allocation. Yet the idea that poor investments and policy mistakes from the 1970s onwards caused the collapse of the entire system is problematic on the grounds of timing. Similar planning mistakes in earlier periods did not have substantial consequences.

In particular, huge investment projects in the late Stalinist era, the so-called great constructions of communism (including the railway beyond the polar circle, or a tunnel to Sakhalin Island), were abandoned immediately after the death of the dictator, with huge losses of investments already undertaken. The first attempt to construct the Danube-Black Sea channel in Romania shared the same fate. Likewise, the substantial drop in grain prices associated with the 1930s Great Depression did not bring the Soviet system down, even though millions of Soviet citizens experienced famine and died as a result.

The three examples motivate an explanation that points to the changing role of coercion and violence in the system. Harrison (2002) suggests that gradual learning of the non-credibility of the threat of punishment undermined the effectiveness of authoritarian control. Once workers realized that the threat of punishment was no longer credible, they switched to the strategy of strikes to defend their rights, eventually bringing the system to its knees. The opposition trade union Solidarity movement in Poland in the 1980s represents the canonical example for this dynamic. Although the Polish regime under Wojciech Jaruzelski (1923–2014) justified the return to a more repressive style of government by the threat of Soviet intervention if protests were left unchecked, Polish society no longer believed that the events of Budapest in 1956 and Prague in 1968 would be repeated. Similarly, non-credible punishment strategies stimulated collusion and opportunistic behaviour among economic agents against the central government, undermining incentive structures for managers and increasing the share of 'bad' projects in the investment pool (Murrell and Olson 1991; Shleifer and Vishny 1992). The question why communist governments did not move back to the policy of intensive coercion and punishment highlights the role of politics. The elites themselves were not ready to pay this price because repression could affect them, too. For example, in the USSR, the political loyalty of the Soviet elite was achieved by the Brezhnev policy of the 'irremovability of cadres' that became remarkably visible starting in the 1970s, when ageing Soviet leaders rarely if ever retired. Soviet stagnation undermined the legitimacy and attractiveness of the communist movement globally.

An alternative political-economy explanation stresses the crowding difficulties driven by the fundamentals of the command system. Kim (1999, 2002) documented hoarding and thus shortages of consumer goods because of illegal purchases of state enterprises in the state retail sector. He argues that these growing shortages triggered the collapse of communism. Under normal conditions in the command economy, the planners did not allow state firms to purchase in the state retail trade; only citizens could buy there. This allowed the planners to separate the consumer market and the economy of state enterprises, and to plan them efficiently. Growing violations of the ban led to the siphoning of financial recourses, which the central planners initially allocated to state enterprises, to the consumer market and produced an unintended increase in demand for goods in the state retail trade. This unexpected demand was not supported by supply, which because of fixed prices led to shortages. The growing shortages eventually invoked social unrest (Ellman and Kontorovich 1992). The central authorities had incentives to overlook the

problem because these practices of siphoning gave additional material resources to state firms that increased their chances to fulfil production plans (Harrison and Kim 2006).

Finally, geopolitics and a heavy defence burden in the USSR have featured prominently in the literature on the demise of the Soviet economy. The political objective of the Soviet leadership to maintain strategic parity with the United States pushed the relative size of defence and defence-related expenditure into dangerous territory. The literature agrees that Soviet military expenditure was very large by international standards, and that the defence sector diverted scarce resources that might have been used more efficiently in the civilian sector. However, as it was discussed in Chapter 11, it is very difficult to make an accurate prediction about the size and the precise impact of the Soviet defence burden (Firth and Noren 1998; Davis 2002). The other main weakness of interpretations stressing the role of the defence burden in the falling behind of socialist economies is that they find little support in the quantitative evidence for the Central and Southeast Europe. All available estimates suggest that the relative size of military spending in the smaller Warsaw Pact countries was comparable to most NATO member states from the 1960s to the 1980s, and never amounted to more than 4% of GDP (Alton et al. 1985; Clements 1985; Crane 1988).

While the debate over the causes of the collapse of communism is inconclusive, the literature agrees that the policy of perestroika (literally restructuring) initiated by Mikhail Gorbachev (born 1931) in 1987 contributed to rather than mitigated the crisis (Hanson 2003). After Gorbachev rose to power in 1985, the Soviet government first followed the old strategy to stimulate economic growth by increasing investments into the machine-building sector in order to expand and modernize the existing capital stock. CIA (1990) estimates confirm that the share of investment in new machinery in GDP peaked during the mid-1980s. Yet this provided only a temporary effect. Under rising popular pressure to increase consumption and public welfare spending, the leadership concluded that the growth potential of the classical model had been exhausted. In search for a new solution, Gorbachev ventured to more radical measures, delegating considerable authority to state enterprises, with the aim of developing a market of socialist industries. Managers were supposed to be elected by workers and received the right to determine the input-output mix, to contract with suppliers and customers, and to shape the structure of wages and bonus payments within the constraints of state procurement contracts. In practice, the reforms generated the outcomes they were supposed to avoid. The new rules for managers provided incentives to accumulate inventories and to barter rather than sell products at official prices, which remained fixed and rarely reflected true factor costs. This made transaction costs prohibitively high and eventually depressed productivity and economic output. Simultaneously, the accountability of managers to workers pushed wages up and undermined labour discipline, decreasing productivity further. The government's inability to eliminate the soft budget constraints for the state enterprises implied further subsidies to cover the losses caused by the ill-advised reforms. Finally, monetary expansion (the money supply

grew by 14% annually between 1989 and 1991), which the government viewed as the minor evil, aggravated the existing shortages of consumer goods and ruined the system (Ellman and Kontorovich 1992).

Perestroika and glasnost (the principle of open discussion) affected not only the economies of the communist countries in Eastern Europe but also invoked radical changes in their political systems. Launched as a partial and limited liberalization of the Soviet regime in 1987, Gorbachev's reforms rapidly went beyond the initial plans both because of popular demand and growing economic difficulties. Communist governments gradually lost control over the institutions and peoples they were supposed to govern, including the control over the economy, which reinforced the economic crisis. The collapse of the communist regimes in the Soviet satellite states in 1989 and the dismemberment of the Soviet Union in 1991 brought an end to the socialist experiment.

Conclusion

The post-war period saw the rise and fall of communism and the command economy in Eastern Europe. CESEE governments nationalized most sectors of economic activity and replaced the market allocation of resources with bureaucratic coordination. The high level of state control over the economy defined a prominent role of economic policy and politics in the command system. Firms and citizens in communist countries depended on government decisions to a much larger extent than in the conventional market economy. The manual control of the government over the economy implied that the activities of numerous economic agents had to be coordinated in the absence of effective price signals. While communist governments had unlimited authority to implement tight regulations in practice and were in the position to choose any policy irrespective of individual preferences, this did not suffice to overcome the main drawbacks of the command system and prevent its collapse. The history of economic policy under state socialism is also a reminder about the effective limits of state intervention in the economy.

Notes

1 The Bolsheviks' policy of 'war communism' during the Russian Civil War (1917–1922) constitutes a predecessor of the Soviet command economy, but it was rapidly replaced by the mixed economy of the 1920s. Some elements of the command system might be traced back to the experience of extensive state regulation in various European countries, and in particular in Germany, during the First World War (Harrison 2017).
2 Changing the workplace was difficult but possible even during the war years (cf. Sokolov (2003) for a review of Soviet economic labour policy from the late 1930s to the early 1950s). There was little choice if a person was imprisoned, but forced labour constituted only a relatively small share of the Soviet labour force (about 2.5 million people at its peak or up to 3% of the total labour force; cf. Gregory and Lazarev 2003).
3 To mitigate this problem, the state criminalized labour relations and used forced labour as a 'worker discipline device' (Miller and Smith 2015).

4 This could happen without de jure re-distribution of property rights in favour of the state (i.e. the state property is not a necessary condition of a command economy).
5 With the exception of Greece, which remained aligned with the West following the Greek Civil War 1946–1949.

References

Allen, R.C. (2003). *Farm to factory: A reinterpretation of the Soviet industrial revolution*. Princeton, NJ: Princeton University Press.

Alton, T.P., E.M. Bass, K. Badach and G. Lazarcik (1985). East European defense expenditures, 1965–1982. In U.S. Congress Joint Economic Committee (ed.), *East European economies: Slow growth in the 1980*, vol. 1, Washington, DC: U.S. Government Printing Office, pp. 475–501.

Banerjee, A.V. and M. Spagat (1991). Productivity paralysis and the complexity problem: Why do centrally planned economies become prematurely grey? *Journal of Comparative Economics*, 15 (4): 646–60.

Belova, E. and P. Gregory (2002). Dictators, loyal and opportunistic agents: The Soviet archives on creating the Soviet economic system. *Public Choice*, 113 (3–4): 265–86.

Belova, E. and P. Gregory (2009). Political economy of crime and punishment under Stalin. *Public Choice*, 140 (3–4): 463–78.

Berliner, J.S. (1957). *Factory and manager in the USSR*. Cambridge, MA: Harvard University Press.

Berliner, J.S. (2001). Soviet initial conditions: How they have affected Russian transition. *Soviet Economy in the 1930s-1970s*, International Conference hosted by Moscow University, the Harvard Davies Center, and the University of Houston International Economics Program Zvenigorod, Russia, June 22–24.

Berend, I.T. (1997). *Central and Eastern Europe 1944–1993: Detour from the periphery to the periphery*. Cambridge: Cambridge University Press.

Berend, I.T. (2006). *An economic history of twentieth-century Europe: Economic regimes from laissez-faire to globalization*. Cambridge: Cambridge University Press.

Broadberry, S.N. and M. Harrison (eds.) (2005). *The economics of World War I*. Cambridge: Cambridge University Press.

Central Intelligence Agency. (1990). *Measures of Soviet gross national product in 1982 prices. A study prepared for the use of the Joint Economic Committee, Congress of the United States*. Washington, DC: U.S. Government Printing Office.

Clements, T.W. (1985). The costs of defense in the Warsaw Pact: A historical perspective. In U.S. Congress Joint Economic Committee (ed.), *East European economies: Slow growth in the 1980*, vol. 1. Washington, DC: U.S. Government Printing Office, pp. 451–74.

Communist Party (1961). *Programma Kommunisticheskoj partii Sovetskogo Souza* [Program of the Communist Party of the Soviet Union]. Moscow: Politizdat.

Crane, Keith (1988). Military spending in Czechoslovakia, Hungary, and Poland. *Journal of Comparative Economics*, 12 (4): 521–45.

Davis, C.M. (1999). Russia: A comparative economic systems interpretation. In J. Foreman-Peck and G. Federico (eds.), *European industrial policy: The twentieth-century experience*. Oxford: Oxford University Press, pp. 319–97.

Davis, C.M. (2002). The defense sector in the economy of a declining superpower: Soviet Union and Russia, 1965–2001. *Defense and Peace Economics*, 13 (2): 145–77.

Eichengreen, B. (2007). *The European economy since 1945: Co-ordinated capitalism and beyond*. Princeton: Princeton University Press.

Elie, M. (2013). Khrushchev's Gulag: The Soviet penitentiary system after Stalin's death, 1953–1964. In D. Kozlov and E. Gilburd (eds.), *The thaw: Soviet society and culture during the 1950s and 1960s*. Toronto: Toronto University Press, pp. 109–42.

Ellman, M. and V. Kontorovich (eds.) (1992). *The disintegration of the Soviet economic system*. New York: Routledge.

Erlich, A. (1960). *The Soviet industrialization debate, 1924–1928*. Cambridge, MA: Harvard University Press.

Feldman, G.A. (1928). K teorii tempov narodnogo dokhoda [A contribution to the theory on rates of economic growth]. *Planovoe Khozyastvo*, 1928 (11–12): 146–70.

Firth, N.E. and J.H. Noren (1998). *Soviet defense spending: A history of CIA estimates, 1950–1990*. College Station: Texas A&M University Press.

Gaidar, Y. (2007). *Collapse of an empire: Lessons for modern Russia*. Washington, DC: Brookings Institution Press.

Gorlizki, Y. and O. Khlevniuk (2005). *Cold peace: Stalin and the Soviet ruling circle, 1945–1953*. Oxford: Oxford University Press.

Granick, D. (1987). *Job rights in the Soviet Union: Their consequences*. Cambridge: Cambridge University Press.

Gregory, P.R. (2003). *The political economy of Stalinism: Evidence from the secret Soviet archives*. Cambridge: Cambridge University Press.

Gregory, P.R. and M. Harrison (2005). Allocation under dictatorship: Research in Stalin's archives. *The Journal of Economic Literature*, 43 (3): 721–61.

Gregory, P.R. and Valery Lazarev (eds.) (2003). *The economy of forced labour: The Soviet Gulag*. Stanford, CA: Hoover Institution Press.

Gregory, P.R. and A. Markevich (2002). Creating Soviet industry: The house that Stalin built. *Slavic Review*, 61(4): 787–814.

Gregory, P.R. and R.C. Stuart (2001). *Russian and Soviet economic structure and performance*. Reading, MA: Addison Wesley.

Grossman, G. (1977). The second economy in the USSR. *Problems of Communism*, 26 (5): 25–40.

Hanson, P. (2003). *The rise and fall of the Soviet economy. an economic history of the Soviet Union from 1945*. London: Pearson Education Limited.

Harrison, M. (ed.) (1998). *The economics of World War II: Six great powers in international comparison*. Cambridge: Cambridge University Press.

Harrison, M. (2002). Coercion, compliance, and the collapse of the Soviet command economy. *Economic History Review*, 55 (3): 397–433.

Harrison, M. and K. Byung-Yeon (2006). Plans, prices, and corruption: The Soviet firm under partial centralization, 1930 to 1990. *Journal of Economic History*, 66 (1): 1–41.

Harrison, M. (2017). Foundations of the Soviet command economy, 1917 to 1941. In Silvio Pons and Stephen Smith (eds.), *The Cambridge history of communism, vol. 1: World revolution and socialism in one country*. Cambridge: Cambridge University Press, pp. 327–347.

Hayek, F.A. (1944). *The road to serfdom*. London, George Routledge & Sons.

Kim, B-Y. (1999). The income, savings, and monetary overhang of Soviet households. *Journal of Comparative Economics*, 27.

Kim, B-Y. (2002). Causes of repressed inflation in the Soviet consumer market: Retail price subsidies, the siphoning effect, and the budget deficit. *Economic History Review*, 55 (1): 105–27.

Kontorovich, V. (1988). Lessons of the 1965 Soviet economic reform. *Soviet Studies*, 40 (2): 308–16.

Kontorovich, V. and A. Wein (2009). 'What did the Soviet rulers maximize?' *Europe-Asia Studies*, 61 (9): 1579–601.

Kornai, J. (1980). *The economics of shortage*. Amsterdam: North-Holland.

Kornai, J. (1986). The Hungarian reform process: Visions, hopes and reality. *Journal of Economic Literature*, 24 (4): 1687–737.

Kornai, J. (1992). *The socialist system: The political economy of communism*. Oxford: Oxford University Press.

Lampe, J.R. (2000). *Yugoslavia as history, twice there was a country*. Cambridge: Cambridge University Press.

Lange, O. (1958). *The political economy of socialism*. The Hague: Van Keulen.

Markevich, A.M. (2003). Byla li sovetskaia ekonomika planovoi? Planirovanie v narkomatakh v 1930-e gg. [Was the Soviet Economy Planned? Planning in the Ministries in the 1930s]. In *Ekonomicheskaia istoriia. Ezhegodnik. 2003* [Economic History Yearbook, 2003]. Moscow: Rosspen.

Markevich, A.M. and M. Harrison (2006). Quality, experience, and monopoly: The Soviet market for weapons under Stalin. *Economic History Review*, LIX (1): 113–42.

Markevich, A.M. and E. Zhuravskay (2011). M-form hierarchy with poorly diversified divisions: A case of Khrushchev's reform in Soviet Russia. *Journal of Public Economics*, 95 (11): 1550–60.

Maskin, E., Y. Qian and C. Xu (2000). Incentives, information and organizational form. *Review of Economic Studies*, 67 (2): 359–78.

Mikhailova, T. (2004). *Essays on Russian economic geography: Measuring spatial inefficiency*. The Pennsylvania State University, Ph.D. Dissertation, University Park, PA.

Miller, M. and J. Smith (2015). In the shadow of the Gulag: Worker discipline under Stalin. *Journal of Comparative Economics*, 43 (3): 531–48.

Murrell, P. and M. Olson (1991). The devolution of centrally planned economies. *Journal of Comparative Economics,* 15 (2): 239–65.

Nove, A. (1958). The problem of 'Success Indicators' in Soviet industry. *Economica*, 25 (97).

Nove, A. (1992). *An economic history of the USSR, 1917–1991*. London: Penguin Books.

Osokina, E. (2001). *Our daily bread: Socialist distribution and the art of survival in Stalin's Russia, 1927–1941*. London & Armonk, New York: M.E. Sharpe.

Pikhoja, R. (2000). *Sovetskij Souz, Istoriya vlasti. 1945–1991*. [The USSR: Political history, 1941–1991]. Novosibirsk: Sibirskij khronograph.

Preobrazhensky, E. (1926). *The new economics*. Translation by B. Pearce. Oxford: Clarendon Press, 1965.

Prout, C. (1985). *Market socialism in Yugoslavia*. Oxford: Oxford University Press.

Qian, Y., G. Roland and C. Xu (2006). Coordination and experimentation in M-form and U- form organizations. *Journal of Political Economy*, 114 (2): 336–402.

Rich, R. (1993). Recognition of states: The collapse of Yugoslavia and the Soviet Union. *European Journal of International Law*, 4 (1): 36–65.

Schroeder, G.E. (1973). Recent developments in Soviet planning and incentives. In U.S. Congress Joint Economic Committee (ed.), *Soviet economic prospects for the seventies*. Washington, DC: U.S. Government Printing Office, pp. 11–35.

Schroeder, G.E. and M.E. Denton (1982). *An index of consumption in the USSR*. In US Congress Joint Economic Committee (ed.), *Measures of economic growth and development 1950–1980*. Washington, DC: US Government Printing Office, pp. 317–401.

Shleifer, A. and R.W. Vishny (1992). Pervasive shortages under Socialism. *RAND Journal of Economics*, 23 (2): 237–46.

Sokolov, A. (2003). Perspektivi izucheniia rabochei istorii v sovremennoi Rossii [Perspectives of labor history in modern Russian]. *Otechestvennaia istoriia* [National History] 4–5: 130–39.

Uvalić, M. (1992). *Investment and property rights in Yugoslavia*. Cambridge: Cambridge University Press.

von Mises, L. (1920). Die Wirtschaftsrechnung im sozialistischen Gemeinwesen. *Archiv für Sozialwissenschaften* 47. Translated into English as 'Economic Calculation in the Socialist Commonwealth' (1990).

von Mises, L. (1922). *Die Gemeinwirtschaft: Untersuchungen über den Sozialismus*. Jena: Gustav Fischer Verlag. Translated into English as *Socialism: An economic and sociological analysis*. New Haven: Yale University Press (1951).

Vonyó, T. (2020). Recovery and reconstruction after Second World War. In S.N. Broadberry and M. Harrison (eds.), *The Economics of the Second World War: Seventy-Five Years On*. A VoxEU.org Book. London: CEPR Press, pp. 115–21.

Weitzman, M. (1980). The 'rachet principle' and performance incentives. *Bell Journal of Economics*, 11 (1): 302–8.

Woodward, S.L. (1995). *Socialist unemployment: The political economy of Yugoslavia*. Princeton: Princeton University Press.

Zaleski, E. (1980). *Stalinist planning for economic growth, 1933–1952*. Chapel Hill: University of North Carolina Press.