European Studies of Population 19

Reinhold Sackmann Walter Bartl Bernadette Jonda Katarzyna Kopycka Christian Rademacher

Coping with Demographic Change: A Comparative View on Education and Local Government in Germany and Poland





Coping with Demographic Change: A Comparative View on Education and Local Government in Germany and Poland

European Studies of Population

Volume 19

The book series *European Studies of Population (ESPO)* aims at disseminating population and family research, with special relevance for Europe. It may analyse past, present and/or future trends, as well as their determinants and consequences.

The character of the series is multidisciplinary, including formal demographic analyses, as well as social, economic and/or historical population and family studies. The following types of studies are of primary importance: (a) internationally relevant studies, (b) European comparative studies, (c) innovative theoretical and methodological studies, and (d) policy-relevant scientific studies. The series may include monographs, edited volumes and reference works.

The book series is published under the auspices of the *European Association for Population Studies (EAPS)*.

For further volumes: http://www.springer.com/series/5940

Reinhold Sackmann • Walter Bartl Bernadette Jonda • Katarzyna Kopycka Christian Rademacher

Coping with Demographic Change: A Comparative View on Education and Local Government in Germany and Poland



Reinhold Sackmann Institut für Soziologie Martin-Luther-Univ. Halle-Wittenberg Halle (S.) Germany

Walter Bartl Institut für Soziologie Martin-Luther-Univ. Halle-Wittenberg Halle (S.) Germany

Bernadette Jonda Institut für Soziologie Martin-Luther-Univ. Halle-Wittenberg Halle (S.) Germany Katarzyna Kopycka Institut für Soziologie Martin-Luther-Univ. Halle-Wittenberg Halle (S.) Germany

Christian Rademacher Zentrum für Sozialforschung Halle e.V. Halle (S.) Germany

ISSN 1381-3579 ISBN 978-3-319-10300-6 DOI 10.1007/978-3-319-10301-3

ISBN 978-3-319-10301-3 (eBook)

Springer Cham Heidelberg New York Dordrecht London

Library of Congress Control Number: 2014948604

© Springer International Publishing Switzerland 2015

This work is subject to copyright. All rights are reserved by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed. Exempted from this legal reservation are brief excerpts in connection with reviews or scholarly analysis or material supplied specifically for the purpose of being entered and executed on a computer system, for exclusive use by the purchaser of the work. Duplication of this publication or parts thereof is permitted only under the provisions of the Copyright Law of the Publisher's location, in its current version, and permission for use must always be obtained from Springer. Permissions for use may be obtained through RightsLink at the Copyright Clearance Center. Violations are liable to prosecution under the respective Copyright Law.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

While the advice and information in this book are believed to be true and accurate at the date of publication, neither the authors nor the editors nor the publisher can accept any legal responsibility for any errors or omissions that may be made. The publisher makes no warranty, express or implied, with respect to the material contained herein.

Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

Contents

1	Intr	Introduction								
2	Demographic Change as a Challenge									
	2.1	Current Demographic Structure in Germany and Poland								
	2.2	Determinants of Lower Fertility Rates								
	2.3	Determinants of Mortality Decline								
	2.4	Determinants of Migration Patterns								
	Refe	erences								
3	Hov	How Do Societies Cope with Complex Demographic								
		Challenges? A Model								
	3.1	A Short Review								
	3.2	Demographic Ways of Coping with Demographic Change								
	3.3	Non-demographic Ways of Coping with Demographic Change								
	3.4	Short Summary								
	Refe	erences								
4	Dat	a Sets and Methods Used								
7	4.1	Methodologies for Studying Coping with Demographic								
	7.1	Change								
	4.2	The Data Sets Created and Used								
	4.3	Approach to Data Analysis								
		erences								
	1010	701005								
5		Why do Municipalities 'Think' in Demographic Terms?								
	Gov	rerning by Population Numbers in Germany and Poland								
	5.1	Introduction								
	5.2	Is Demographic Change Relevant to Public Sector								
		Organisations?								
	5.3	In-kind Calculation of Municipal Services Based								
		on Population Numbers								

vi Contents

	5.4	Demographic Responsiveness of Local Government								
		Revenues in Germany and Poland								
	5.5	Conclusion								
	Refe	erences								
6	Coping with Demographic Decline in German and Polish									
	Municipalities									
	6.1	Introduction								
	6.2	Comparing Municipal Framing and Coping Strategies								
	6.3	Growth Frames and the Expansion of Public Services								
	6.4	Demographisation Frames and Reduction Strategies								
	6.5	Realistic Frames								
	6.6	Denial Frames								
	6.7	Reorganisation of Public Services Through Privatisation								
	6.8	Second-Order Problems of Personnel Downsizing								
		in Internal Labour Markets								
	6.9	Conclusion								
	Refe	erences								
7	Evn	Expansive Reaction to Demographic Change: The Case								
7		ne Polish Educational Sector								
	7.1	Inevitable Consequences of Demographic Change?								
	7.2	Forms of Expansion of the Polish Educational Sector								
		at the Central and Local Government Level								
	7.3	Consequences of Expansion Strategies								
	7.4	Concluding Remarks								
	Refe	erences								
R	The	The Demographic Responsiveness of Education Demand								
U		Supply at Different Levels of the Education System								
	8.1	Introduction								
	8.2	The Demographic Responsiveness of the Education System								
	8.3	Demographic Responsiveness of the Education System								
	0.0	in Saxony-Anhalt								
	8.4	Equal Access to Education and Economisation								
	···	of Infrastructure								
	Refe	erences								
9		Personnel Strategies of Public Sector Organisations								
		in Response to a Declining Service Population. A Model								
		Empirical Evidence								
	9.1	Introduction								
	9.2	Theoretical Considerations								
	9.3	Personnel Policy in Polish Public Schools Facing Falling								
		Enrolment								

Contents vii

	nographic Challenges and Mentalities: Modes								
	of Reflexivity and Personnel Policy in German and Polish								
Mu	Municipalities								
10.1	Introduction								
10.2	Conceptual Considerations								
10.3	Applied Methodology								
10.4	Empirical Results in a German-Polish Comparison								
10.5	Conclusion								
Refe	References								
11011									
l The	Consequences of Coping with Demographic Change Fiscal Capacity of and Unemployment in German								
The for	Consequences of Coping with Demographic Change								
The for	Consequences of Coping with Demographic Change Fiscal Capacity of and Unemployment in German nicipalities								
The for Mu	Consequences of Coping with Demographic Change Fiscal Capacity of and Unemployment in German nicipalities Introduction: Does Local Population Policy Matter?								
The for Mu 11.1	Consequences of Coping with Demographic Change Fiscal Capacity of and Unemployment in German nicipalities Introduction: Does Local Population Policy Matter? Theoretical Concept: The Model of Frame Selection (MFS)								
The for Mu 11.1	Consequences of Coping with Demographic Change Fiscal Capacity of and Unemployment in German nicipalities Introduction: Does Local Population Policy Matter? Theoretical Concept: The Model of Frame Selection (MFS) Methodology								
The for Mu 11.1 11.2 11.3	Consequences of Coping with Demographic Change Fiscal Capacity of and Unemployment in German nicipalities Introduction: Does Local Population Policy Matter? Theoretical Concept: The Model of Frame Selection (MFS) Methodology								

Chapter 1 Introduction

Abstract Demographic change in the form of an ageing and slightly shrinking population is seen as a new challenge to society. The introductory chapter highlights the approach of this book: a response-focussed sociological population analysis using systematic theory, empirical mixed-methods research and international comparative analysis. An overview of the book chapters is given.

Demographic change is seen as a major challenge for contemporary societies. As opposed to wars, revolutions or economic crises, demographic change is a continuous, evolutionary development, seldom spectacular, but in its effects nevertheless a revolutionary challenge for societies. Societies have to either adapt to the new structural constraints or, if they fail to do so, risk a disruption of such heterogeneous fields as public finances, the labour market, institutionalised solidarity, education, and economic mentalities.

From a scientific perspective, current demographic change in OECD countries consists of two components: demographic ageing and a decreasing population. Whereas demographic ageing certainly will hit all OECD countries (and has done so for a number of decades already), decreasing populations are a quite recent phenomena. We still do not know how many societies will experience the latter phenomenon and for how long, but the likelihood is high that most OECD countries will witness some period of shrinking populations in the next 2 decades. As our knowledge of countries with decreasing populations is rather limited, this book will concentrate on this new form of demographic change (without neglecting the effects of demographic ageing).

Modernity, as we have understood it in the past 2 centuries, rested on growing young populations. Within a very short period of history, there was a worldwide explosion in the number of humans, who conquered new fields of activities in all parts of the world. It is not often mentioned that the new ideas of progress, individuality, powerful nation states and education spreading to ever-larger parts of the world society in the 19th century coincided with a rise of growing young populations. The 20th century, despite its dangerous deviations in the form of gigantic wars and belligerent ideologies, resembled its precursor in this respect as it followed the same

Author: Reinhold Sackmann

2 1 Introduction

path of growing young populations up until the end of the century. Phenomena such as youth cultures, youth movements, young political parties and ever-new modern styles of art seem to be taken for granted as the normal rhythm of modern society. Will this change with an ageing, decreasing population? Since the 1990s a number of societies have experienced periods of very low fertility, which can be seen as a possible precursor of accelerated demographic ageing and shrinkage in some countries.

Among the OECD countries, European and East Asian countries are the vanguard of demographic change. At present, most countries in these regions have a fertility rate that is well below the reproduction rate while longevity is rising at the same time. Both developments have fostered a situation where a number of countries such as Germany, Hungary and Japan now face an ageing and declining population. However, differentiation is necessary. Many East Asian and European countries have a fertility rate that is below the reproduction rate, but some have historical momentum caused by high birth rates in recent decades, as in the case of Poland, or have had a high influx of immigrants, such as Spain. This does not prevent demographic ageing, but it will keep population numbers on the brink between growth and shrinkage for the decade to come. Among the OECD countries, the USA still seems to be able to achieve a fertility rate above reproduction level. So, at least for Europe and East Asia, which are undoubtedly important regions of the world, demographic change will be a major challenge in the next 2 decades.

Does demographic change have detrimental effects on societies? Demographic change (in the form of ageing and decline) as such has no negative effects on society. To the contrary, to live longer in less crowded environments would seem to be a promising prospect for many of us. However, there are a number of areas in society where the demographic trend might create problems nonetheless. The entire education system is strongly affected by demographic developments. A decreasing population usually hits educational organisations such as kindergartens, schools or universities first since the focus of their work is on new cohorts. Other parts of society such as *companies and the labour market* are in a more beneficial position insofar as they have more time to adapt in advance. Patterns of recruitment, work organisation, modes of human resource management and training perspectives all will be affected by demographic change. The state, especially public administration, will be particularly struck by demographic change since its institutions are built to stabilise society. There we often find special long-term employment contracts that might be considered difficult to adapt to demographic change. Some authors state that demographic change will not only concern the practical procedures of a society, but also its mood and mentality: Growing young countries are seen as very dynamic and optimistic, although sometimes turbulent. In contrast, decreasing, older populations might be more likely to convert to a risk-averse, conservative and pessimistic mentality.

Problems such as the ones already mentioned might be seen as either very pressing or irrelevant according to one's position in society or worldview. The arena of reflection on demographic change is still mostly shaped by authors with a political or normative agenda who either claim that demographic change as such will di-

Introduction 3

rectly affect society or hold the position that demographic change is irrelevant to societal developments.

The approach adopted in this book gives priority to the forms of societal coping with demographic change. Demographic change is conceptualised as a challenge with which society is confronted. We focus on processes by which actors, organisations and nation states try to cope with this new situation. We are interested in social forms of coping. Therefore social-psychological theories of coping are put in a more general perspective to specify mechanisms of coping used by organisations, nation states and other kinds of corporate actors.

A second feature of the approach pursued in this book is to develop a sound theoretical basis for reflection on societal coping with demographic change. So far, to date, demography and population sociology has concentrated on the projection and explanation of demographic processes but has neglected societal adaptation to demographic developments. Large parts of the current literature on the subject of coping with demographic change are therefore descriptive or normative in nature or focus on practical recipes only. By offering a theoretical model of coping with demographic change, we hope to provide a systematic means of reflecting on different strategies of coming to terms with demographic change.

A third feature of this book is that it is the result of long empirical research. The theories used in this book are therefore grounded in empirical research. This has to be underlined since demographic change in the shape of ageing and possible population decline is a rather recent phenomenon. In theory, this phenomenon had already been on the agenda in the early 1930s, a time in which some advanced western countries already experienced short episodes of decreasing populations. The period was too short to trigger systematic empirical research at the time, especially since a new consensus in economic theory formed in the 1940s according to which demographic challenges were not considered to be factors of fundamental significance for economic processes (Lee 1997; Coleman and Rowthorn 2011). We think that it would be mistaken to simply rely on general economic theory in its neglect of demographic challenges without further systematic research.

A fourth element of our approach is to gain insight by proceeding in the form of international comparisons. Despite the fact that we live in a world society, major parts of our taken-for-granted knowledge on societal processes and procedures is shaped by nation states that set most institutional orders. The effects of these institutional orders can best be studied by international comparisons. In this book we concentrate on two large European countries: Germany and Poland. They are similar in that Poland and East Germany both have experienced a comparable transformation path after the Velvet Revolution in 1989/90, including a major drop in fertility rates. Despite these similarities, we will see that Poland, East and West Germany sometimes differ considerably in their views and actions with regard to demographic change. We focus on Poland and Germany, but we have also included other countries where possible. This approach allows us to compare rather similar cases to study how and why different response strategies to demographic change yield different results while remaining aware of the wider field of heterogeneity in demographic change and in the responses to it.

4 1 Introduction

Our approach—a response-focussed sociological population analysis using systematic theory, empirical mixed-methods research and international comparative analysis—is laid out in the following ten chapters. The starting point is a chapter on demographic change to specify the circumstances of the challenge to which societies have to respond. It operationalises concepts of demographic ageing and population decline and discusses important general data on demographic developments. Here we also outline the major lines of explanatory arguments for the classic demographic triad of fertility, mortality and cross-border migration with special reference to Germany and Poland.

The third chapter elaborates a general theoretical model of societies coping with major long-term challenges. According to our model, demographic change is a potential trigger for coping in the form of either adaptation and/or the mobilisation of resources. There is a long tradition in stress coping research on which we can build. However, for societies to come to terms with major challenges, institutions and organisations are the backbone of regular adaptation to new situations. Similar to individuals, who commonly use coping strategies that have evolved over a long history of experiences (which can be conceptualised as character or personality type). societies and organisations rely on institutionally established forms of coping with new situations based on a history of learning how to adapt to a variety of challenges. In our empirical analysis, path dependency (of previous institutional and organisational solutions) is an important key to understanding differences between countries, but it is not the entire story. A third building block of our theoretical model consists of routines, strategies and innovation to capture the agency of the corporate actors. With regard to the response to demographic change, we could empirically observe both taken-for-granted practices and rational strategies in responding to the demographic challenge alongside innovations with both intended and unintended consequences. Differences in mentality (that some might judge as rather subjectivistic) can be precisely modelled as modes of reflexivity that structure agency in important ways. A fourth theoretical component is the perception and framing of the problem of demographic change as a (social) problem. In the discourse on demographic change in Europe and East Asia, we find a broad range of contradictory stances such as dramatisation, ignorance or critique of ideology. The concept of framing helps to understand and explain these differences.

The general framework of the book concludes with a chapter on the methods used to gather the data. The empirical research for this book rests on a combination of the following six data sources: (1) qualitative expert interviews with municipal actors in Germany and Poland, (2) a quantitative survey of mayors in the two countries, (3) a secondary quantitative data analysis of the Bertelsmann study (also resting on questionnaires administered to mayors, who were asked about demographic policy issues), which was complemented by performance indicators of the municipalities, (4) a quantitative secondary data analysis of the SIO (*System Informcji Oświatowej*), a full-scale Polish data set on the employment periods of nearly all teachers in Poland, (5) a quantitative secondary panel data analysis of municipal revenues in Germany and Poland and (6) a secondary data analysis of key data on educational levels in Saxony-Anhalt. Despite a focus on quantitative longitudinal

Introduction 5

data analysis, the qualitative data from the expert interviews play an important role and were interpreted with great care since we assume that an understanding of actors in leading positions in municipalities and educational organisations is crucial for understanding the procedural logic in the field.

The following seven chapters present the empirical results of the studies. The first one addresses the perception of demographic change. It is astonishing how present the demographic agenda is in Germany and how absent it seems to be in Poland, despite the fact that Poland has a total fertility rate similar to Germany. The analysis of the data shows that forms of institutionalised accountancy predispose German administrators to think in terms of demography. Institutional features such as the rules of the tax system, its mode of redistribution and performance indicators create a jargon that supports reflection on municipal affairs by reference to demographic data.

En suite, four empirical chapters highlight different strategies of coping with demographic change. A comparative analysis of personnel policy in public services in Germany and Poland reveals three conflicting strategies: expansion, reduction and reorganisation. The most risky policies of expansion we find more often in West Germany and Poland. As the budgetary potential for such a high-risk strategy is higher in Poland than in West Germany, side effects are less likely there. East German municipalities are characterised by a higher concentration of reduction policies, sometimes of an innovative kind, typically with hard-edged starts and potential recovery later. In all regions, we find potential for second-order problems of generational inequalities.

Expansion of the educational system as a response strategy to demographic change is an option often propagated by the employees of this sector, sometimes supported by parts of the public. Often these expansion strategies are detrimental to finances without raising the general level of human capital. We have analysed the Polish educational reform of the early 2000s more in depth as most indicators suggest that it had a number of positive effects on educational achievements without adversely affecting the budgets of the municipalities.

The reaction of the educational systems to demographic change, especially to shrinkage, is not only instructive because they are the first larger societal fields that have to respond to demographic developments. It is also interesting as each in itself is quite heterogeneous. Therefore it allows us to answer questions of more general interest on the relation between the division of labour and demographic change. Secondary data analysis reveals that kindergartens reduced their division of labour and stabilised their organisations in the process. Similar trends towards more multifunctional organisations could be registered in secondary schools, whereas the direct effect on school closures was strongest in the case of primary schools. A decoupling of demographic change in its relation to the number of employees and students was strongest in universities and other institutions of higher education. Information on these different degrees of resilience seems to be important for guiding the process.

Whereas adaptation to waves of demographic change, a shortage of pupils and other developments often necessitate reflection on current institutional arrange-

6 1 Introduction

ments, there exists also a micro-organisational dimension of great importance. Analysis of the interviews with the heads of autonomous schools and of secondary data shows their efforts to come to terms with short-term cycles by building buffers and strategic cooperations as well as their attempts to raise middle-term flexibility by enhancing the multifunctionality of teachers' qualifications.

The final two empirical chapters try to capture the effects of different response strategies to demographic change. A quantitative analysis of interviews with mayors in Poland and Germany demonstrates that demographic change partially influences the mode of self-reflection in municipalities. Whereas the observed mentality effects of demographic change were less pronounced than Kaufmann (2005) postulated, there are nevertheless certain groups of municipalities that turn to less autonomous modes of self-reflection.

A secondary quantitative data analysis tests whether framing (i.e., the framing of coping strategies of demographic change) has an influence on the performance of municipalities. Is their fiscal capacity better? Are they more efficient in reducing unemployment?

For the funding of our studies, we thank the German Research Foundation (DFG)¹, the German-Polish Foundation for Science (DPWS)², the Foundation for Polish-German Cooperation (FWPN)³, the Wissenschaftszentrum Sachsen-Anhalt (wzw)⁴ and the Gottlieb Daimler and Karl Benz Foundation. We also would like to express our gratitude to our collaborators in recent years: Elżbieta Gołata, Maria Reinhold, Dominika Pawleta, Marcus Heise, Christian Dietrich, Peter Harding, Piotr Wroblewski and Małgorzata Perzanowska, who was taken away from us too early. For comments on earlier versions of our work, we want to show our appreciation to Horst Weishaupt, Christoph Köhler, Burkhard Lutz, Heinrich Best, Karin Gottschall, Peer Pasternack, Eva Barlösius and Klaus Friedrich.

References

Coleman, D., & Rowthorn, R. (2011). Who's afraid of population decline? A critical examination of its consequences. *Population and Development Review*, 37, 217–248. doi:10.1111/j.1728-4457.2011.00385.x.

Kaufmann, F.-X. (2005). Schrumpfende Gesellschaft. Vom Bevölkerungsrückgang und seinen Folgen. Frankfurt a. M.: Suhrkamp.

Lee, R. D. (1997). Population Dynamics: Equilibrium, Disequilibrium, and Consequences of Fluctuations. In M. R. Rosenzweig, & O. Stark (Eds.), Handbook of population and family economics (pp. 1063–1114). Amsterdam: Elsevier.

¹ Grant Collaborative Research Centre 580, project B8.

² Grant no. 2009-027-30-0.

³ Grant no. 12471/09/AC.

⁴ Grant no. 5207AD/0609M.

Chapter 2 Demographic Change as a Challenge

Abstract This chapter defines the key terms *demographic ageing* and *declining population*. It refers to important indicators to give an overview of the demographic development in Germany and Poland over the last two decades. The main determinants of the demographic situation, i.e. fertility, mortality and migration, are analysed in depth. Both Germany and Poland show fertility rates below reproduction level. Due to a higher momentum of recent birth cohorts, the decline in natural reproduction is less accentuated in Poland than in Germany. Mortality trends are similar in both countries and are the main factors contributing to demographic ageing, albeit with a cohort-specific increase in the number of healthy years. Migration patterns in Germany are very volatile. Up until 2000, net immigration offset natural population decline. Changes in immigration policy in 1993 brought an end to the considerable migration surplus, thus leading to population decline in the 2000s. Germany's reopening of its doors to immigrants since 2011 constitutes a potential trigger for population decline in Poland since Poland has a long tradition of being an outmigration country with an underdeveloped immigration policy.

Since modernity restructures patterns of interaction in society, demography is not only a matter of fate for nation states but also a challenge to which they respond in different ways. Currently, demographic ageing and population decline are new challenges with which societies have to cope.

Demographic ageing describes a situation in which the age distribution within political units or organisations changes such that older age groups become more numerous whereas the percentage of younger people declines. There are different ways to operationalise the concept of demographic ageing. We define *demographic ageing* as a structural process in a political territorial unit or organisation that leads to an increase in the median age of a given population. We prefer this operationalisation because the median is a quite robust indicator, whereas the arithmetic mean is strongly influenced by shifts in infant mortality, which might distort the index. We deliberately do not work with predefined age intervals as used in "age-burden" indices, which conceptually (and unnecessarily) attribute resource dependence to certain age groups. In contrast to this prejudiced conceptualisation, changing the

Authors: Reinhold Sackmann, Bernadette Jonda

interpretations attached to certain age groups and fighting age discrimination are important elements of potential strategies for coping with demographic ageing.

Population decline characterises a situation in which political units witness a shrinking number of inhabitants. This can be the product of a lower number of births than deaths ('natural' population decline), a higher level of outmigration than immigration, or both. We define a *declining population* as a development in which the population of a political territorial unit or the membership of an organisation has decreased in absolute numbers during at least three 1-year periods over the past 5 years. Since migration in particular can have a strong short-term impact on population size and the direction of population development, using a 5-year interval allows correcting for such short-term volatility and focussing on structural trends.

Demographic ageing and shrinking populations are not the only challenges by which demographic developments put stress on society. During the last two centuries, rapid population growth (often in combination with an extraordinarily high percentage of persons below age 25) forced people to adapt in terms of education and the organisation of family systems, to name but two areas affected by this development. One of the first theories of demography, by Malthus (1789), pessimistically reflected on the effects of population growth on food supply. And 200 years later, the famous report "Limits of Growth" (Meadows et al. 1972) still focussed on the detrimental effects of population growth. Despite making use of various fields of knowledge, some of which were later cultivated in the social sciences, Malthus' theory was conceptualised in terms of the natural sciences and a search for universal laws. Malthus was convinced that his law showed that (exponential) population growth cyclically results in waves of famine because of (linearly increasing) food supply lagging behind. However, later developments showed that there is a sufficient increase in food supply in most societies marked by demographic growth. Even more importantly, there are no law-like regularities in the social sciences because human beings and their societies possess the means and faculties to react to the challenges they face. To name but one such response, Malthus triggered a social movement, the so-called Neo-Malthusians, who aimed to provide access to contraceptives to all strata of society in order to curb population growth and expand the options for families to make their own independent decisions on family size¹. In contrast to the objects that preoccupy the natural sciences, social communication and change in human practices can alter developments in ways that contradict law-like regularities.

Theoretical demographic thinking was greatly influenced in the twentieth century by a typology of stages of demographic transition. This typology identifies six stages of a secular demographic transition process, usually in reference to raw fertility and raw mortality rates (Birg 1996, p. 59). In the first phase, mortality and fertility rates are both high. In the second phase, a reduction in mortality rates triggers population growth, which continues to grow rapidly in the third phase despite lower fertility rates beginning to set in. In the fourth phase, a rapid decrease in fertility rates slows population growth. In the fifth phase, fertility and mortality rates converge at a lower level, and population growth stops. In the sixth phase, originally not envisioned and sometimes called the second demographic transition, the fertility rate falls below the mortality rate, which causes a shrinking population

¹ A drop in the total fertility rate, observable in Germany since 1900, is also an effect of this social movement (among many other factors).

(Lesthaeghe 2011). Currently, world society as a whole is in phase four (growing but with reduced momentum), whereas Germany and Poland, the two societies we want to analyse in depth, are both between phase five and six (population decline). Birg uses raw fertility and raw mortality rates, which are good indicators for predicting population growth in absolute numbers. For the purpose of analysis, agestandardised figures, such as the total fertility rate or projected life expectancy, are more useful key figures as they allow a more individualised reconstruction of the social processes behind the transition process (Büttner 2000).

The next chapters will give a general theoretical outline of the research question. The current chapter starts with a general overview of the demographic situation in Germany and Poland. The question guiding this chapter is, which processes are the determinants of population decline and demographic ageing? The developments in fertility, mortality and migration are described and explained accordingly.

2.1 Current Demographic Structure in Germany and Poland

Demographic ageing is a quasi-universal phenomenon in world society (United Nations 2011, p. 5), which is undergoing a transformation from a rapidly growing to a gradually growing society. As opposed to this overall trend, only a minority of countries throughout the world recently experienced a decline in population. Germany and Poland are in this group, among which many former communist countries in Central and Eastern Europe can also be counted as well as some southern European countries with low fertility rates, such as Italy and Spain, possibly in the near future. A shrinking population is not only a feature of European societies. We also find it in Japan and probably soon in other East Asian countries such as South Korea (Coulmas and Lützeler 2011; cf. Goldstein et al. 2009). Modern nation states with declining populations are a rather new phenomenon in world history that has only emerged since the 1990s. We still do not know how many nation states will experience this development. But with more and more nation states entering phase five of the demographic transition, in which fertility and mortality rates converge, the probability of more and more nation states witnessing at least some period of population decline is increasing.

Before we go into the details of the social processes that explain demographic change in Germany and Poland, a few characteristic numbers on fertility, mortality, migration, population growth and age composition will be provided to give an overview of the development in the last two decades.

Table 2.1 illustrates that in both Germany and Poland women currently have a fertility rate of 1.3–1.4 children, which is well below the replacement level of 2.1 children. The time pattern of the fertility rates differs insofar as the (West) German fertility rate has been nearly constant at around 1.4 since the middle of the 1970s, whereas the Polish fertility rate has dropped sharply in recent decades, starting from a high level of 2.3 in the early 1980s.

Table 2.1 Total fertility rate, life expectancy at birth, net migration balance, population growth and median age in Germany and Poland (1990, 1995, 2000, 2005–2012). (Sources: Eurostat, 2012, 2013; Statistisches Bundesamt, 2013, 2014; Gołata and Jonda, 2008; GUS, 2011, 2013b)

Year	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012
Germany: total fertility rate	1.4	1.2	1.4	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4
Poland: total fertility rate	2.0	1.5	1.4	1.2	1.3	1.3	1.4	1.4	1.4	1.3	1.3
Germany: life expectancy at birth, male	72.1	73.4	75.2	76.2	77.2	77.4	77.6	77.8	78.0	77.9	77.9
Poland: life expectancy at birth, male	66.2	67.6	69.7	70.8	70.9	71.0	71.3	71.5	72.1	72.4	72.7
Germany: life expectancy at birth, female	78.4	79.7	81.0	81.4	82.4	82.7	82.7	82.8	83.0	82.6	82.6
Poland: life expectancy at birth, female	75.2	76.4	78.0	79.4	79.7	79.8	80.0	80.1	80.7	80.9	81.0
Germany: net migration balance (in thousands)	682	430	167	82	26	45	-54	-11	130	279	369
Poland: net migration balance (in thousands)	-16	-18	-20	-13	-36	-20	-15	-1	-2	-4	-7
Germany: population growth (in thousands)	521	279	96	-63	-123	-97	-215	-200	-51	92	196
Poland: population growth (in thousands)	85	19	-9	-17	-32	-10	20	31	33	9	-5
Germany: median age	37	38	40	42	42	43	43	44	44	45	46
Poland: median age	32	34	35	36	37	37	37	38	38	38	39

Demographic ageing is also driven by a rise in life expectancy, which in both countries amounts to an increase of 5–6 years for both sexes over the last two decades. In Poland, life expectancy is still lower than in Germany; in particular the gender gap of 8 years is much larger in Poland (Rządowa Rada Ludnościowa 2011, p. 144).

The two countries differ in their net migration rate (Table 2.1). Poland has been and still is a country with high outmigration and low levels of immigration². Whereas Poland has had consistently high levels of outmigration for some time, the numbers in Germany are highly volatile. There a high immigration surplus of more than half a million at the beginning of the 1990s neared zero in the 2000s but has gained momentum again since 2010.

The effect of these differences in fertility, mortality and migration is that the German population decreased between 2005 and 2010, whereas the Polish population shrank in the 5 years before 2007 but has returned to equilibrium since then. However, as this divergence has mainly been caused by the higher momentum of earlier population growth in Poland (an 'echo' of the baby boom of the 1980s), the probability of returning to decreasing population numbers is quite high there. This process has again set in since 2010.

While both countries are now demographically ageing societies, the speed and level of this development is faster and higher in Germany than in Poland. Demographic ageing is projected to proceed faster in Poland than in Germany in the coming decades (Lanzieri 2011).

In a world society that is still growing (and will continue to do so at a slower pace for most of this century), population decline will remain a regional feature. A pattern of national population decline persists only in countries where there are barriers to immigration or (less often) that are considered unattractive destinations. Within nation states, population decline also has a strong regional component. Some regions in Germany, such as most parts of East Germany and the Ruhr region, are shrinking faster, while other parts in southern Germany, especially the greater Munich or Stuttgart areas, are growing. Poland features similar regional patterns of decline: the eastern parts and Upper Silesia are shrinking, whereas the regions around Warsaw³, Krakow, Poznań and the northern cities Gdańsk, Gdynia and Sopot are growing.

In summary, we can say that Germany experienced a period of a consistently declining population in the last decade and has been demographically ageing at a fast pace for several decades now. Poland, by contrast, witnessed a period of population decline during the middle of the first decade of the twenty-first century and is near equilibrium now. While Poland is also an ageing country, this trend is proceeding at a lower level and slower pace.

2.2 Determinants of Lower Fertility Rates

The following sub-chapters provide an analysis of the current determinants of population size and dynamics. We will proceed according to the three major determinants of population size: fertility, mortality and migration.

² Current statistics underestimate outmigration as many Poles register with their municipality despite the fact that they have left their country for an indefinite period of time (emigracja zawieszona = floating emigration) (Jończy 2009). The national statistics office estimates the number of Poles living outside of Poland in 2010 at 1.99 million people (GUS 2011).

³ Birth data for Warsaw are systematically overestimated as all Polish children born outside of Poland by parents registered outside of Poland are counted as having been born in Warsaw.

Demographic analysis traditionally focuses on fertility. Why is the fertility level in Germany and Poland so low? The discussion usually revolves around the reasons for a decline in fertility. In the case of Germany, it would be more precise to ask about the factors that have stabilised a total fertility rate of around 1.4 children for nearly 40 years now and the mechanisms involved in reproducing this structure. To answer this question, we discuss in more detail major components, such as late births, a low number of high parities, motives for no children or only one child and motives for two and three children, as well as the effects of family policies.

One structural component of lower fertility rates is a *rise in the age at which mothers give birth to their first child.* In Germany, the mean age rose from 24 years in 1970 to 27.5 years in 1995 and reached 30 in 2009. We can observe a similar trend in Poland. The mean age of Polish mothers at the birth of their first child increased from 22.8 years in 1970 to 23.8 years in 1995 and 26.6 years in 2010 (GUS 2011; OECD 2012). This rise is connected with the prolongation of women's participation in education, especially higher education. In Western countries there is an institutional tension and a role conflict between education and family formation (Blossfeld and Jaenichen 1993). This tendency is currently also present in Poland. The level of education of mothers has changed dramatically over the past 20 years. Whereas only 6% of all mothers had earned a graduate degree at the beginning of the 1990s, the percentage rose to 40% in 2010, which is almost seven times the previous amount. The largest jump in this area occurred within the last 10 years; nevertheless, the percentage of mothers with a graduate degree was only 13% in 2000.

In addition to education, the job entry phase is seen as another sensitive period in the life course—a time in which most potential parents try to avoid starting a family (Blossfeld et al. 2011). The current situation in the Polish labour market is an obstacle that many young people have to overcome when starting a family. This reinforces the tendency to postpone family formation. It is also becoming increasingly apparent that the difficulty of reconciling family and occupation in Poland prevents many women from having children early.

A life-course pattern of first births at a later age is not a universal feature of modern societies. Communist regimes tried to entice women, especially academics, into early birth in the early 20s with the intention of avoiding parental leave during the middle years of their working life. Another cause—unintended by the regime—was that allotment criteria for scarce housing also supported early family formation (Sackmann 2000). With the transition from a communist economic regime to a market society both in the former GDR and in Poland, mothers' age at first birth increased quickly but currently still lags behind the West. (The indicator "total fertility rate" is sensitive to changes in the timing of births (Blatchford et al. 2002); in the short term, it therefore misinterprets a rise in maternal mean age at childbirth as a drop in fertility rates. Extremely low total fertility rates, for example 0.77 in East Germany in 1993 and 1.22 in Poland in 2003, are also due to the aforementioned timing effects.)

However, changes in the timing of births are not only acts of rearranging events in the life course. They can also have a causal effect on the number of births because a higher mean age at the time of first birth influences the number of children afterwards: the biological fertility of women drops after age 35. Also in the case of divorce and remarriage, the time left to have children with a new partner might be too short in cases where having children has been postponed.

A second structural component of lower fertility rates lies in a *sharply decreasing number of high-parity children of four and more children* in a family. One cause for this development is a secular change in the value of children (Nauck and Trommsdorff 2010; Caldwell 1982), according to which the value of children in terms of their utility to the household economy, especially as farm helpers, disappearing as compulsory schooling is becoming universal. Even some immigrant groups in West Germany who originated from countries in which the economic value of children still plays a role have adapted quite rapidly, in the vast majority of cases, to the opportunities of the new host society and have accordingly adopted a view of children based on more 'modern' values. Within the indigenous population, those who strictly comply with religious dogma (e.g., conservative Catholics) and thus tend to give birth to a large number of children are also becoming fewer in number.

In contemporary advanced societies, the range of total fertility rates is therefore much smaller than its variance in traditional or modernising countries. The average number of births per woman is between 1.0 and 3.0 children in all of these societies. As a consequence of this development, research on the factors that explain fertility rates slightly above reproduction level, at reproduction level or at rates well below reproduction level has to concentrate on the causes of child parities of zero, one, two and three children. The mixture of these four groups is a decisive factor in shrinkage.

Motives for having one child are very strong in contemporary societies. Sociological research in the value-of-children tradition shows that the strongest current parental motive for having children is the emotional fulfilment derived from having children (Nauck 2007). This subjective utility can hardly be substituted by other goods or activities (Becker 1998). As biological causes for childlessness are responsible for around 10% of potential parents who remain without children, higher rates of childlessness can usually be attributed to difficulties in partnership formation or strong incompatibilities between different life spheres. For instance, in the GDR under the communist regime, the percentage of childless women was below 10%, which is an indicator of low incompatibilities between life spheres. By contrast, the percentage of childless women in younger cohorts in West Germany is around 20%, which is an indicator of high incompatibilities. Research shows that in times of high female employment—encouraged by general values that support female labour force participation as a symbol of female liberation and independence most countries that subscribed to a strong male breadwinner model in the twentieth century face a rising number of childless women today (Billari 2008; Brewster and Rindfuss 2000). West Germany, Italy and Spain are among this group of nations. The explanation for the seemingly paradoxical relation between aggregate low female labour force participation and aggregate low fertility rates lies in the effort of women in these countries to avoid or postpone family formation as long as possible as the price of having children is very high for women's careers in terms of their chances of advancement and higher wages. Social and educational policy schemes that provide childcare and schooling on a half-day basis only have a prohibitive impact, especially on the careers of highly educated women, who in Germany exhibit a higher rate of childlessness than lower-educated women.

Motives for having two children are twofold. Firstly, according to opinion polls, the perceived ideal number of children in Germany is two. This is well-known and can be viewed as a weak social norm. (It is a weak norm insofar as it rests more on positive than on negative sanctions.) Secondly, a strong parental motive for a second child is that it is believed that two children of similar age provide a better setting for socialisation as the two siblings can guide and assist each other and are in a better position to acquire social skills (Buhr et al. 2011). This second motive is connected with the timing of child births, especially with the 'spacing' of the time interval between first and second child. In Germany, the optimal spacing is seen to be between 2 and 4 years (Kunze and Sackmann 2008). The strength of the socialisation motive decreases after this window so that the birth of a second child becomes more improbable the older the first one is. These motives play a huge part in Poland as well. Employed Polish women with a university degree are more likely to choose to have a single child than unemployed women. The choice to have a second child, on the other hand, is more common among unemployed mothers. The chances of women with two or more children to find employment are decreasing in Poland (Kotowska 2010).

Motives for having a third child are diverse. In contrast to other countries such as France, there is no cultural norm pushing for three children in Germany. However, as in most countries with a gender-egalitarian culture, there is a tendency for both parental sexes to prefer having children that 'mirror' their own gender. Therefore, the probability of a third child is higher in the case of the first two children being of identical sex (Yamaguchi and Ferguson 1995). As in other contemporary societies, the relationship between income and having a third child is curvilinear with a slightly higher probability of a third child for high-income fathers and a slightly higher transition rate for low-income parents.

Fertility patterns are often referred to in reforms of *family policies*. Family policies govern the rules of absence from the labour market as well as access to social benefits and services. By offering women conditions to better reconcile work and family, these policies define the intensity of the institutional incompatibilities between the two spheres of activity. Not surprisingly, the cross-country variation in family policies is often referred to in discussions on the interrelationship between fertility and the supply of female labour (Matysiak 2011).

In Germany, the effects of family policy are quite weak. Expenditure for family policy has more than doubled since the late 1990s, but it has not caused a rise in fertility rates (Blome et al. 2009; Seeleib-Kaiser and Toivonnen 2011). Despite the fact that public expenditure for families is now clearly above OECD levels, fertility levels have consistently remained below the OECD average. Family expenditure until 2008 concentrated on proportional tax relief for married couples and children on the one hand and direct income subsidies for parents on the other. Recent policies have experimented more with better childcare provision for preschool children and with parental leave. Up to now, no strong effects of these policies could be observed. Despite the fact that gender mainstreaming is an official EU policy, the reality in German companies, unlike the situation in Scandinavian countries, is more gendered, which creates a tension between life spheres that hinders fertility.

Family policy is one of the "strategic topics" in Poland and is also seen as one of the most important challenges there. Yet the public assistance for families provided by the Polish government is the lowest in all of Europe (Matysiak 2011).

In summary, the fertility patterns in Germany show a strong persistence of a low fertility equilibrium, which in West Germany is defined by a polarised constellation consisting of a large percentage of childless couples, on the one hand, and a large proportion of couples with two children, on the other. This is due to the implicit prevalence of gendered work relations both in companies and private households.

2.3 Determinants of Mortality Decline

The fall in the mortality rate, and the rise in life expectancy as the flip side of the coin, influences population dynamics in two ways. Firstly, it slows down population decline in terms of natural population dynamics. Secondly, and more importantly, it is an independent factor in demographic ageing.

Four developments in the field of mortality are important to understand changes in mortality in Germany and Poland in recent decades.

Declining child mortality as well as fewer deaths caused by *infectious diseases* are two in the long line of social changes that have marked modern societies since the early twentieth century. More hygiene, better housing and improved medical services have induced this development.

Death rates in Germany were influenced by the late effects of the First and Second World Wars. This was also the case in Poland. Up to as recently as 2002, we find higher war-related effects on mortality and morbidity rates in Germany (Luy and Zielonke 2009). These long-term effects were caused by wounds, traumas and malnutrition in wartime and early post-wartime periods. They have been decreasing since the turn of the century. Due to the difficult living conditions in Poland, the life expectancy of people who were involved in the war was very low.

The mortality development follows a pattern influenced by the Iron Curtain. Until the early 1970s, life expectancy in East Germany was slightly higher than in West Germany. Between the 1970s and 1990, the communist countries lagged behind more and more in terms of mortality. In 1988/1990 both men and women lived 3 years longer in West Germany than in East Germany. By 1999 this difference had already shrunk to a 0.5-year longer life for West German women and a 1.6-year longer life for West German men (Luy 2004). Environmental differences, less strenuous physical work, lower risk behaviour (smoking, alcohol, high-fat food and obesity) and better medical care were responsible for the once growing and later shrinking gap between East and West Germany. Since the turn of the century, differences in risk behaviour are still more important for men than women. A decomposition analysis shows, for instance, that East German men lose 0.5 years compared to their West German counterparts because of a higher rate of cirrhosis of the liver and an extra 0.5 years as the result of a higher number of road accidents.

In 1990 gender differences in Polish life expectancy were even larger (9 years), and the gap had only dropped to 8.5 years by 2010. Decomposition analysis shows that approximately 50% of the gender differences can be attributed to the higher level of alcohol and tobacco consumption among males (Mączyńska 2001). In general, Polish life expectancy has followed a similar pattern of historical development to the one observed in Germany. In the communist era between 1965 and 1990, the life expectancy of males above age 45 decreased in the range of 2 years, whereas between 1990 and 2010 it increased by an average 3.5 years (Rządowa Rada Ludnościowa 2011). The main causes of the post-transformation increase are less hazardous jobs, an improved environmental situation, better medical care and a healthier lifestyle (the consumption of fruit nearly doubled while cigarette consumption dropped by 35%) (Rządowa Rada Ludnościowa 2011).

Generally speaking, there is an increasing *life expectancy after age 60*, especially since the 1970s (Oeppe and Vaupel 2002; Vaupel et al. 2003; Vaupel et al. 2007). Ischaemic, heart-related problems are losing ground to cancer as mortal illnesses (Lussier et al. 2008).

In Germany, higher life expectancy is connected with less sickness in all age groups between 40 and 81 (Tesch-Römer et al. 2006). This rise in the number of "healthy years" is not entirely due to diminishing post-war effects, as it has also been observed in countries that were not directly hit by the wars of the twentieth century, such as Switzerland (Höpflinger 2007).

Very high mortality rates have been observed in Poland among men of all age groups. At age 20–25, the mortality rate of Polish men is four times higher than that of Polish women. Only around 20 years ago, cardiovascular disease caused approximately 50% of all deaths; this percentage has decreased substantially in recent years (GUS 2011).

In summary, changing mortality and morbidity patterns in both Germany and Poland have caused a trend towards increasing longevity. The impact of demographic ageing is alleviated insofar as reaching a higher age is associated with less frailty caused by morbidity compared to previous cohorts at the same age.

2.4 Determinants of Migration Patterns

Migration is the third component that is decisive for the explanation of population size in a given society. In terms of communication and interaction, world society is the only natural social unit, which since the end of the nineteenth century has encompassed all parts of the earth. Theorists such as Luhmann (2012; 2013), Stichweh (2007) or Meyer (2010) stress that world society is the adequate unit for analysing processes of structuration, reproduction and exchange. However, in the current world society, the nation state is the most powerful corporate actor. Therefore most actors view societies as nation states that exist alongside other societies with which they may exchange goods, harmful by-products, ideas and people. The differentiation between the level of world society and the nation state is especially relevant

for the analysis of migration. In the perspective of a world society, regulations on migration hinder individual movements of people; in the view of the nation state (often interpreted as a community), transnational migration is seen as a problem of national integration that has to be regulated.

We will analyse migration in five steps. Firstly, structural components that push or pull migration are discussed. Secondly, the logic of patterns of migration in relation to the individual life course is explained. Thirdly, the importance of the transnational nature of present-day migration is shown. Fourthly, border regimes are illustrated as central to our understanding of the modern nation-state's logic of migration. Fifthly, hybrid forms of migration are addressed to draw attention to the dynamic nature of migration patterns as a developing form of structuration.

2.4.1 Structural Components

Since the nineteenth century, structural elements have been seen to exert a major influence on migration patterns. The distance of the place of current settlement (origin) to the envisioned point of future activity (possible destination) determines the transaction costs of migration. If the destination is near enough to travel back and forth on a daily basis, commuting is a likely alternative to migration. On the other hand, as the distance to the destinations increases, the rate of migration decreases since the search costs at the potential new location increase along with the costs of relocation⁴.

In addition to geographic distances, economic differences structurally influence migration patterns. The availability of jobs and higher wages attracts people and pulls them to new places. For instance, in the 2011 census 77% of the Poles living abroad stated employment and higher wages in particular as the main reasons for emigration. Therefore, places that belong to the 'centre' of the OECD world are preferred destinations for migration as they offer higher levels of income. Despite the fact that unemployed persons are less mobile than employed or non-employed persons, the unemployment rate at a potential destination is a good indicator of potential immigration as it indicates opportunities for newcomers. Economic processes in a market society follow cyclical patterns of boom and recession periods. In Germany, migration follows a pro-cyclical path: immigration increases in times of boom, whereas it decreases and outmigration rises in periods of recession.

Language constitutes a further structural component of migration. Identical languages in the place of origin and destination increase the rate of migration. Migration can also be triggered by the nation state acting as a push factor of migration. People try to avoid dangerous, uncomfortable or risky situations by moving to another country in response to war or oppression. However, some repressive states try to prosecute outmigration, thus limiting outmigration in those states. The rise of the nation state in the twentieth century led to large migration flows, especially in Europe. Ethnic cleansing and discrimination, sometimes following the involvement

⁴ For migration patterns within nation states in particular, the availability of individualised transport, especially private cars, changed the scale of feasible distance. Commuting became a more viable alternative to permanent migration, and this has strengthened suburbanisation.

of parts of the population in wars or ideological confrontation, drove millions of inhabitants across the continent.

2.4.2 Patterns of Migration in the Individual Life Course

Whereas structural components can influence the size of migration flows between regions, the specific act of migration is usually based on individual decisions. Migration between countries typically is not the result of spontaneous behaviour but involves some degree of reflection on the pros and cons. In the perspective of rational choice theory, a decision is made by weighing the subjective costs and benefits of migration. Most people never migrate between countries. This is the result of the high subjective costs of migration, which involves losing one's job, family, friends, routines and so forth. The more a person has invested at a particular locality, the higher are the subjective costs of migration and the less likely is relocation. Another characteristic of a migration decision is that it is an investment decision with risks. Usually the costs of migration show up almost immediately, whereas the benefits of the new destination are usually realised at a much later point in time. Migrants therefore tend to be more risk prone on average than other parts of the population, and they have more resources for investment than others.

Traces of this decision structure of migration can be seen in patterns of migration across the life course. In modern society, migration peaks in three phases of the life course: most frequent by far is migration between the age of 18 and 30 (Friedrich 2008). Many people at that age have not yet invested in their own homes, their own family and in existing work relations. For them the cost of migration is therefore far lower than for other age groups. Growing participation in higher education has increased the importance of this pattern as both attending a university and entering one's first job afterwards usually involve migration processes. More significant for intra-nation migration (and less for inter-nation migration) is a second peak of migration during the life course, which typically occurs already at age 0-5 as the result of young families moving to suburban settlements where they often buy a home or flat. A third very small peak of migration is around age 60-65. This migration wave is triggered by retirement decisions. In Germany, as in other Western European countries, some people move to Southern European countries. However, the volume of this latter outmigration pattern has no major influence on migration patterns overall.

The age structure of migration is important as it is an independent driver of demographic ageing and population decline. As the emigrating population is younger than the non-migrating population, countries with surplus emigration experience accelerated demographic ageing, which at the same time accelerates population decline since the emigrating cohorts are more likely to be of family-formation age than the non-migrating population. On the other hand, countries with surplus immigration can reduce both demographic ageing and population decline.

2.4.3 Networks

Despite the fact that most migration decisions are made individually, these decisions are embedded in networks of relations that foster migration and provide a specific interaction pattern with an impact on the long-term consequences of migration. Any potential migrant has to overcome an information asymmetry: the person knows far more about his or her place of origin and far less about the destination. Despite the high availability of low-cost information about any place in the world through books and the Internet, there is still a difference between anonymous and personal information. Family members, friends or persons known in the local community who have successfully migrated are role models that lower the threshold to move. They can also offer specific help in the crucial early months at the new destination. They can provide accommodation, help in understanding new requirements and sometimes may even be able to provide access to jobs or educational opportunities. As networks are useful for migration processes, we typically find chains of migration, i.e., later migrants following earlier pioneers to the same destinations, which bolster the formation of communities at the new destinations. In larger cities (and sometimes also in small destinations), there are clusters of immigrants from specific regions or of the same nationality. In the last two decades, commercial organisations that provide information and assist in migration have grown in importance, yet they have not supplanted personal networks. One example of network-driven immigration is Poles in Great Britain. Their number quadrupled from 150,000 in 2004 to 637,000 in 2012 (GUS 2013a). This development was enhanced by Britain's decision to permit Polish immigration immediately after Poland became a member of the EU in 2004.

During the past few decades the concept of transnational space has drawn attention to the transnational nature of migration processes, which is strongly represented by the networked character of migration. Whereas networks and chains of migration facilitate migrations because they lower the costs and risks of migration, networks also explain the effects of migration processes. The resources needed to finance migration are often provided by families. Migration enlarges a family's 'field of operation' in terms of economy, family formation or differentiation. Migration is also still an important way for ideas to travel. New experiences with lifestyles, habits, knowledge, institutions and skills are gained at the destination and are communicated to the place of origin. Sometimes ideas also travel in the other direction—that is, from the place of origin to the destination—and quite often both worlds are mixed to create new ideas. Inventions of foods such as the supposedly Indian curry in Britain or the (inauthentic) Turkish doner kebap in Germany are just two of these sometimes surprising new ideas. Within transnational space, resources are exchanged as well: business ideas, capital and sometimes simply money. For a number of countries remittances from migrants are an important source of revenue for the national economy. And last but not least, transnational spaces are important alternative political power spots. Outside of the grip of the nation state of origin,

alternative ideas for political reform, especially in the case of repressive states, can be expressed and acted upon.

2.4.4 Border Regimes

In addition to structural components and individual decisions, border regimes regulating migration between states are important in understanding the volume and structure of migration in a world society in which the dominant structure is the nation state. In most countries, with the major exception of China, migration within the nation state is no longer regulated. People can move to any place they choose provided that they have the resources to do so. By contrast, inter-nation migration is characterised by a high degree of legal regulation. The details of such regulation are very much country-specific. Until 2000, German citizenship law reflected the principle of ius sanguinis, which meant that citizenship was handed down by familial descent, and naturalisation was possible only in exceptional cases. A major immigration wave in the 1940s and 1950s consisted of millions of Germans who were expelled by the new communist regimes in Central and Eastern Europe. Prior to the erection of the Berlin Wall in 1961, immigration from the communist GDR to its Western counterpart, the FRG, was also considerable. A growing shortage of labour led West Germany to recruit workers in Spain, Italy, Greece, Yugoslavia and Turkey in the 1960s and 1970s, the largest group being Turkish nationals. Whereas the original concept assumed short-term immigration of low-skilled workers, the end of recruitment in 1973 led to widespread decisions among immigrants to avoid the risk of never being allowed to re-enter by forming families in their host country and creating an ethnic infrastructure of houses, mosques and shops. The military regime in Turkey in the 1980s led to a growing stream of Turkish nationals seeking asylum in Germany. In the late 1980s and early 1990s, Germany witnessed another immigration wave, this time of ethnic Germans primarily from Romania, Poland and the former Soviet Union, Growing conflicts within Germany, accompanied by spectacular right-wing attacks, led to a very strict cutback in immigration after 1993, which reduced the number of asylum seekers to below 100,000 and made it very difficult to immigrate to Germany, even for ethnic Germans from eastern countries. The spectacular drop in immigration in the 1990s and 2000s, characteristic of the population development in these decades, was mainly the result of these tough restrictions on immigration. A change in citizenship law in 2000, which introduced more elements of ius soli, whereby the place of birth is more important than familial descent, allowed more immigrants already living in Germany to acquire German citizenship, but it did not open doors for more immigration. As in most Western European countries, integration of immigrants is a highly controversial issue in German politics. Specific to the German situation might be that the discussion is still dominated by the traditional political parties and the antagonistic voices therein; no populist right-wing party has been able to establish itself and muster sufficient support in Germany so far.

In line with its broader policy, Germany had postponed the granting of work permits for new EU citizens from Central and Eastern European countries until 2011. Despite the fact that immigration numbers from Poland and other new EU members have increased since then, they are still at a moderate level. However, this new situation has considerably influenced emigration from Poland to Germany. According to Polish and German data, half a million temporary Polish migrants now live in Germany (GUS 2013a). These migration flows strongly influence the population development in both countries.

2.4.5 Hybrid Forms

Overall migration patterns in recent decades have been shaped by an ambiguous development that has given rise to new hybrid forms of migration. On the one hand, migration has become easier today. Some reasons for this are better education systems in most countries so that most migrants speak a second language, which eases communication barriers; extensive geographical networks and Internet communication that have increased our knowledge of different parts of the world (Fassmann 2002); and the increasing similarity of the lifeworld in the country of origin and destination due to the accelerated spread of a consumer society based on a single world market. This reduces the transaction costs of migration. On the other hand, the successive closure of legal avenues of immigration in Germany between the 1960s and the 2000s is not an isolated case. Major immigration countries such as the USA. Australia or France all have higher barriers to immigration now than they had a few decades ago. Other major countries of the economic centre, such as Japan, never opened their doors to a larger influx of migrants. A result of this development is that the opportunities for permanent legal immigration have decreased.

People have creatively adapted to this ambiguous constellation of circumstances by developing new patterns of migration, so-called hybrid forms. Short-term migration for a timespan of 1–4 years is increasing. Migration for educational purposes, which has been sharply increasing since the 1990s, is just one such form of transitory migration, which seems more like a project than a change of identity to adapt to a new country.

Another feature of these new hybrid forms of migration is that the percentage of illegal immigrants is on the rise. Whereas some countries such as the USA, Italy and Spain have a long tradition of illegal immigration, which has allowed them to develop procedures to cope with this problem, countries like Germany are still very unfamiliar with this phenomenon and still try to ignore the resulting problems.

Contrary to the general pattern of closing rather than opening the doors for migration, within the European Union the free movement of persons is one of the guiding principles of this supranational unit. After eastern enlargement, it remains to be seen whether open borders will create long-term migration imbalances between nation states in the EU.