

Population Aging Human Capital Accumulation And Productivity Growth

[#population aging](#) [#human capital accumulation](#) [#productivity growth](#) [#aging workforce](#) [#economic growth demographics](#)

Explore the critical interplay between population aging, its profound influence on human capital accumulation, and the subsequent effects on national productivity growth. This analysis delves into how evolving demographics reshape economic potential, underscoring the need for strategic policies to sustain innovation and prosperity in an older society.

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Population Aging, Human Capital Accumulation, and Productivity Growth

In this volume, economists discuss the long-run consequences of aging societies. Using theoretical economic models, long-term projections and simulations, and econometric analysis, answers to the following questions are given: What are the economic consequences for consumption patterns, the supply of labor, capital accumulation, productivity, and the international flow of capital? Where are the political consequences for pension systems, health care and immigration policy? And what changes in politics are needed to handle the issues of populations that age markedly?

Economic Policy for Aging Societies

First Published in 2013. Routledge is an imprint of Taylor & Francis, an informa company.

Aging and Economic Growth in the Pacific Region

This edited collection explores the links between human capital (both in the form of health and in the form of education), demographic change, and economic growth. Using empirical as well as theoretical perspectives, the authors investigate several important issues in the context of human capital, namely population ageing, inequality, public policy, and long-term economic development. Ultimately, they demonstrate that the accumulation of human capital is of crucial importance to long-run economic growth.

Population Growth, Factor Accumulation, and Productivity

Brazil is in the middle of a profound socioeconomic transformation driven by demographic change. Because of profound changes in mortality and, especially, fertility over the past four decades the population at older ages then begun to increase, a trend that will become more and more rapid as time

progresses. While it took more than a century for France's population, aged 65 and above, to increase from 7 to 14 percent of the total population, the same demographic change will occur in the next two decades in Brazil (between 2011 and 2031). The elderly population will more than triple within the next four decades, from less than 20 million in 2010 to approximately 65 million in 2050. On the one side, these shifts in population age structure will lead to substantial additional fiscal pressures on publicly financed health care and pensions, along with substantial reductions in fiscal pressures for publicly financed education. Public transfers in Brazil have been very effective in reducing poverty among the elderly in both urban and rural areas. However, without substantial changes, the aging of the population will put a strain on the current system that will result in some critical trade-offs with consequence for poverty among other vulnerable groups and for the growth prospects of the country. On the other side, given the strong association between people's economic behavior and the life cycle, changes in the population age structure have a major impact on economic development. This book investigates the impact of demographic changes on several dimensions of the Brazilian economy and society. It does so in a comprehensive and systematic way that captures the broad complexity of issues, from economic growth to poverty, from public financing of social services and transfers to savings, from employment to health and long-term care, and their interrelations.

The Economic Impact of Ageing Populations in the EU25 Member States

This volume provides an important collection of recent papers on the macroeconomic effects of population ageing. The articles are focused into three categories which cover the main channels through which population ageing affects national living standards: productivity and growth; consumption and saving; and labour market and fiscal effects. The papers have been selected for their clear and valuable contributions to this field of study. The book will be an essential reference volume for academic and public sector economists, policy makers and demographers.

Human Capital and Economic Growth

This book looks at the challenges ageing populations pose to policy makers in advanced economies. It provides new evidence on how to turn these challenges into long-term, productive opportunities.

Growing Old in an Older Brazil

Population aging is perhaps the single biggest economic and social obstacle confronting Asia's future. The region-wide demographic transition towards an older population is fundamentally reshaping the demographic landscape, and is giving rise to two key socio-economic challenges. This timely book provides an in-depth analysis of these challenges and presents concrete policy options for tackling them. First, the expert contributors argue, Asia must find ways to sustain rapid economic growth in the face of less favorable demographics, which implies slower growth of the workforce. Second, they contend, Asia must find ways to deliver affordable, adequate and sustainable old-age economic security for its growing elderly population. Underpinned by rigorous analysis, a wide range of concrete policy options for sustaining economic growth while delivering economic security for the elderly are then presented. These include Asia-wide policy options relevant to the entire region such as building up strong national pension systems, whilst other policy options are more relevant to sub-groups of countries. This stimulating and informative book will be of great interest to academics, students and researchers with an interest in Asian studies, economics generally, and more specifically, public sector economics.

New Developments in the Economics of Population Ageing

Productivity growth—the key driver of living standards—fell sharply following the global financial crisis and has remained sluggish since, adding to a slowdown already in train before. Building on new research, this note finds that the productivity slowdown reflects both crisis legacies and structural headwinds. In advanced economies, the global financial crisis has led to “productivity hysteresis”—persistent productivity losses from a seemingly temporary shock. Behind this are balance sheet vulnerabilities, protracted weak demand and elevated uncertainty, which jointly triggered an adverse feedback loop of weak investment, weak productivity and bleak income prospects. Structural headwinds—already blowing before the crisis—include a waning ICT boom and slowing technology diffusion, partly reflecting an aging workforce, slowing global trade and weaker human capital accumulation. Reviving productivity growth requires addressing remaining crisis legacies in the short run while pressing ahead with structural reforms to tackle longer-term headwinds.

Ageing, Health, and Productivity

The process of demographic transition through which Argentina is passing is a window of both opportunities and challenges in economic and social terms. Argentina is still a young country in which the working-age population represents the largest proportion of its total population. Currently, the country just began a 30-year period with the most advantageous age structure of its population, which could favor greater economic growth. This situation, known as the 'demographic window of opportunity,' will last until the beginning of the 2040s. The dynamics of the fertility and mortality rates signify a gradual ageing of the population, with implications for various dimensions of the economy, the social protection system, public policies, and society in general. This book studies the opportunities and challenges that the demographic transition poses for the Argentine economy, its most important social sectors like the healthcare, education, and social protection systems, and the potential fiscal trade-offs that must be dealt with. The study shows that even though Argentina is moving through its demographic transition, it just recently began to enjoy the window of opportunity and this constitutes a great opportunity to achieve an accumulation of capital and future economic growth. Once the window of opportunity has passed, population ageing will have a significant impact on the level of expenditure, especially spending in the social protection system. This signifies a challenge from a fiscal policy point of view, because if long-term reforms are not undertaken to mediate these effects, the demographic transition will put pressure on the reallocation of fiscal resources among social sectors. Finally, population ageing poses concerns related to sustaining the rate of economic growth with a smaller working-age population. Taking advantage of the current window of opportunities, increasing savings that will finance the accumulation of capital, and increasing future labor force productivity in this way is a challenge for the Argentine economy.

Aging, Economic Growth, and Old-age Security in Asia

The increases in global wealth and the developments in the field of health have led to decreases in mortality rates, increases in life expectancy, and decreases in fertility rate, leading to a population that is rapidly consisting more and more of older individuals. The demographic changes affect nearly all parts of society including economics, education, health, social security systems, socio-cultural activities, and more. Thus, it is essential to study the impacts that an aging population will have on society. The Handbook of Research on Economic and Social Impacts of Population Aging analyzes the economic and social impacts of population aging from a multidisciplinary perspective. Covering topics such as life expectancy, social welfare, health, social security, and more, this book is essential for social scientists, sociologists, demographers, economists, medical professionals, government officials, policymakers, professionals, researchers, managers, students, and academicians looking to understand the effects of an aging population on modern society.

Gone with the Headwinds

'While there already exists a crowded body of publications addressing the effect of an aging population on the economy, this monograph is most outstanding in presenting a global, in-depth analysis of the implications thereby generated for 23 developed and developing countries. . . Scholars, researchers, and practitioners everywhere will benefit immensely from this comprehensive work.' – H.I. Liebling, Choice
'Ron Lee and Andrew Mason's Population Aging and the Generational Economy is a demographic and economic tour-de-force. Their collaborative, intercontinental. . . study of aging, consumption, labor

supply, saving, and private and public transfers is the place to go to understand global aging and its myriad and significant economic challenges and opportunities.' – Laurence Kotlikoff, Boston University, US 'The culmination of. . . work by Lee, Mason, and their collaborators from around the world to extend Samuelson's framework to accommodate realistic demography, empirical measurement of age-specific earnings, consumption, tax payments, and benefit receipts, the studies. . . demonstrate the power of this integrated economic-demographic framework to advance our understanding of critical public policy challenges faced by countries at different stages of demographic transition and population aging.'

– Robert Willis, University of Michigan, US 'Lee and Mason have done scholars and practitioners a magnificent service by undertaking this comprehensive, compelling, and supremely innovative examination of the economic consequences of changes in population age structure. The book is a bona fide crystal ball. It will be a MUST READ for the next decade!' – David Bloom, Harvard School of Public Health, US 'Population Aging and the Generational Economy provides an encompassing account of what we know about population aging and the impact that this process will have on our economies. It does not confine itself to the advanced industrial countries, where aging has already been largely studied, but adopts a truly global perspective. I am sure it will become a key reference for researchers, students and those involved in policy-making in areas that are affected by population aging.'

– Giuliano Bonoli, Swiss Graduate School of Public Administration (IDHEAP), Switzerland Over coming decades, changes in population age structure will have profound implications for the macroeconomy, influencing economic growth, generational equity, human capital, saving and investment, and the sustainability of public and private transfer systems. How the future unfolds will depend on key actors in the generational economy: governments, families, financial institutions, and others. This path-breaking book provides a comprehensive analysis of the macroeconomic effects of changes in population age structure across the globe. The result of a substantial seven-year research project involving over 50 economists and demographers from Africa, Asia, Europe, Latin America, and the United States, the book draws on a new and comprehensive conceptual framework – National Transfer Accounts – to quantify the economic lifecycle and economic flows across generations. It presents comprehensive estimates of both public and private economic flows between generations, and emphasizes the global nature of changes in population age structure that are affecting rich and poor countries alike. This unique and informative book will prove an invaluable reference tool for a wide-ranging audience encompassing students, researchers, and academics in fields such as demography, aging, public finance, economic development, macroeconomics, gerontology, and national income accounting; for policy-makers and advisers focusing on areas of the public sector such as education, health, pensions, other social security programs, tax policy, and public debt; and for policy analysts at international agencies such as the World Bank, the IMF, and the UN.

As Time Goes By in Argentina

The Seventh National Population Census (NPC) results show that China's population structure has undergone profound changes. While the rates of education penetration and urbanization continue to rise, issues such as population aging and low fertility rates have become prominent. Population is the core factor influencing economic growth, and its structural changes will bring numerous opportunities and challenges for China's future economic development. Currently, most of the research on the economic effects of population structure mainly focus on constructing a certain static panels to analyze certain demographic factors, lacking consideration of the wholeness and correlation aspects of population structure. Moreover, the design of models seldom incorporate the intrinsic dynamics and convergence of economic growth. Therefore, it is of great significance to construct a dynamic panel model and systematically study the impact of various demographic factors on regional economic growth and convergence, so as to understand and grasp the demographic changes in China and promote the coordinated development of regional economy. Based on a comprehensive review of the theoretical literature, this book first conducts a systematic analysis of the spatial and temporal evolution patterns of China's national and regional population structure and regional economic development. Second, it identifies the mechanism through which population structure affects regional economic growth and convergence and proposes research hypotheses. Subsequently, based on the neoclassical economic growth convergence model, a dynamic model is constructed to examine the influence of population structure on regional economic growth and convergence. Using panel data on population structure and economic growth from 31 provinces, autonomous regions, and municipalities directly under the central government, an empirical analysis is conducted using the SYS-GMM method. Additionally, a heterogeneity analysis is conducted with samples from the eastern, central, and western regions. Furthermore, taking into account the reality of shortened spatial and temporal distances and intensified

population mobility between regions, a spatial econometric model is constructed to analyze the spatial spillover effect of population structure on regional economic growth. The current research theory for interfacial loess landslides is relatively lagging behind. Therefore, this book provides a detailed theoretical study on the failure mechanism and calculation model of interface type loess landslides, and provides a clear theoretical derivation process and application methods. The research process involves interdisciplinary research in soil mechanics, elastic-plastic mechanics, fracture mechanics, structural mechanics, theoretical mechanics, and other disciplines, which not only reflects the multi-angle nature of research issues, but also reflects the multi-scale nature of research issues. The conclusions of the study as follows: changes in the gender structure of the population do not have a significant impact on the speed of national and regional economic growth. On the other hand, an increase in the gender ratio in the western region may promote economic growth convergence. Secondly, population aging can reduce labor supply and savings rate, inhibit innovation, thereby impeding regional economic growth and convergence. The influence of the rate of urbanization on economic growth shows an inverted U-shaped pattern. Initially, urbanization promotes economic growth, but excessive urbanization may hinder it. The eastern region has the highest urbanization rate and experiences an inverted U-shaped impact on economic growth, whereas the central and western regions benefit from linearly positive effects of urbanization. Moreover, the improvement of urbanization rate is one of the most important factors promoting regional economic growth convergence. The enhancement of the population's educational level can promote total factor productivity and human capital in the country as a whole and each region, thereby driving economic growth. It also stands as one of the most crucial factors promoting regional economic growth. Additionally, considering spatial factors, the aging of the population has a positive effect on the interaction of regional economic growth. Based on the above conclusions, this book proposes the following policy recommendations: First, adhere to the concept of gender equality and alleviate the pressure caused by the "marriage squeeze". Second, improve the pension system and vigorously develop the "silver economy". Third, promote the coordinated development of new urbanization and prevent "pseudo-urbanization" and "counter-urbanization". Fourth, implement the three major strategies of innovation-driven, science and education revitalization, and talent power. Fifth, strive to promote the upgrading of the employment structure and give full play to the important role of the tertiary industry in absorbing labor.

Handbook of Research on Economic and Social Impacts of Population Aging

Africa will account for 80 percent of the projected 4 billion increase in the global population by 2100. The accompanying increase in its working age population creates a window of opportunity, which if properly harnessed, can translate into higher growth and yield a demographic dividend. We quantify the potential demographic dividend based on the experience of other regions. The dividend will vary across countries, depending on such factors as the initial working age population as well as the speed and magnitude of demographic transition. It will be critical to ensure that the right supportive policies, including those fostering human capital accumulation and job creation, are in place to translate this opportunity into concrete economic growth.

Population Aging and the Generational Economy

Recoge: 1. Introduction. - 2. Stylised facts about labour productivity growth and its driving forces. - 3. Evaluation of the different approaches for making long-run productivity projections. - 4. Overview of the methodology adopted for the present projections. - 5. Main results of baseline projections. - 6. Sensitive tests on productivity and GDP per capita. - 7. Concluding remarks. - 8. Annexes.

DEMOGRAPHIC STRUCTURE, REGIONAL ECONOMIC GROWTH AND CONVERGENCE IN CHINA

The United States is in the midst of a major demographic shift. In the coming decades, people aged 65 and over will make up an increasingly large percentage of the population: The ratio of people aged 65+ to people aged 20-64 will rise by 80%. This shift is happening for two reasons: people are living longer, and many couples are choosing to have fewer children and to have those children somewhat later in life. The resulting demographic shift will present the nation with economic challenges, both to absorb the costs and to leverage the benefits of an aging population. Aging and the Macroeconomy: Long-Term Implications of an Older Population presents the fundamental factors driving the aging of the U.S. population, as well as its societal implications and likely long-term macroeconomic effects in a global context. The report finds that, while population aging does not pose an insurmountable

challenge to the nation, it is imperative that sensible policies are implemented soon to allow companies and households to respond. It offers four practical approaches for preparing resources to support the future consumption of households and for adapting to the new economic landscape.

Africa Rising: Harnessing the Demographic Dividend

This book contains material that I have presented in seminars at the Universities of Bochum, Mannheim, Munich, Salerno, and Southern California at Los Angeles, the Institute for Advanced Studies in Vienna, the Max-Planck-Institute for Demographic Research in Rostock, and on various international meetings and conferences. In preparing and revising the material I have benefited from comments, discussions, and advice from several colleagues. I had particularly close and friendly collaboration with Alexander Kemnitz and Robert von Weizsacker to whom I am very grateful. I am also grateful to Michele Boldrin, Axel Borsch-Supan, Friedrich Breyer, Karen Feist, Tullio Jappelli, Leo Kaas, Marco Pagano, Gerhard Schwoiauer, Carl Christian von Weizsacker, and Wolfgang Wiegand for their comments and suggestions. Finally, I would like to thank the Deutsche Forschungsgemeinschaft for financial support.

Mannheim, January 2002
Berthold U. Wigger

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Human Capital Accumulation and the Macroeconomy in an Ageing Society

This issue of Finance & Development discusses link between demographics and economic well-being. In the coming decades, demographics is expected to be more favorable to economic well-being in the less developed regions than in the more developed regions. The age structure of a population reflects mainly its fertility and mortality history. In high-mortality populations, improved survival tends to occur disproportionately among children. The “demographic dividend” refers to the process through which a changing age structure can spur economic growth. It depends, of course, on several complex factors, including the nature and pace of demographic change, the operation of labor and capital markets, macroeconomic management and trade policies, governance, and human capital accumulation. Population aging is the dominant demographic trend of the twenty-first century—a reflection of increasing longevity, declining fertility, and the progression of large cohorts to older ages. Barring a change in current trends, the industrial world’s working-age population will decline over the next generation, and China’s working-age population will decline as well. At the same time, trends toward increased labor force participation of women have played out with, for example, more women than men now working in the United States.

Long-term Labour Productivity and GDP Projections for the EU25 Member States

Studies have documented that recent population decline in U.S. counties has been exacerbated by economic recession, but there is a lack of information about how to stabilize a declining population in a growing economy. The purpose of this book was to measure participants perceptions of the relationship between population decline and economic growth, employment, and education in one northern US County. Smiths theory relating functional division of labor to increases in wealth and Malthuss theory relating population change and economic growth served as theoretical bases. This mixed-methods case study used documents, a survey of 25 participants, and individual interviews with 10 participants. Data were analyzed with ANOVAs, t tests, and linear simple regressions. Survey results indicated that participants believed there was a minimal to moderate correlation between population decline and economic growth and that increased higher education opportunities in the community could stabilize the population and create long-term economic growth. Some participants were concerned that increased educational opportunities would lead to overpopulation and a loss of traditional values, suggesting that efforts should be made to help community members understand the value of higher education as a population and economic stabilizer. This study can contribute to positive social change by providing strategies for maintaining economic stability in areas experiencing population decline.

Aging and the Macroeconomy

There is long-standing debate on how population growth affects national economies. A new report from Population Matters examines the history of this debate and synthesizes current research on the topic. The authors, led by Harvard economist David Bloom, conclude that population age structure, more than size or growth per se, affects economic development, and that reducing high fertility can create opportunities for economic growth if the right kinds of educational, health, and labor-market policies are in place. The report also examines specific regions of the world and how their differing policy environments have affected the relationship between population change and economic development.

Public Pensions and Economic Growth

A structural growth slowdown is under way across the world: at current trends, the global rate of potential growth is expected to fall to a three-decade low over the remainder of the 2020s. Nearly all the forces that have powered growth and prosperity since the early 1990s have weakened. In addition, a series of shocks has affected the global economy over the past three years. A persistent and broad-based decline in long-term growth prospects imperils the ability of emerging market and developing economies to combat poverty, tackle climate change, and meet other key development objectives. The challenges presented by this potential inability call for an ambitious policy response at the national and global levels. This book presents the first detailed analysis of the growth slowdown and a rich menu of policy options to deliver better growth outcomes. ----- This book presents a sobering analysis of the secular growth slowdown based on the most comprehensive database of potential growth estimates available to date. With nearly all the forces that have driven growth and prosperity in recent decades now weakened, the book argues that a prolonged period of weakness is under way, with serious implications for emerging market and developing economies. The authors call for bold policy actions at both the national and global levels to lift growth prospects. The book is essential reading for policy makers, economists, and anyone concerned about the future of the global economy. Beatrice Weder di Mauro Professor of International Economics, Geneva Graduate Institute, and President of the Centre for Economic Policy Research (CEPR) Economic policy making is becoming increasingly complicated in the 2020s. In addition to tackling traditional trade-offs in aggregate demand management and improving efficiency on the supply side, policy makers need to address new priorities and challenges, from addressing climate change and its impacts to improving income distribution, all in the context of lower growth rates, waning productivity growth, and flattening of the globalization process that has brought unprecedented prosperity across the globe and lifted more than a billion people out of poverty. In *Falling Long-Term Growth Prospects*, the authors do a phenomenal job of assessing these trends at the global and regional levels, identifying and unpacking salient twenty-first-century policy challenges, and providing thoughtful and evidence-based policy prescriptions for leaders in advanced, emerging market, and developing economies. Importantly, the book underscores that these challenges tend to be global and, hence, global cooperation at all levels is necessary to achieve optimal results. Alas, we seem to be going in the opposite direction; this book offers a road map to put us back on the path to creating a more integrated, prosperous, and equitable global community. Michael G. Plummer Director, SAIS Europe and ENI Professor of International Economics, The Johns Hopkins University

Finance & Development, March 2020

The book offers an eclectic treatment of the human capital-economic growth nexus and uses state-of-the-art nonlinear econometric methods to provide an empirical assessment of the link between human capital and economic growth.

Socioeconomic Stratification

This book addresses nine relevant questions: Will population growth reduce the growth rate of per capita income because it reduces the per capita availability of exhaustible resources? How about for renewable resources? Will population growth aggravate degradation of the natural environment? Does more rapid growth reduce worker output and consumption? Do rapid growth and greater density lead to productivity gains through scale economies and thereby raise per capita income? Will rapid population growth reduce per capita levels of education and health? Will it increase inequality of income distribution? Is it an important source of labor problems and city population absorption? And, finally, do the economic effects of population growth justify government programs to reduce fertility that go beyond the provision of family planning services?

The Demographic Dividend

The age-distribution of Europe's workforce has shifted towards older workers over the past few decades, a process expected to accelerate in the years ahead.. This paper studies the effect of the aging of the workforce on labor productivity, identifies the main transmission channels, and examines what policies might mitigate the effects of aging. We find that workforce aging reduces growth in labor productivity, mainly through its negative effect on TFP growth. Projected workforce aging could reduce TFP growth by an average of 0.2 percentage points every year over the next two decades. A variety of policies could ameliorate this effect.

Falling Long-Term Growth Prospects

Human resources constraints will affect economic growth in the EU, the US, China and other global players. In most (not all) of these regions the inescapable decline of working-age population will impose restrictions on future employment and economic growth. Higher productivity growth will eventually become the only way to sustain a positive rate of economic growth in the EU and many other parts of the world including some of the emerging economies. Whereas the developed, industrialised world will have to generate higher productivity growth through continuous innovation and strong investment in skills and education, emerging economies will still be able to reap a higher productivity by reallocating productive resources, mainly human resources, from low value-added economic activities in agriculture to more productive industrial and service activities. However, evidence suggests that emerging economies such as China and India are not solely reliant on those structural productivity gains. They are also increasingly investing in human capital formation. Hence, it can be expected that the EU will face more acute global competition in the decades to come, not only in markets related to cheap labour and products of low value-added, but also on premium products and high quality services.

Human Capital and Economic Growth

A seminal work in health economics first published in 1972, Michael Grossman's *The Demand for Health* introduced a new theoretical model for determining the health status of the population. His work uniquely synthesized economic and public health knowledge and has catalyzed a vastly influential body of health economics literature. It is well past time to bring this important work back into print. Grossman bases his approach on Gary S. Becker's household production function model and his theory of investment in human capital. Consumers demand health, which can include illness-free days in a given year or life expectancy, and then produce it through the input of medical care services, diet, other market goods and services, and time. Grossman also treats health and knowledge as equal parts of the durable stock of human capital. Consumers therefore have an incentive to invest in health to increase their earnings in the future. From here, Grossman examines complementarities between health capital and other forms of human capital, the most important of which is knowledge capital earned through schooling and its effect on the efficiency of production. He concludes that the rate of return on investing in health by increasing education may exceed the rate of return on investing in health through greater medical care. Higher income may not lead to better health outcomes, as wealth enables the consumption of goods and services with adverse health effects. These are some of the major revelations of Grossman's model, findings that have great relevance as we struggle to understand the links between poverty, education, structural disadvantages, and health.

Population Growth and Economic Development

The number of Americans eligible to receive Social Security benefits will increase from forty-five million to nearly eighty million in the next twenty years. Retirement systems must therefore adapt to meet the demands of the largest aging population in our nation's history. In *Developments in the Economics of Aging*, David A. Wise and a distinguished group of analysts examine the economic issues that will confront policy makers as they seek to design policies to protect the economic and physical health of these older Americans. The volume looks at such topics as factors influencing work and retirement decisions at older ages, changes in life satisfaction associated with retirement, and the shift in responsibility for managing retirement assets from professional money managers of traditional pension plans to individual account holders of 401(k)s. *Developments in the Economics of Aging* also addresses the complicated relationship between health and economic status, including why health behaviors vary across populations and how socioeconomic measures correlate with health outcomes.

The Impact of Demographic Change on Human Capital Accumulation

Is Japan's aging and, more recently, declining population hampering growth and reflation efforts? Exploiting demographic and economic variation in prefectural data between 1990 and 2007, we find that aging of the working age population has had a significant negative impact on total factor productivity. Moreover, prefectures that aged at a faster pace experienced lower overall inflation, while prefectures with higher population growth experienced higher inflation. The results give strong support to the notion that demographic headwinds can have a non-trivial impact on total factor productivity and deflationary pressures.

The Impact of Workforce Aging on European Productivity

This publication informs three debates: population aging, pension reform, and education reform. The author's intention is to show that, if the economic burden of population aging is to be alleviated, then education reform should be another important reform step in addition to pension reform. --foreword.

Demographic Change, Human Resources Constraints and Economic Growth

Advanced economies have been witnessing a pronounced slowdown of productivity growth since the global financial crisis that is accompanied in recent years by a withdrawal from trade integration processes. We study the determinants of productivity slowdown over the past two decades in four closely integrated European countries, Austria, Denmark, Germany and the Netherlands, based on firm-level data. Participation in global value chains appears to have affected productivity positively, including through its effect on TFP when facilitated by higher investment in intangible assets, a proxy for firm innovation. Other contributors to productivity growth in firms are workforce aging, access to finance, and skills mismatches.

The Demand for Health

Work is constantly reshaped by technological progress. New ways of production are adopted, markets expand, and societies evolve. But some changes provoke more attention than others, in part due to the vast uncertainty involved in making predictions about the future. The 2019 World Development Report will study how the nature of work is changing as a result of advances in technology today. Technological progress disrupts existing systems. A new social contract is needed to smooth the transition and guard against rising inequality. Significant investments in human capital throughout a person's lifecycle are vital to this effort. If workers are to stay competitive against machines they need to train or retool existing skills. A social protection system that includes a minimum basic level of protection for workers and citizens can complement new forms of employment. Improved private sector policies to encourage startup activity and competition can help countries compete in the digital age. Governments also need to ensure that firms pay their fair share of taxes, in part to fund this new social contract. The 2019 World Development Report presents an analysis of these issues based upon the available evidence.

Developments in the Economics of Aging

This paper considers the potential variables that have determined economic growth in The Gambia during 1964–98. The results indicate that The Gambia's aggregate production function exhibits increasing returns to scale, thus supporting the endogenous growth-type model. The impact of private investment—and thus private capital accumulation—on output is large and significant. Furthermore, increases in public investment boost output substantially. Finally, the effects associated with human capital accumulation are positive and statistically significant. The paper also estimates a series on total factor productivity growth that indicates that The Gambia was able to use its resources more efficiently.

The Impact of Demographics on Productivity and Inflation in Japan

This volume honours the contributions Claudia Goldin has made to scholarship and teaching in economic history and labour economics. The chapters address some closely integrated issues: the role of human capital in the long-term development of the American economy, trends in fertility and marriage, and women's participation in economic change.

Why Not Start Younger?

Drawing on the 2019 revision of World Population Prospects, the World Population Ageing 2019 (Highlights) document global and regional trends in population ageing, including consideration of the implications of these trends for the implementation of the 2030 Agenda. The report also presents

various concepts and indicators related to population ageing and discusses related fiscal and economic implications.

Productivity Growth and Value Chains in Four European Countries

Greater longevity is an indicator of human progress in general. Increased life expectancy and lower fertility rates are changing the population structure worldwide in a major way: the proportion of older persons is rapidly increasing, a process known as population ageing. The process is inevitable and is already advanced in developed countries and progressing quite rapidly in developing ones. The 2007 Survey analyses the implications of population ageing for social and economic development around the world, while recognising that it offers both challenges and opportunities. Among the most pressing issues is that arising from the prospect of a smaller labour force having to support an increasingly larger older population. Paralleling increased longevity are the changes in intergenerational relationships that may affect the provision of care and income security for older persons, particularly in developing countries where family transfers play a major role. At the same time, it is also necessary for societies to fully recognise and better harness the productive and social contributions that older persons can make but are in many instances prevented from making. The Survey argues that the challenges are not insurmountable, but that societies everywhere need to put in place the policies required to confront those challenges effectively and to ensure an adequate standard of living for each of their members, while respecting and promoting the contribution and participation of all.

World Development Report 2019

Population aging is a global phenomenon that influences not only the industrialized countries of Asia and the West, but also many middle- and low- income countries that have experienced rapid fertility decline and achieved long life expectancies. This book explores how workers and consumers are responding to population aging and examines how economic growth, generational equity, trade and international capital flows are influenced by population aging. The contributors draw on the experience of the developing and industrialized worlds and on countries in Asia, North America, and Europe. They offer new evidence about micro-level responses of labor force participation, earnings, and savings to actual and/or perceived demographic change. Their broad perspective on population aging spans the entire demographic transition and demonstrates the importance of effective policy response in the early stages of population aging. Also included are policy analyses that explore the use of tax policy, financial reform, and policies targeting immigration and procreation. This insightful study will prove invaluable to students and scholars of population economics, public sector economics, welfare economics, social economics, and public finance. Pension analysts and government policymakers will find the material of great practical use.

Investment, Capital Accumulation, and Growth

Human Capital in History