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Wittgenstein Centre
FOR DEMOGRAPHY AND GLOBAL HUMAN CAPITAL
A COLLABORATION OF IIASA, VID/OAW, WU

EXECUTIVE SUMMARY

WORLD POPULATION & HUMAN CAPITAL IN THE TWENTY-FIRST CENTURY

EDITED BY
WOLFGANG LUTZ | WILLIAM P. BUTZ | SAMIR KC

THIS IS A PATH-BREAKING BOOK WHICH SIGNALS THE EVER-INCREASING IMPORTANCE OF EDUCATION TO DEMOGRAPHY, ECONOMICS AND THE DELIVERY OF EQUAL OPPORTUNITIES AND FAIR OUTCOMES.

The Rt Hon Gordon Brown MP, UN Special Envoy for Global Education

THIS MONUMENTAL, PIONEERING VOLUME PROSELYTIZES FOR A NEW TRINITY OF FUNDAMENTALS OF DEMOGRAPHY: AGE, SEX, AND EDUCATION. IF THIS BOOK SUCCEEDS IN ITS MISSION, AS I HOPE IT WILL, THE FUTURE WILL LOOK DIFFERENT, NOT ONLY FOR THE SCIENCE OF DEMOGRAPHY, BUT ALSO FOR ALL PEOPLE'S LIVES.

Professor Joel E. Cohen, The Rockefeller University and Columbia University, New York

THIS IS A VALUABLE GUIDE TO DATA, ANALYSIS, AND EXPERT OPINION BEARING ON THE WORLD'S DEMOGRAPHIC FUTURE. PARTICULARLY INSTRUCTIVE IS THE CONSISTENT FOCUS ON THE TRANSFORMATIVE ROLE OF EDUCATIONAL PROGRESS.

Professor Samuel H. Preston, University of Pennsylvania, Philadelphia

THIS BOOK ON HUMAN NUMBERS AND THE QUALITY OF LIVES WILL DESERVEDLY BECOME OUR FIRST PORT OF CALL WHENEVER WE SEEK TO UNDERSTAND OUR PAST AND OUR POSSIBLE FUTURES. IT IS SIMPLY A MONUMENTAL PIECE OF WORK.

Professor Sir Partha Dasgupta, University of Cambridge, United Kingdom

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IIASA

DEDICATED TO THE MEMORY OF NATHAN KEYFITZ ON THE OCCASION OF HIS 100TH BIRTH YEAR, 2013.

"FORECASTING IS ONE OF THE OLDEST OF DEMOGRAPHIC ACTIVITIES, AND YET IT HAS NEVER BEEN FULLY INTEGRATED WITH THE MAIN BODY OF DEMOGRAPHIC THEORY AND DATA."

(Nathan Keyfitz in Lutz, W. ed. 1994 The Future Population of the World. What Can We Assume Today? Earthscan: London, Foreword)

This publication contains an executive summary and chapter summaries of the reference book: *Lutz, W., Butz, W. P., & KC, S. (Eds.) (2014) World Population and Human Capital in the 21st Century. Oxford: Oxford University Press*. The book is available for purchase from Oxford University Press: http://ukcatalogue.oup.com/product/9780198703167.do and the hardback book's ISBN is: 978-0-19-870316-7

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SUMMARY

THE APPROACH TO HUMAN CAPITAL PROJECTIONS

This book presents a comprehensive summary of what we know today about the drivers of fertility, mortality, migration, and education in different parts of the world and what we can assume for the future. It documents and discusses the international state of the art in these fields through reviews of relevant literature and by presenting and discussing the scientific input from over 550 international population experts who contributed to this volume in different capacities. The substantive chapters of this volume synthesize this broad knowledge base and translate it into alternate numerical assumptions for calculating alternative scenarios by age, sex, and level of educational attainment for all countries in the world to 2060 with extensions to 2100. The projection results are discussed in another set of chapters and selected results for all countries are presented in a numerical appendix. The complete results are presented on a designated web site www.wittgensteincentre.org/dataexplorer/.

World Population and Human Capital in the Twenty-First Century is the first book to systematically and quantitatively address the role of educational attainment in global population trends and models. By adding education to the traditional demographic characteristics of age and sex, this distinguishing feature substantially alters the way we look at changes in populations and how we project them into the future. In most societies, particularly during the process of demographic transition, women with more education have fewer children, both because they want fewer and because they find better ways to pursue their goals. And better educated men and women in virtually all societies have lower mortality rates and their children have a better chance of survival. The scenarios presented in this book show how alternative policies of education expansion in the near term, mostly through their effect on the future educational attainment of young women, can significantly influence the medium to long term paths of population growth for individual countries and the world as a whole. The book also presents many other examples for how the future looks different—and mostly better—once education is explicitly factored into population projections. The pervasive demographic differentials by level of education matter greatly for population dynamics. When we explicitly address this important source of population heterogeneity, the projected future population trends are different from those resulting from the conventional stratifications that include only age and sex. In addition, the future educational attainment levels of the adult population are of great interest in their own right as a key determinant of outcomes ranging across economic growth, quality of governance, and adaptive capacity to environmental change, as summarized in the epilogue of the book.

Through the systematic addition of the education dimension, this approach can be thought of as adding a 'quality' dimension to the consideration of population numbers. When studying and modelling education, it is important to distinguish conceptually between education 'flows' and 'stocks'. Flows refer to the process of education, to schooling, and, more generally, the production of human capital, which may consist of formal and informal education.

These flows are the focus of most of the international literature on education and they are typically measured by school enrolment rates and other schooling related indicators. Human capital refers to the stock of educated adult people, which at any point in time is the result of recent education flows for younger adults and of more distant past education flows for older adults. This stock is typically measured in terms of the quantity of formal education (highest level of attainment or mean years of schooling), but the quality (the general knowledge and cognitive skills people actually have), content, and direction of education also matter. Content is more important for higher education than basic education, where the focus is on acquisition of literacy skills and basic numeracy. This book for reasons of data availability is largely confined to quantitatively modelling the changing distributions of formal educational attainment by age and sex. This in itself is already a pioneering step.

The toolbox of technical demographers contains the powerful methods of multidimensional (multi-state) population dynamics, which were developed around 1980 at the World Population Program of the International Institute for Applied Systems Analysis (IIASA). They represent a generalization of the widely used cohort-component method of projecting by

age and sex and are tailor-made for the task of integrating the processes of human capital formation with education-specific fertility, mortality, and migration. They provide a comprehensive, analytically consistent, and directly applicable model for projecting these interdependent processes.

The resulting new global population projections for 195 countries for 2010 to 2100, and for 5-year age groups for men and women by six levels of education presented in this volume continue the IIASA tradition of working at the forefront of developing new approaches of population forecasting. These innovations included the first global probabilistic population projections and efforts to blend statistical techniques with expert based substantive justifications for the specific assumptions made. The present book further extends the state of the art by significantly expanding the substantive knowledge base through the broadest ever expert argument solicitation in demography and the systematic incorporation of population heterogeneity by level of education for all countries.

The first part of the book consists of eight chapters (Chapters 2-9) that provide the scientific background for these new projections including comprehensive summaries of the state of the art in understanding the current patterns of fertility, mortality, migration, and education and the drivers of the future trajectories of these demographic factors. The chapters are presented in the form of two-page summaries in the following section. The second part of the book consists of three results chapters and an epilogue which are summarized in the rest of this section. They focus on the effects of alternative education trends of future population, on new ways of measuring future population ageing and on a new set of population scenarios for sustainable development that have been defined in a major collaborative effort with leading research institutes on integrated assessment and global climate change. The third part of the book contains statistical tables with the most important results for the world, world regions, as well as 171 individual countries (24 countries with limited education data are not shown). Tables for selected major countries are included at the end of this summary.

BOX 1: A BRIEF HISTORY OF INTERNATIONAL POPULATION PROJECTIONS BY IIASA

Since the early 1970s, the International Institute for Applied Systems Analysis (IIASA) has had a demography group first under the leadership of Andrei Rogers (1973–84), and then Nathan Keyfitz (1984–94), followed by Wolfgang Lutz (since 1994). The focus in the early years was on developing the methods of multidimensional mathematical demography. These methods incorporate a generalization of the conventional life table and cohort-component approach to population forecasting in which the population is stratified by demographic dimensions beyond age and sex. Inspired by the need for long term population scenarios by IIASA's environmental change programs, since 1990 IIASA's World Population Program produced actual international projections. In doing so, IIASA also developed the approach of expert-argument based projections (in which the substantive reasons for making certain assumptions have to be argued substantively) and pioneered global probabilistic projections.

The different sets of IIASA projections have been published primarily in a series of three books and three articles in the pages of *Nature*:

- Lutz, W. (Ed.). (1991). *Future demographic trends in Europe and North America. What can we assume today?* London: Academic Press.
- Lutz, W. (Ed.). (1994, 1996). *The future population of the world. What can we assume today?* London: Earthscan.
- Lutz, W., Sanderson, W. C., & Scherbov, S. (Eds.). (2004). The end of world population growth in the 21st century: New challenges for human capital formation and sustainable development. London, UK: Earthscan.
- Lutz, W., Sanderson, W. C., & Scherbov, S. (1997). Doubling of world population unlikely. *Nature*, *387*(6635), 803–805.
- Lutz, W., Sanderson, W. C., & Scherbov, S. (2001). The end of world population growth. *Nature*, *412*(6846), 543–545.
- Lutz, W., Sanderson, W. C., & Scherbov, S. (2008). The coming acceleration of global population ageing. *Nature*, *451*(7179), 716–719.

RESULTS

RESULTS: 1. EDUCATIONAL ATTAINMENT AND POPULATION GROWTH[1]

The results of the major new effort of producing population scenarios by age, sex, and level of education for 171 countries are presented with a time horizon up to 2060 with later extensions to 2100 for the long term scenarios in the context of climate change. In the medium scenario—which can also be considered the most likely from today's perspective and which combines medium fertility and mortality assumptions with a continuation of the recent Global Education Trends (GET)—the aggregate population for the world will reach 8.3 billion in 2030 and 9.2 billion in 2050. As shown in Figure 1, these results are quite in line with recent population projections published by other groups.

But our projections also show the changing level of education of this growing population. Figure 2 clearly indicates that the added population will on average be much better educated than today.

The population that never attended school will be stagnant in absolute terms and diminishing as a proportion while at the same time the population with secondary or post-secondary education will rapidly expand. Since the unique new feature of our projection lies in the explicit incorporation of education, we will specifically focus on the effect of the interactions between female education and population growth. In the book we demonstrate that in virtually all countries, and at different levels of development, there is a strong negative association between the level of female education and the levels of fertility rates and child mortality rates. We also argue that there is a strong case for assuming a direct causal effect from the empowerment of women

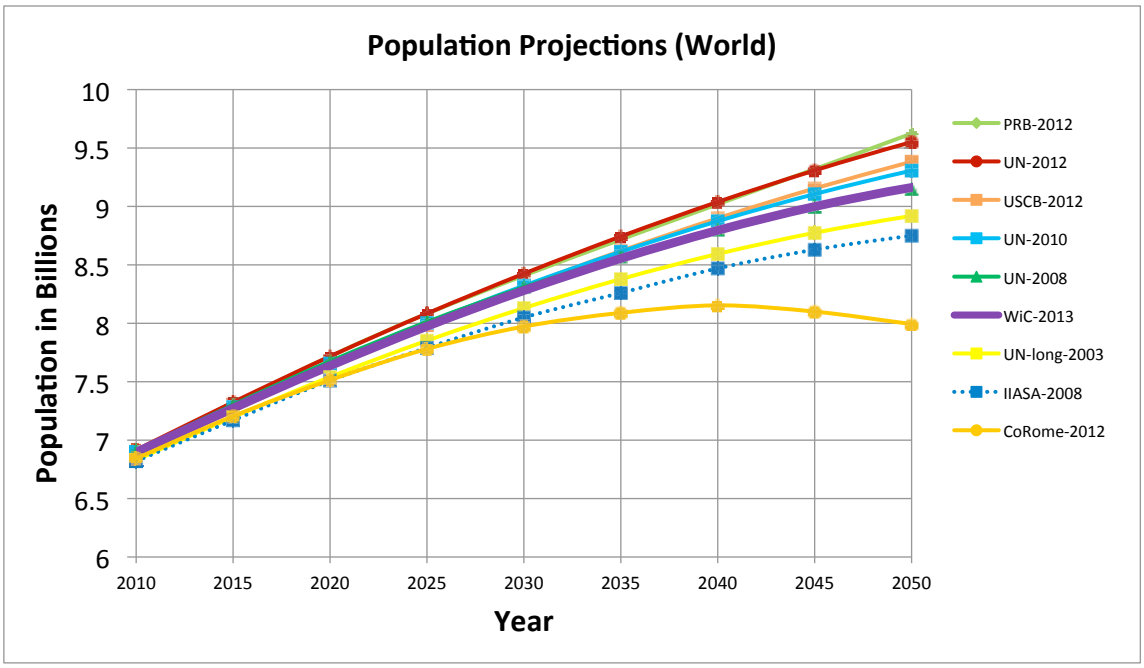


Figure 1 (10.6)[2]: Comparison of different world population projections published over the last decade with a time horizon to 2050 to our new projections (WIC-2013). PRB: Population Reference Bureau; UN: United Nations; USCB: US Census Bureau; WIC: Wittgenstein Centre for Demography and Global Human Capital; IIASA: International Institute for Applied Systems Analysis; CoRome: Club of Rome.

1 Results 1 and 3 correspond to Chapter 10 and 12 in the book respectively, authored by Wolfgang Lutz and Samir KC. Results 2 refers to Chapter 11 authored by Sergei Scherbov (Wittgenstein Centre (IIASA, VID/ÖAW, WU), IIASA), Warren C. Sanderson (Stony Brook University, New York; Wittgenstein Centre (IIASA, VID/ÖAW, WU), IIASA), Samir KC, and Wolfgang Lutz

2 The number in brackets represents the original number of the figure in the book

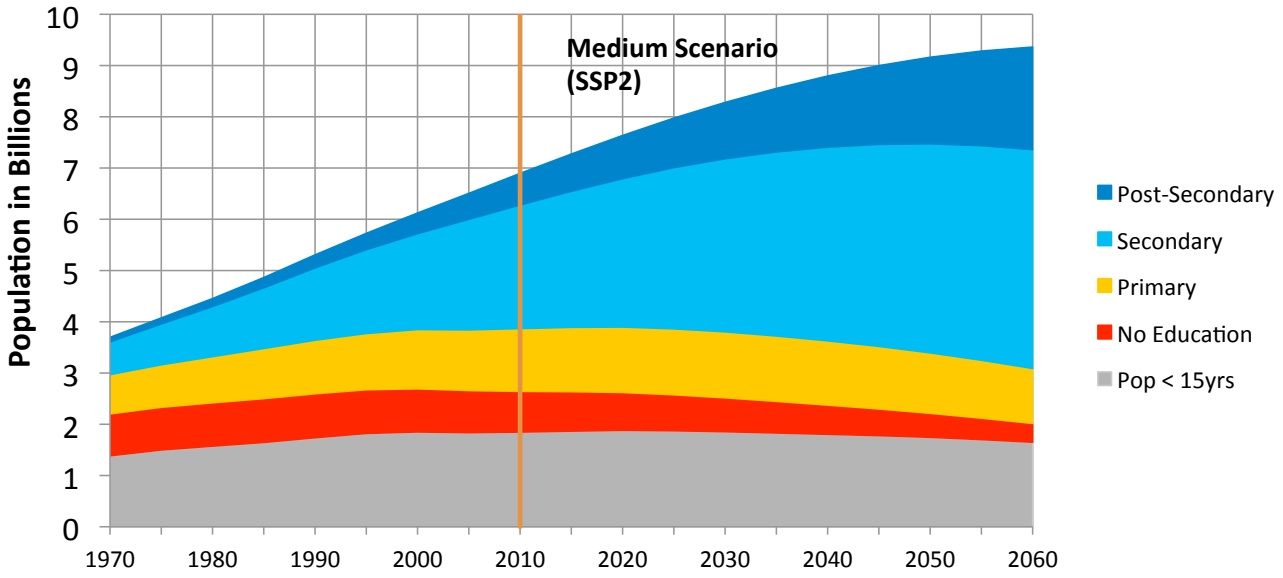


Figure 2 (10.5): Reconstructed and projected trend of changing world population size by level of education 1970–2060. Medium scenario (corresponds to Shared Socio-economic Pathway 2).

through basic education to changes in attitudes, behavior, and the relative standing of women in their partnership, extended family, and society, and that this causal effect results in the observed lower levels of fertility and child mortality rates.

Given this clear relationship between female education and demographic outcomes, we should expect that alternative scenarios about future education trends of women (Box 2) will result in different levels of overall fertility and mortality. The aggregate effects on fertility and child mortality affect population growth in different directions. More female education in high fertility settings brings down birth rates and improves the survival of children. But the calculations presented here show that the drop in fertility has a far greater net effect than improved child survival rates. As a result, better education is associated with a clear reduction in population growth. For this reason, universal female education—in addition to its many other positive implications—is likely an effective way to slow the world's population growth.

This effect of education on future population growth is illustrated in Figure 3 for the world population as a whole. The figure shows future trends in population size by level of education according to four alternative education scenarios, while assuming identical education-specific fertility and mortality trajectories at the level of individual countries.

BOX 2: ALTERNATIVE EDUCATION SCENARIOS

The **Fast Track (FT)** scenario is the most optimistic scenario. It assumes that all countries will expand their school systems at the fastest possible rate, comparable to the best performers in recent history such as Singapore and South Korea.

The **Global Education Trend (GET)** scenario is moderately optimistic, and can be considered as the most likely. It assumes that the country will follow the average path of school expansion that other countries already further advanced in this process have experienced.

The **Constant Enrolment Rates (CER)** scenario assumes that in each country the most recently observed rates of school enrolment are frozen at their current levels.

The most pessimistic scenario is the **Constant Enrolment Numbers (CEN)** scenario. It assumes that no more schools are being built and the absolute number of students is kept constant, which under conditions of population growth means declining enrolment rates.

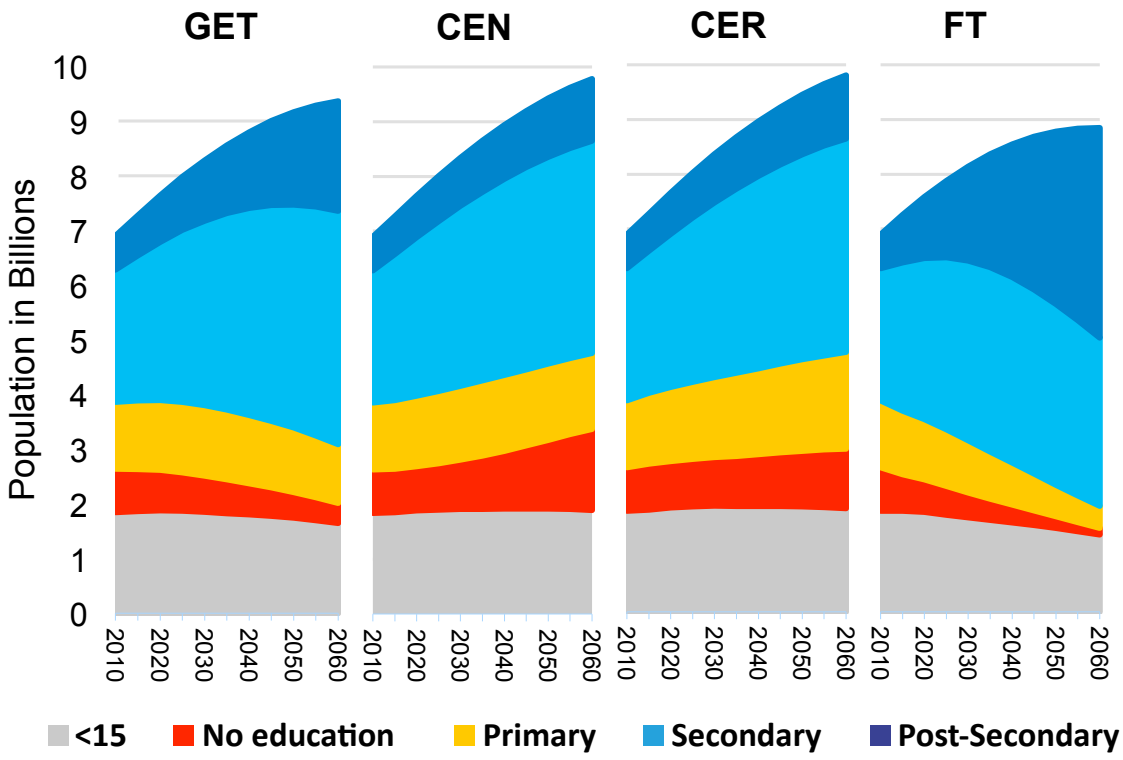


Figure 3 (10.19): World population scenarios by level of education according to three alternative education scenarios while assuming identical medium education-specific fertility and mortality trajectories at the level of individual countries.

When interpreting comparisons of these scenarios, it should be kept in mind that the effect of better education on population growth takes a long time to play out because of two factors. First, if more girls are entering primary education tomorrow, the main effect on fertility will occur some 15 or more years later, when these young women are in their prime child-bearing years. Second, once fertility rates fall, this will not translate immediately into falling absolute numbers of births because of the large age-structural momentum of population growth. More young women will be moving into reproductive ages as a consequence of past high fertility and hence the absolute number of births may still increase, even though the number of births per woman declines. Even in the unlikely case of instant replacement-level fertility, young populations would continue to grow substantially for decades.

For these reasons, the differences among the four scenarios as shown in Figure 3 only become visible after a few decades. But by 2060 very clear differences show up. As can be expected, the differences are most pronounced between the most rapid expansion Fast Track (FT) scenario and the scenarios assuming constant school enrolment. The difference in total population size by 2060 is already about a billion people at the global level. In other words, identical education-specific fertility and mortality assumptions result in a total world population of 8.9 billion under the Fast Track (FT) scenario compared with 9.8 billion under the Constant Enrolment Rates (CER) scenario.

The effects of near term investments in female education on slowing population growth is strongest in countries with high current fertility levels and great educational fertility differentials. Data on these fertility levels and differentials and the resulting effects of education scenarios on future population growth are given in the end of this report for selected countries and in the book and the associated website for all countries and world regions.

Another important feature of these education-specific perspectives on demographic trends is that we can say with certainty that in most countries the future population will be better educated than today's because virtually everywhere the younger cohorts are better educated than the older ones. And since education is almost universally acquired at young age and then remains invariant over the rest of

the life cycle, we have a very good analytical handle for projecting improvements of the educational composition of the population along cohort lines. In other words, when we know how many 20-year old women have at least a junior secondary education in 2010, we then have a good basis for projecting how many 60-year old women will have at least junior secondary education in 2050. The only errors that we can possibly make in such forecasts would be unexpected changes in education-specific mortality and migration patterns. But these tend to be of only minor importance.

An efficient graphical representation of the above described demography of changes in educational composition is the age pyramid in which color represents the level of education for each age cohort of men and women. Such pyramids are extensively used in the book to illustrate in one picture the rather complex pattern that results from the fact that higher education of reproductive age women leads to fewer births and hence a narrower bottom of the age pyramids. Figure 4 illustrates these interactions between age-specific levels of education and the overall shapes of the age pyramids for the world as a whole for the different education scenarios discussed above. It clearly illustrates that the rapid education expansion scenario Fast Track (FT) not only results in a much smaller and better educated population in 2060 but also in a much older one.

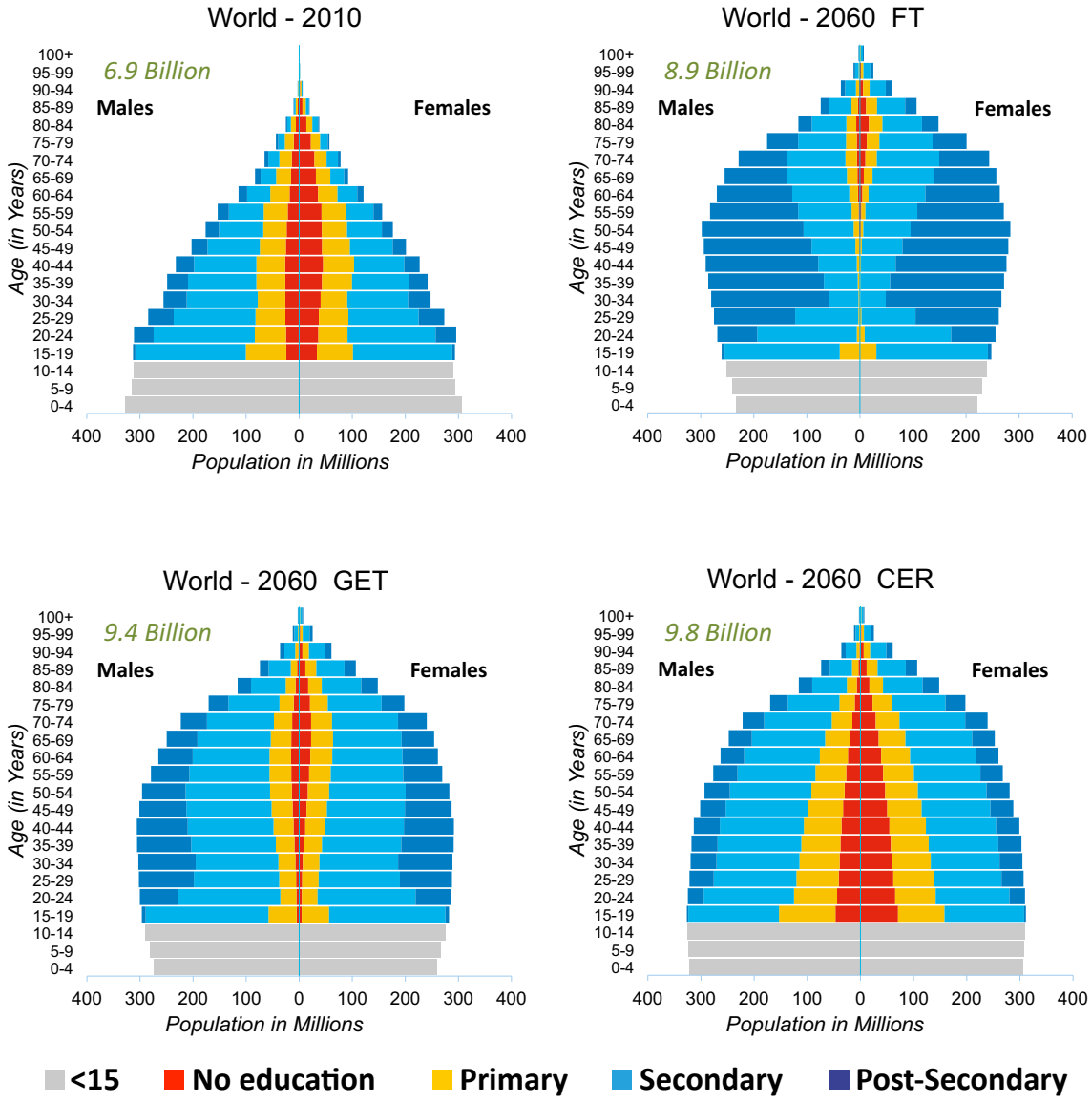


Figure 4 (10.15): Age and education pyramids for the world in 2010 and projected to 2060 under the Global Education Trend (GET), Fast Track (FT), and Constant Enrolment Rate (CER) scenarios under medium education specific fertility and mortality assumptions.

RESULTS: 2. FUTURE GLOBAL POPULATION AGEING

Like all other recent population projections, our new results also show significant future population ageing in all parts of the world. The measured speed and extent of ageing, however, depends on the specific indicators of ageing chosen. The percentage of the population above age 65 – a conventional indicator of ageing – is expected to increase from currently 8 percent on the global average to 18 percent by 2050 and 28 percent by 2100. In Europe it will increase from currently 16 percent to 29 percent in 2050 and 36 pecent in 2100.

In this book we also calculate new indicators of ageing for all countries in the world that take changing life expectancy as well as education into account. In contrast to the conventional definition of age which is based on time since birth, we do this by defining an old age threshold that is based on remaining life expectancy. In the book we use a definition that considers people as 'old' at the age when their remaining life expectancy is 15 or less years. Currently these are 6 percent of the world population. This percentage increases much less than the conventional indicator to 10 percent in 2050 and 13 percent in 2100. In Europe it is currently 13 percent and due to expected increases in life expectancy in Europe this percentage of 'old' will remain virtually unchanged in the range of 12-15 percent.

Thirty-seven per cent of the population of the world that is considered 'old' according to the new old age threshold had secondary education or higher in 2010. Between 2020 and 2030, a majority of the world's 'old' population will be in that group. By 2050, the figure rises to 68 per cent and, by 2090, to 86 per cent.

In Latin American and Asia, the proportion of the 'old' population with secondary or higher education roughly quadruples from 2010 to 2090, ending that period at 85 per cent. In Africa, 11 per cent of the 'old' population had this level of education in 2010. According to our medium assumption, this will rise to 69 per cent by 2090. Toward the end of this century under these assumptions, the 'old' in Africa will be more educated than the 'old' were in Europe in 2010. All over the world, tomorrow's 'old' will be more educated than today's.

More data on these different ageing indicators by level of education are given in the Appendix for the world and selected countries. They all illustrate that the expected process of future population ageing looks less dramatic and also less dangerous in its consequences when education is explicitly factored in. Since more educated people at a given age tend to have a much lower probability of being disabled, the future demands for care of disabled elderly look less

dramatic. Also, the decline of cognitive abilities with age is highly education dependent and explicitly factoring in education gives a more positive view of the future.

RESULTS: 3. ALTERNATIVE SCENARIOS IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT

The projections presented in this book are also part of an ongoing international effort to develop a new generation of global change scenarios related to the Intergovernmental Panel on Climate Change (IPCC). These so-called Shared Socioeconomic Pathways (SSPs) have been designed to capture alternative future trends with respect to socioeconomic challenges to both climate change mitigation and adaptation.

Compared to the previous generation of IPCC scenarios which only included total population size and GDP as socioeconomic variables, the new SSPs provide a much richer picture of demographic and social trends. The alternative scenarios by age, sex, and level of education that are being defined, presented, and discussed in this volume form the "human core" of the broader SSPs that also include many other dimensions such as energy and economic variables.

We only discuss three out of five SSPs here. The Middle-of-the-Road/Continuation SSP2 scenario is set to be identical with the medium scenario discussed above which combines medium fertility, mortality, and migration assumptions with the Global Education Trend (GET) education scenario. There is also SSP1 (Sustainability/ Rapid Social Development) which combines rapid education expansion with rapid fertility and mortality decline, and SSP3 (Fragmentation/Stalled Development) which combines stalled school enrolment rates with slow fertility and mortality decline. In terms of total world population size by 2100, these scenarios span a range from 7 to almost 13 billion people.

By 2050, SSP1 and SSP3 differ greatly in terms of resulting population size and education structures. Total population size will differ by as much as 1.5 billion over the coming four decades (8.5 billion for SSP1 and 10.0 billion for SSP3 in 2050). By the end of the century, total population size under SSP1 will have declined to 6.9 billion, under SSP2 it will reach 9.0 billion, and under SSP3 12.6 billion. Given the very different resulting educational compositions of the world population, it is indeed plausible to assume that these scenarios refer to very different future levels of human wellbeing, with SSP1 showing a world of less than 7 billion increasingly well educated, and therefore healthy and wealthy, people who will be better able to cope with the consequences of already unavoidable climate change. In contrast, SSP3 shows a world of almost 13 billion less educated, less healthy, and less wealthy people likely to be much more vulnerable to environmental change.

These differences in total population size according to the different SSPs partly reflect the differences in levels of female education that have been discussed above. But the resulting range is broader because the SSPs also alter the levels of education-specific fertility and mortality which produces an even larger inter-scenario difference.

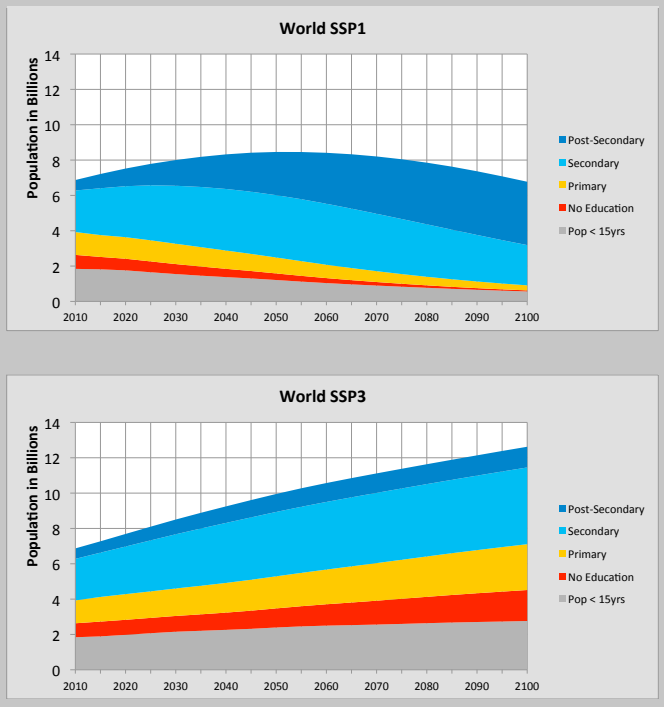
BOX 3: SHARED SOCIOECONOMIC PATHWAYS (SSPS) 1-3 DEFINED

SSP1 (Sustainability/Rapid Social Development): This scenario assumes a future that is moving toward a more sustainable path, with educational and health investments accelerating the demographic transition, leading to a relatively low world population. The emphasis is on strengthening human wellbeing.

SSP2 (Continuation/Medium Population Scenario): This is the middle-of-the-road scenario in which trends typical of recent decades continue, with some progress toward achieving development goals, reductions in resource and energy intensity, and slowly decreasing fossil fuel dependency. Development of low income countries is uneven, with some countries making good progress, while others make less.

SSP3 (Fragmentation/Stalled Social Development): This scenario portrays a world separated into regions characterized by extreme poverty, pockets of moderate wealth, and many countries struggling to maintain living standards for rapidly growing populations. The emphasis is on security at the expense of international development.

For specific countries that are still in the early phases of demographic transition and socioeconomic development, the alternative assumptions associated with the different SSPs have even greater effects at the national level than they do at the global level. Figure 6 shows the implication of the different SSP assumptions for the example of Kenya. SSP1 shows that with significant further investments in education over the coming decades, Kenya by 2050 could reach an education structure (of the younger adult population) that is similar to that of Europe today. SSP3 shows the case of stalled development that is associated, not only with much lower education levels, but also with significantly more rapid population growth due to continued high fertility. While under SSP1 Kenya's population will "only" increase from currently 41 million to 75 million by the end of the century, under SSP3 it will increase by a factor of four to an incredible 157 million. The medium SSP2 scenario results in 96 million.



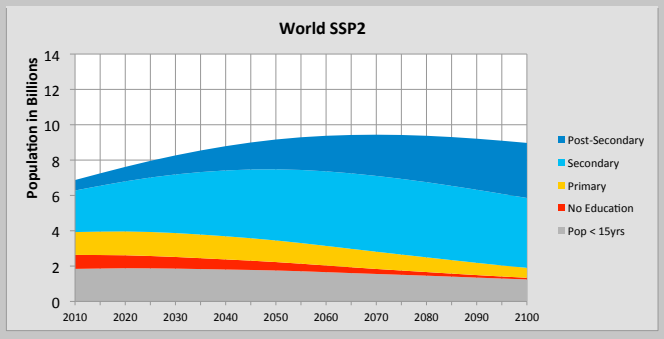
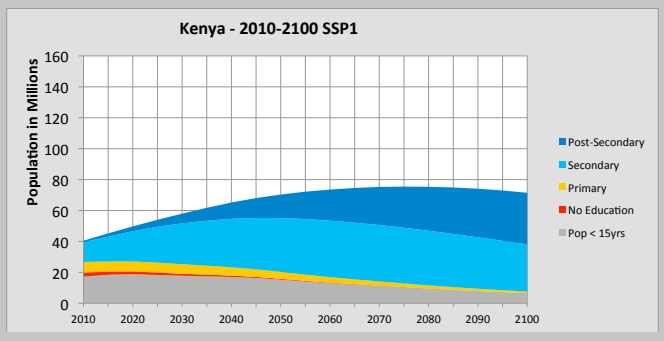
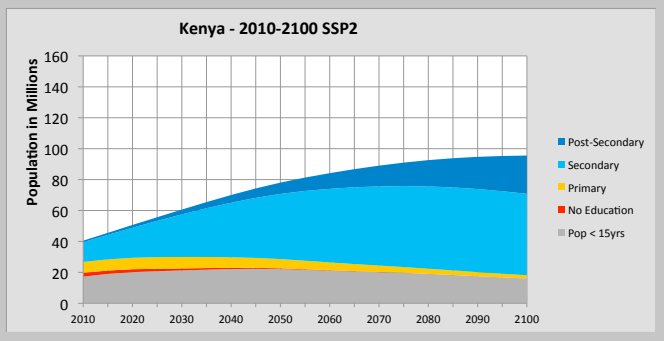


Figure 5: The three SSP scenarios shown depict vastly different worlds. SSP1 envisages a rapidly developing world with more education, lower mortality, and a more rapid fertility decline in high fertility countries. SSP2 is considered the most likely in terms of future fertility, mortality, migration, and education. SSP3 assumes increasing global inequality with social and economic stagnation, with stagnant school enrolments and retarded demographic transition.





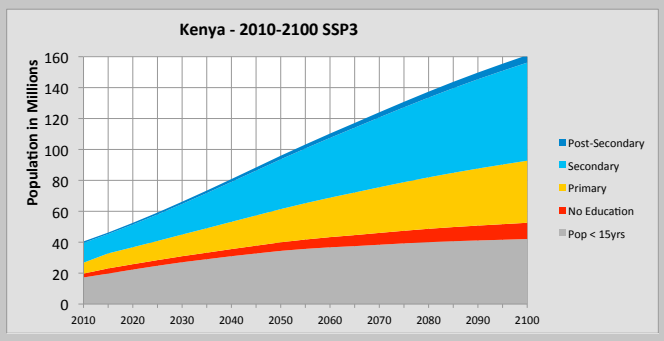


Figure 6: Three SSP projections for Kenya 2010-2100. SSP1 shows that with significant further investments in education over the coming decades, Kenya by 2050 could reach an education structure for its younger adult population that is similar to that in Europe today. SSP3 shows the case of stalled development that is associated not only with much lower education levels, but also with rapid increases in population growth to 161 million in 2100.

IMPLICATIONS

IMPLICATIONS

The epilogue of the volume authored by Wolfgang Lutz is entitled "With education the future looks different" and presents broader reflections about the wide ranging implications of the work presented in this book. The title can first be read as referring to the cognitive processes of perceiving the world and thinking about the future, processes that education helps shape. Second, the title can be understood in the more specific demographic modelling context of this book, where we show that explicitly adding education to the conventional demographic approach, which differentiates only by age and sex, produces a population outlook of the future that does, indeed, look very different when accounting for education heterogeneity compared with assuming homogeneity. Finally, the title can be read as referring to the improved life chances and development opportunities that result from education, at the level of both individuals and societies, where at both levels the future looks better with education.

Referring to education as a decisive source of population heterogeneity, this epilogue gives concrete examples of how the anticipated challenges associated with population ageing look very different when education is factored in. One important example is the expected increase of disability where the fact that at a given age more educated people have lower disability rates combines with the near certain expectation that the future elderly will be better educated than today's elderly. This confluence results in an appreciably lower forecast of future disability compared to the conventional way of only looking at age-specific disability rates while disregarding the changing education structure.

The epilogue also addresses the multiple benefits of education that go far beyond the fields of health and fertility that are the focus of this book. In particular there is mounting evidence that education really stands out as a root cause of development in its broadest sense and in particular for economic growth and poverty eradication. It also touches upon the literature on the important role of education in improving the quality of governance and how "demos" empowered through education can help to bring about democracy. It finally also discusses a very recent body of literature that shows that improved education may be a key strategy to enhance the adaptive capacity to already unavoidable climate change and the natural disasters associated with it.

The data, analyses, and scenarios presented in this book allow for a richer and more convincing assessment of the returns to education in terms of desirable individual and social futures. They suggest that strengthening the human resource base for sustainable development should be the overriding population policy priority for the 21st century.

		Population in Millions			Mean years of schooling, age 25+		
		SSP1	SSP2	SSP3	SSP1	SSP2	SSP3
WORLD	2010	6,896	6,896	6,896	7.90	7.90	7.90
	2050	8,525	9,162	9,989	11.35	10.42	8.79
	2100	7,096	8,963	12,774	13.78	12.87	8.28
AFRICA	2010	1,022	1,022	1,022	5.38	5.38	5.38
	2050	1,801	2,018	2,324	10.59	9.24	6.72
	2100	1,925	2,622	3,924	13.46	12.25	6.69
ASIA	2010	4,164	4,164	4,164	7.06	7.06	7.06
	2050	4,746	5,126	5,702	10.93	9.98	8.41
	2100	3,330	4,368	6,877	13.54	12.72	8.20
EUROPE	2010	738	738	738	10.93	10.93	10.93
	2050	764	755	678	13.29	12.88	12.19
	2100	699	703	539	14.91	14.31	12.33
LATIN AMERICA AND THE CARIBBEAN	2010	590	590	590	7.97	7.97	7.97
	2050	696	758	865	11.44	10.74	9.44
	2100	520	684	1,094	13.53	12.87	9.53
NORTHERN AMERICA	2010	345	345	345	12.93	12.93	12.93
	2050	461	447	369	14.20	13.81	13.30
	2100	556	521	289	14.98	14.57	13.32
OCEANIA	2010	37	37	37	12.03	12.03	12.03
	2050	57	58	51	14.62	14.31	13.66
	2100	66	67	50	15.96	15.60	13.99
Brazil	2010	195	195	195	6.97	6.97	6.97
	2050	217	233	255	10.46	9.85	8.92
	2100	148	189	279	12.79	12.04	9.25
China	2010	1,341	1,341	1,341	7.36	7.36	7.36
	2050	1,219	1,255	1,310	10.42	9.86	9.16
	2100	644	754	1,046	12.79	12.21	9.40
Egypt	2010	81	81	81	6.77	6.77	6.77
	2050	115	126	142	12.29	11.70	10.14
	2100	100	134	202	14.53	14.02	10.56
Germany	2010	82	82	82	13.71	13.71	13.71
	2050	82	79	67	14.99	14.72	14.25
	2100	75	69	38	15.94	15.58	14.17
India	2010	1,225	1,225	1,225	5.53	5.53	5.53
	2050	1,543	1,715	1,982	10.77	9.32	7.13
	2100	1,131	1,569	2,687	13.66	12.65	7.27
Indonesia	2010	240	240	240	7.96	7.96	7.96
	2050	269	285	306	11.61	11.10	10.07
	2100	182	225	292	13.98	13.39	10.33
Iran (Islamic Republic of)	2010	74	74	74	7.20	7.20	7.20
	2050	92	98	108	11.63	11.16	9.37
	2100	66	81	122	14.22	13.90	9.64
Kenya	2010	41	41	41	7.68	7.68	7.68
	2050	73	80	95	12.25	11.39	8.03
	2100	75	98	157	13.94	12.99	7.99
Nigeria	2010	158	158	158	6.13	6.13	6.13
	2050	333	371	435	12.35	11.62	8.57
	2100	439	576	879	14.66	14.29	8.67
Republic of Korea	2010	48	48	48	11.85	11.85	11.85
	2050	49	46	41	14.48	14.55	14.28
	2100	35	30	19	15.48	15.47	14.68
Russian Federation	2010	143	143	143	10.44	10.44	10.44
	2050	126	132	133	12.36	11.80	11.45
	2100	88	115	144	13.50	12.73	11.70
South Africa	2010	50	50	50	8.94	8.94	8.94
	2050	62	63	61	12.08	11.24	10.20
	2100	50	59	70	13.63	12.54	10.23
Spain	2010	46	46	46	8.99	8.99	8.99
	2050	53	52	44	12.51	12.25	11.15
	2100	51	47	28	14.78	14.46	11.78
United States of America	2010	310	310	310	12.86	12.86	12.86
	2050	411	400	332	14.11	13.69	13.19
	2100	496	466	261	14.93	14.48	13.22

Table 1 (12.2): Results for major world regions and selected countries, SSP1–SSP3.

SCIENTIFIC BACKGROUND

SCIENTIFIC BACKGROUND

HOW EDUCATION DRIVES DEMOGRAPHY AND KNOWLEDGE INFORMS PROJECTIONS

Wolfgang Lutz[3] and Vegard Skirbekk[3]

The population projections by age, sex, and level of education presented here are based on the multi-dimensional generalization of the so-called cohort-component projection model which projects populations along cohorts and requires assumptions on future fertility, mortality, migration, and education trends. An important prerequisite for suggesting the addition of educational attainment as a third demographic dimension in addition to age and sex is the assumption that the effects of education on demographic behavior and outcomes are not spurious associations, but real and causal in nature. In the research effort presented here, we establish *functional causality*, (as *strong causality* in the sense of universal validity is almost impossible to establish in social sciences) through assessing three criteria:

- There must be *strong empirically observed associations* between the two factors studied, and those associations should hold across different societies and for different subgroups of the population, and for different points in time.
- There must be a *plausible narrative about the mechanisms* through which one force influences the other.
- Alternative explanations of the observed associations, specifically self-selection and reverse causality, should be studied and ruled out as playing dominant roles.

Chapter 2 in the book demonstrates that these three criteria are being met in the case of education effects on health, mortality, and fertility through a broad review of the literature that also includes several “natural experiments”. The foundations of the effects of education on human behavior refer to modern brain research: neurological studies have confirmed beyond doubt that brain volumes, cortical thickness, and neurological structures are affected by learning experience and hence education. Based on the literature, it seems reasonable to assume that cognitive functions that relate to our perception of the environment around us, our view of the future, and our time horizon and degree of rationality are related to our previous education experiences. This has direct consequences for health and fertility related behavior.

DEFINING ASSUMPTIONS FOR POPULATION PROJECTIONS

The assumptions used in this new set of population projections are based on a comprehensive review of the scientific literature on the drivers of future fertility, mortality, migration, and education trends and the largest ever expert survey for assessing the validity of alternative arguments including over 550 international experts.

A team at IIASA and the Vienna Institute of Demography designed an online questionnaire with separate segments for high and low fertility, high and low mortality, and migration. For each of the five segments the arguments were grouped according to selected major forces that were defined to be as independent from each other as possible.

Six such major forces were identified for fertility and mortality, and five for international migration. Up to ten specific predefined arguments were listed for each of these 17 major forces, with responding experts invited to add additional self-defined arguments. The experts were asked to judge the degree of validity (from very likely to be wrong to ambivalent to very likely to be right) for each of the arguments based on the scientific evidence (see Figure 7). Experts were asked a second question concerning the likely

3 Wittgenstein Centre (IIASA, VID/ÖAW, WU), IIASA

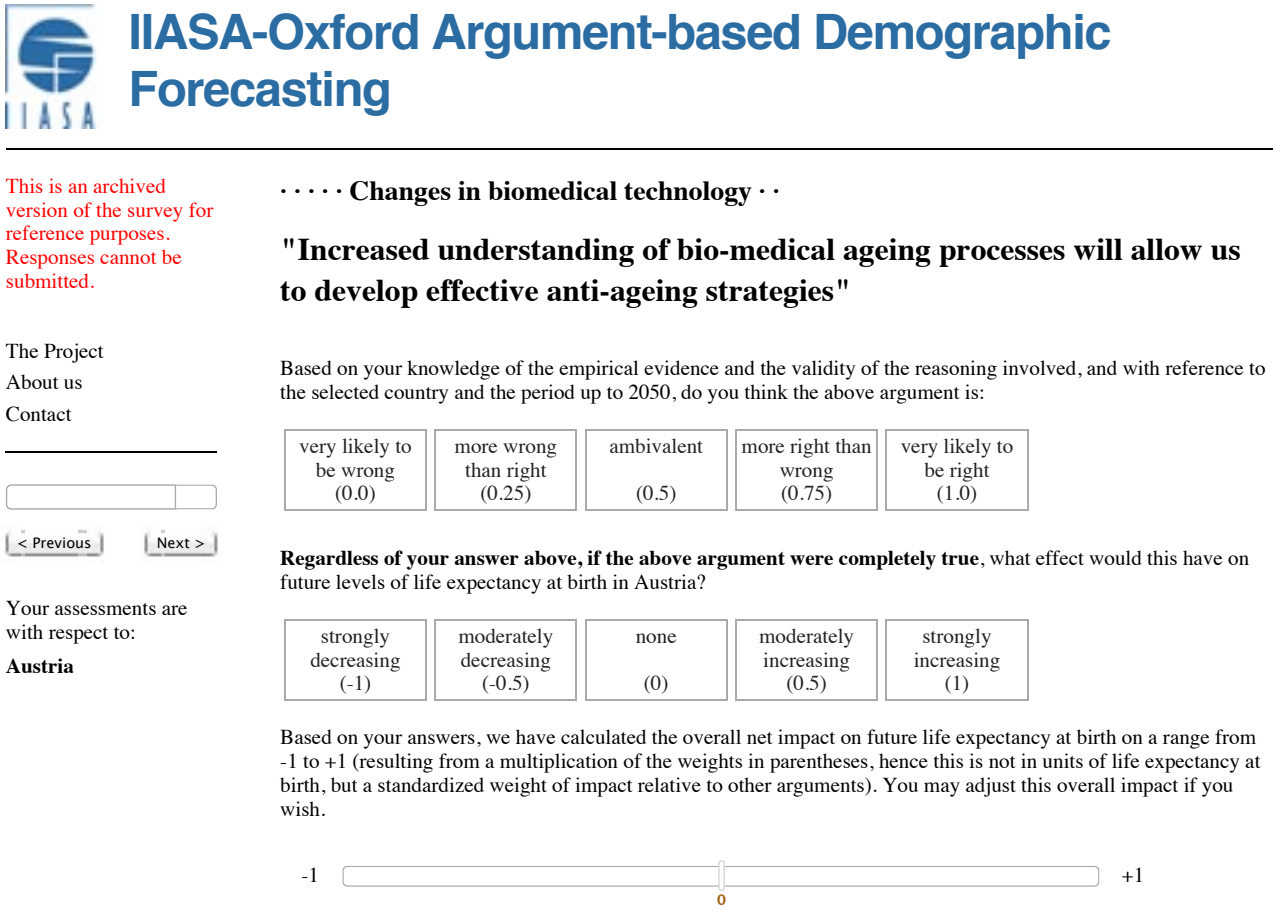


Figure 7 (2.1): Screen shot from a sample page of the online questionnaire listing one argument on future life expectancy under the force 'changes in biomedical technology'.

impact of each argument on fertility, mortality and migration, assuming that the argument was completely true. In a final assessment, the two factors stated for any given argument are multiplied, with the total argument impact score automatically shown. The experts could still modify this score if they had second thoughts.

In mid-2011, all members of international population associations (International Union for the Scientific Study of Population, Population Association of America, European Association for Population Studies, Asian Population Association, and all other regional population associations) were invited to participate in the online survey. More than 550 responses were submitted. The lead authors of this volume, most of whom are affiliated with the Wittgenstein Centre, systematically analyzed the responses and led a series of five meta-expert workshops to review and focus on them. These specialized workshops consisted of groups of 8–12 leading experts in the respective fields. Between October 2011 and February 2012, the meetings were held on five continents: 'Migration' (Boulder, CO, USA), 'Low Fertility' (Vienna, Austria), 'High Fertility' (Kathmandu, Nepal), 'Low Mortality' (San Jose, Costa Rica), and 'High Mortality' (Cape Town, South Africa). Based on these meetings and by blending this country specific knowledge with statistical models, we defined alternative education-specific fertility, mortality, and migration assumptions for all countries.

FUTURE FERTILITY IN LOW FERTILITY COUNTRIES

Stuart Basten[4], Tomáš Sobotka[5], and Kryštof Zeman[5]

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Fertility rates well below replacement level emerged in most developed countries since the 1980s. More recently, many middle income countries including China, Brazil, Iran, and Turkey have joined the expanding list of low-fertility settings (Figure 8). The ongoing transition to low fertility is, alongside the long-term expansion of life expectancy, the key force reshaping population dynamics around the world. Close to a half of the global population now lives in regions with below replacement fertility.

Will low or even very low fertility become a long-term phenomenon? Chapter 3 gives a systematic overview of the forces shaping contemporary reproductive behavior in low fertility countries and explores possible future scenarios based upon a major survey of international experts. A regional overview demonstrates that the locus of low fertility is increasingly moving toward the rapidly developing economies of East Asia and Latin America. Rising education levels is the most important factor contributing to the observed global fertility trends, especially the decline of fertility in higher-fertility countries, and the shift towards delayed parenthood in affluent countries with low fertility.

Experts show considerable disagreement with the prevailing projection assumption of global convergence toward fertility levels near population replacement. They envision a future where considerable cross-country variation is combined with a partial convergence to fertility moderately below the replacement threshold (Figure 9).

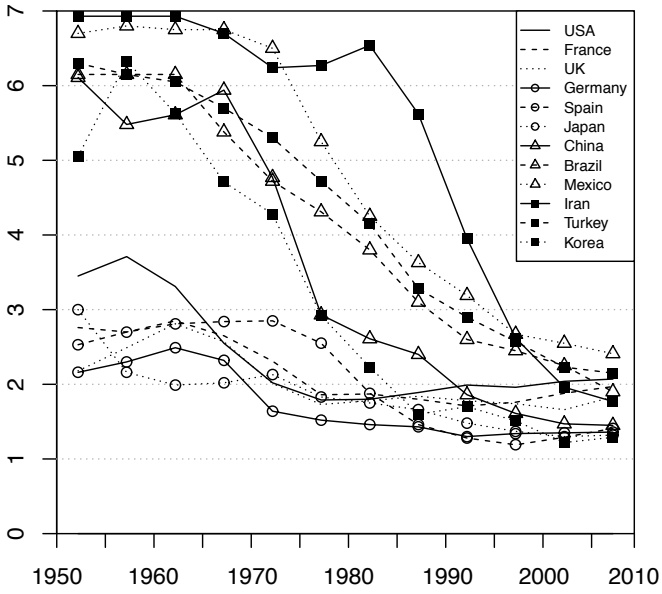

Figure 8 (3.1b): Period total fertility rate (TFR) in largest countries covered in chapter 3, 1950 to 2010

Note: Period TFR in China in 1990-2010 is likely to be overestimated in the official statistics and the UN data

Data source: United Nations, World Population Prospects 2010

East Asia is confirmed as a "hotspot" of low fertility, and China is expected to retain very low fertility rates. As China amounts to almost one fifth of the global population, low fertility there may have a strong reducing effect on the global fertility levels over the coming decades.

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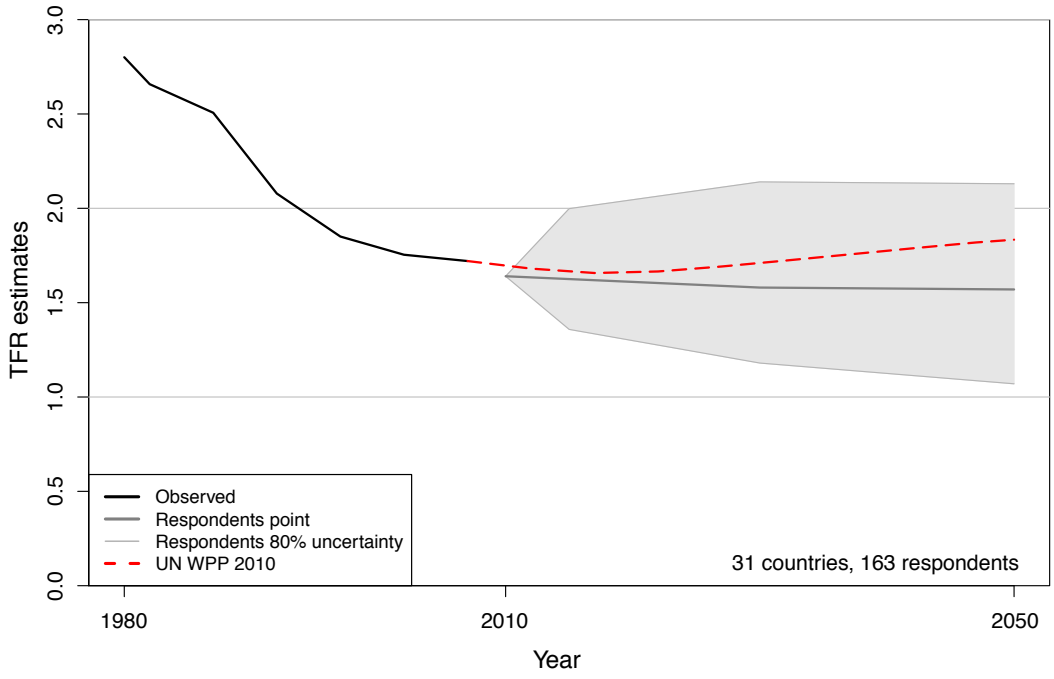

Figure 9 (3.13)**:** Total fertility rates (TFR) estimates and assumptions from 1980 to 2050 (including 80% uncertainty range given by experts) for all low-fertility countries combined, as derived from the expert survey and compared to the 2010 United Nations (UN) World Population Prospects.

Notes: Only countries with at least two expert assessments included. Global mean weighted by population size of countries included.

The arguments perceived by the experts to have the strongest positive impact on fertility relate to immigration from higher fertility countries, increasing flexibility in work practices, the provision of universal childcare and other family policies, and increased gender equity in the division of housework (see Box 4 below). The strongest negative impact was driven by expected uncertainty in individual life course planning, educational expansion, and increasing acceptance of voluntary childlessness, followed by the related arguments on job instability among the young and an inability to find the right partner.

BOX 4: FROM THE EXPERT SURVEY

Major forces likely to affect the future fertility trends identified by the experts:

Positive influence:

- Immigration from higher fertility countries
- Increasing flexibility in work practices
- Public childcare provision, local family policies

Negative influence:

- Increasing uncertainty in individual life-course planning
- Expanded education
- Acceptance of voluntary childlessness

Altogether, 184 questionnaires on low fertility were completed by more than 170 experts.

Meta-expert meeting: Vienna, Austria, December 2011

FUTURE FERTILITY IN HIGH FERTILITY COUNTRIES

Regina Fuchs[6] and Anne Goujon[6]

Contributing authors: *Donatien Beguy, John Casterline, Teresa Castro-Martin, Youssef Courbage, Gavin Jones, Samir KC, James K.S., John F. May, Blessing Mberu, Michaela Potančoková, Zeba Sathar, Bruno Schoumaker, David Shapiro, Laura Wong, and Brenda Yepez-Martinez*

Fertility differences among developing countries are now larger than ever because transitions to low fertility have not yet started in some subpopulations of Western and Middle Africa, but have already been completed in others (e.g., in the economically most advanced countries of Asia, especially East Asia, as well as in many countries in Latin America and the Caribbean). As a result, the observed TFRs of (former) developing countries in 2005–10 ranged from a high of 7.1 in Niger to a low of 1.0 in Hong Kong.

Africa is the most uncertain regarding the speed of the fertility decline as the evidence indicates that the socio-economic conditions in many countries in terms of political governance, low levels of education, and under-performing economies do not favor rapid future declines in fertility. Nonetheless, significant declines in fertility rates are anticipated by the experts consulted for this exercise in most countries as they considered the continuous spread of women's education, modern family planning, and rapid urbanization as main drivers for decreasing fertility.

In the theoretical section of Chapter 4, we highlight the determinant role of women's education on their fertility. At the middle stage of the demographic transition, where different social strata are spread out across different stages of the transition, the role of education is most pronounced,

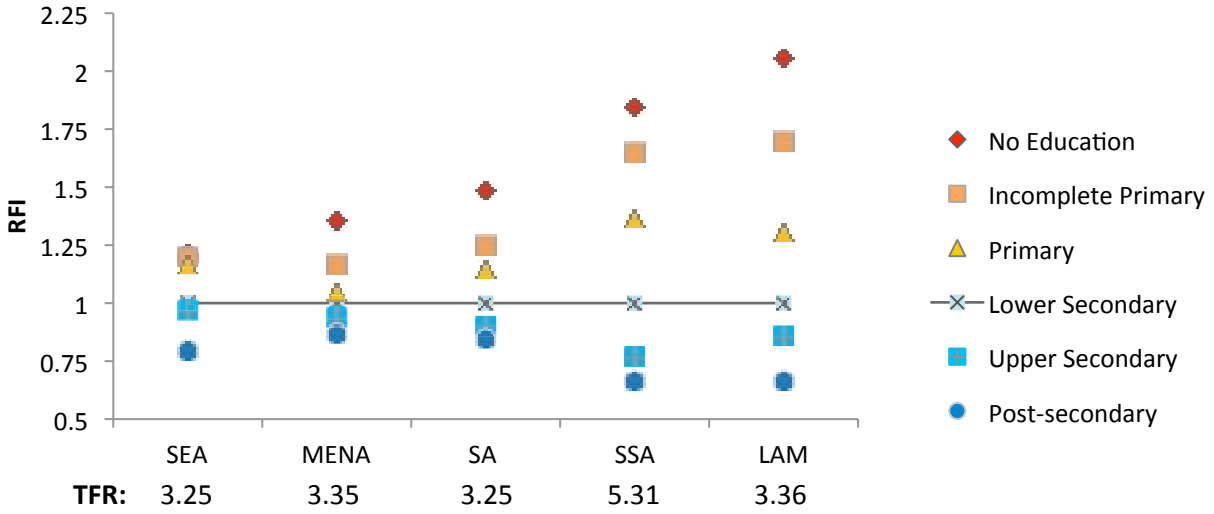

Figure 10 (4.4): Relative fertility index (RFI – taking women with lower secondary education as the point of comparison) by levels of education and region. SEA: South East Asia; MENA: Middle East and North Africa; SA: Southern Africa; SSA: Sub-Saharan Africa; LAM: Latin America; TFR: total fertility rate.

About half of the world's population currently lives in areas where women of childbearing age still have above replacement fertility. The key for future population growth lies with those women in intermediate and high fertility countries, and particularly in the two last world regions with high levels of fertility which are sub-Saharan Africa and South Asia.

with the highly educated having considerably lower fertility than the less and not educated. This strong impact of education is likely to prevail for several decades as many countries find themselves at, or approaching, that mid-transitional stage as exemplified by the case of Kenya in Figure 11. As the fertility transition proceeds to low levels of childbearing, the differentials then tend to diminish.

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The assumptions on future fertility trends for each country were derived by blending the results of the assessment of alternative arguments in the expert survey (based on the relationship of average argument scores to stated likely levels of future TFR), assessments reached in the meta-expert meeting, and a statistical model which derives future fertility from the collective experience of other countries that are already more advanced in the fertility transition. This model assures that both collective global experience and country-specific knowledge are taken into account.

The results of this modeling exercise show that out of the 117 countries that had strictly above replacement fertility in 2010—set conventionally at 2.1—there will be only 71 in 2030 and 42 in 2050. In 2060, out of the 17 countries where women are expected to bear more than 2.1 children, only 5 will experience fertility above 2.5. Four are in sub-Saharan Africa (Niger, Nigeria, Uganda, and Malawi) and one is in South Asia (Afghanistan). Two-thirds of the countries that had high levels of fertility in 2010 are expected to converge to below replacement fertility by 2060.

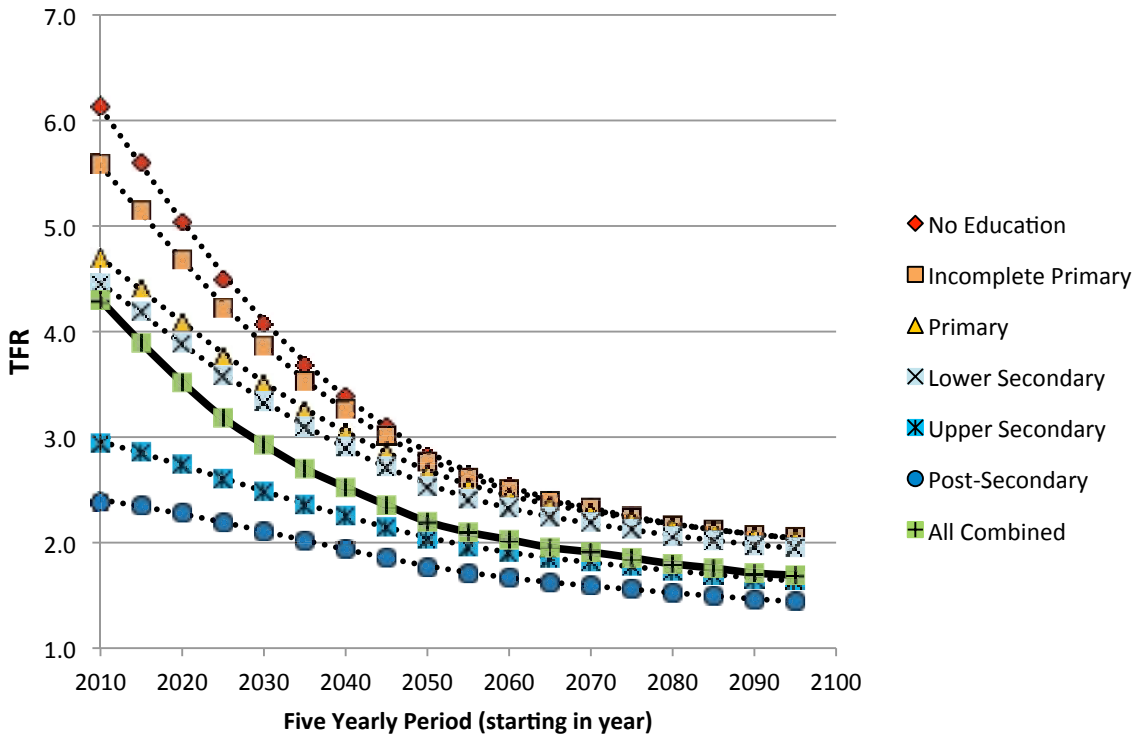

Figure 11 (9.4): An example of education-specific total fertility rates (TFRs) observed and projected from the aforementioned procedure (Kenya).

BOX 5: FROM THE EXPERT SURVEY

Main factors on which the future of fertility in high fertility countries will depend:

- Increasing female educational attainment
- Cost of raising children in urban settings
- Improving access to family planning services

Altogether, 140 experts completed the high fertility questionnaire that was sent to members of professional organizations.

Meta-expert meeting: Dhulikhel, Nepal, November 2011

FUTURE MORTALITY IN LOW MORTALITY COUNTRIES

Graziella Caselli[7], Sven Drefahl[8], Christian Wegner-Siegmundt[9], and Marc Luy[9]

Contributing authors: *Michel Guillot, France Meslé, Arodys Robles, Richard G. Rogers, Edward Jow-Ching Tu, and Zhongwei Zhao*

Chapter 5 provides an overview of past and expected future trends in life expectancy in populations with low levels of mortality. High and low mortality populations were separated on the basis of the level of child mortality in the year 2010, with the threshold being 40 deaths per 1,000 children below the age of 5 years. The low mortality population is comprised of 132 countries including Europe, North America, most of Oceania and Latin America, large parts of Asia (excluding the high mortality area in Central and Southern Asia), and Northern Africa.

Because populations of low mortality countries previously experienced strong decreases of mortality in young ages, the future trends will be driven mainly by mortality among the old and oldest-old. The chapter gathers empirical background data and theoretical considerations about past and likely future determinants of mortality including smoking, obesity, biomedical progress, environmental changes, and socio-economic conditions. Based on past experience in today's low mortality countries, smoking and obesity are major factors that can be individually influenced and have a high potential to affect future mortality. Beside these health behavioral factors, biomedical progress and the influence of environmental changes can be expected to become main drivers in future mortality trends. Another likely determinant is socio-economic status, including individual educational attainment, occupation, income, and wealth. Within the prevalent societal, economic, and disease environment, individuals can improve their socio-economic situation and can, consequently, experience a longer lifetime.

The presented evidence and substantive arguments indicate that the positive influences on human life expectancy will likely outweigh the negative risk factors, suggesting that enormous potentials for further increases of longevity exist. These might be the milestones of the path our post-industrial society will follow toward a truly new phase in health transition. Without overlooking the effects of economic change on a society's mortality level, the possibility for this new phase to become a reality depends on the interplay between a new health culture and further discoveries in treatment, therapy, and bio-genetic and biomedical techniques. The former would act on the individual and social control over risk factors and the possibility of making an early diagnosis; the latter would provide more prompt and effective structures and treatment. Consequently, the recent increased pace of the decline in mortality in more developed countries appears to justify hope for further significant gains in life expectancy.

These conclusions are supported by the assessments of 75 experts from 30 countries which were gathered in an online survey. Figure 12 presents the expected global trend in life expectancy at birth in today's low mortality populations assessed by the experts and compared to the UN Word Population Projection (2010 Revision). According to the survey results, the factors with the highest expected impact on future life expectancy are related to health behaviours like smoking reduction, increasing mental and social activities to prolong lifetime among the elderly and increased awareness of the importance of physical activity to counteract obesity. Other factors with high expected impacts are further progresses in preventive medicine and breakthroughs in carcinogenic processes. Based on all these results, meta-experts developed specific storylines about the future trends in life expectancy which characterize the final projection model for low mortality countries. This reflects two main expectations: continuing reduction of mortality levels and increasing convergence between major regions and individual populations.

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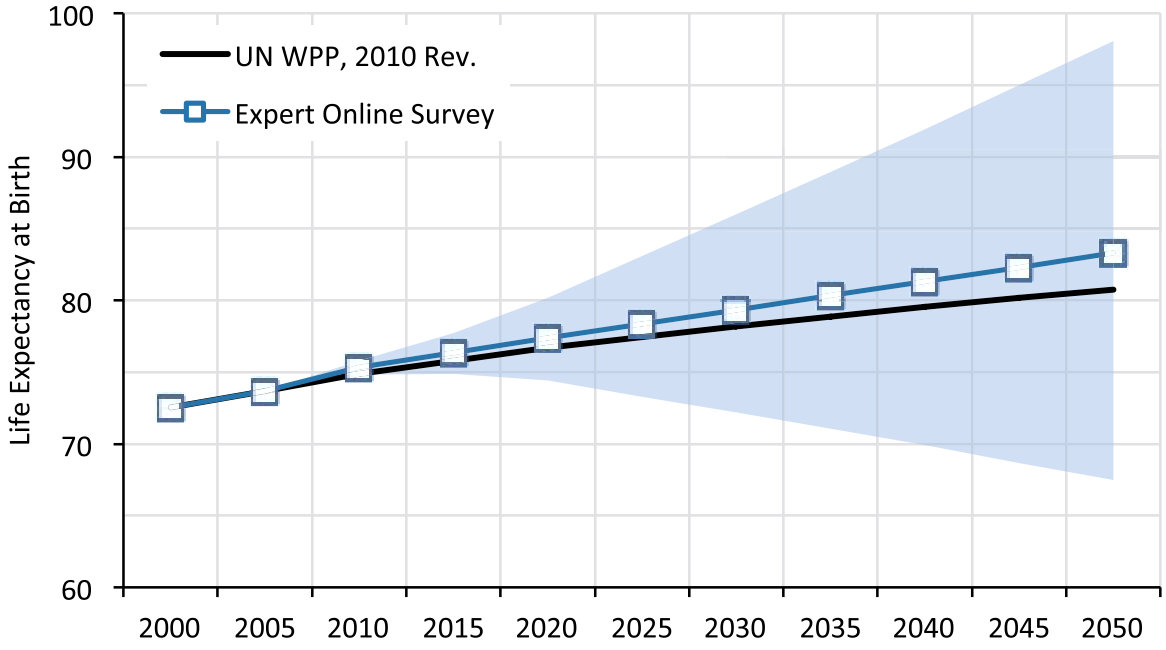

Figure 12: Expected future global trend in life expectancy at birth in today's low mortality populations (including 80% uncertainty range as given by experts)

Data: IIASA-Oxford Demographic Expert Survey, UN World Population Prospects, 2010 Revision

BOX 6: FROM THE EXPERT SURVEY

Major forces likely to affect the future trends in life expectancy at birth identified by the experts:

Positive influence

- Behavioural factors, mainly reduction in smoking and alcohol consumption
- Improvements in preventive medicine and biomedicine technologies
- Education attainment

Negative influence

- Reduction in social security and health care system
- Drug resistance and natural disasters (but less predictable)

Mortality differences between countries will further decline in regional convergence processes.

The low mortality module of the questionnaire was completed for 30 countries by 75 experts.

Meta-expert meeting: San José, Costa Rica, February 2012

FUTURE MORTALITY IN HIGH MORTALITY COUNTRIES

Alessandra Garbero[10] *and Elsie Pamuk*[11]

Contributing authors: *Michel Garenne, Bruno Masquelier, and François Pelletier*

Many demographers have, over the last 50 years, predicted a general convergence worldwide toward low mortality and fertility resulting in higher levels of life expectancy. However, the idea of a global convergence in mortality has been challenged by the occurrence of mortality reversals during the last two decades. These reversals took place in countries that experienced conflict (e.g., Rwanda, Angola, Sierra Leone, Liberia, and Somalia), failure of health systems (e.g., Kazakhstan and Zimbabwe), or HIV/AIDS epidemics. In 2004, HIV/AIDS was the fourth leading cause of death in low-income countries, followed by deaths from lower respiratory infections, ischemic heart disease, and diarrheal diseases. Increases in malaria and tuberculosis (TB) have also been partly responsible for mortality trend reversals in the last two decades in sub-Saharan Africa and in other regions.

A serious problem in estimating past trends and projecting the future course of life expectancy in high mortality countries is the lack of reliable data on age-specific mortality rates, particularly for adults. Against a paucity and poor quality of data on mortality, this chapter describes what is known about trends in child and adult mortality in high mortality countries, using the best data available, for 65 countries classified as having high mortality in 2010 based on a cut-off point of 40 deaths before age 5 per thousand live births. The chapter presents a review of the literature on forces affecting the future course of mortality, with particular reference to those aspects relevant to high mortality populations. The forces discussed include the HIV/AIDS epidemic, changes in mortality conditions due to biomedical technology, effectiveness of health care systems, behavioral changes related to health, the role of neglected and emerging diseases, environmental changes, mortality due to crisis, and forces that contribute to differential mortality trends in population subgroups. The chapter also includes the results of the 2011 expert survey module on the forces shaping future trends in life expectancy in high mortality countries. As part of this exercise, experts provided a numerical estimate for the decadal gain in life expectancy

10 International Fund for Agricultural Development (IFAD)

11 Wittgenstein Centre (IIASA, VID/ÖAW, WU), IIASA

for 2010-30 and 2030-50. In addition, an assessment of the validity and relevance of alternative arguments about the forces (clusters) that will shape these future trends was provided. The importance allocated to the effectiveness of health care systems combined with relatively high net impact scores means that the four highest ranked arguments come from this cluster: basic public health interventions for children under 5; expansion of coverage for inexpensive interventions against diarrhea, pneumonia, and malaria; extension of reproductive health services; and investments in education increasing the quality of health care personnel.

The chapter concludes by presenting the methodology that was applied for defining the final assumptions for overall mortality levels for each country. As with fertility, the mortality assumptions are also based on a combination of a statistical model and country-specific assessments, by the surveyed experts and with the results of the meta-expert meeting (see Box 7). Following the general view that national mortality trends should be viewed in a larger international context rather than being analyzed and projected individually and that life expectancy in different countries tends to be positively correlated, our model forecasts the global best-practice level (Japan) and then the gap between Japan and the regional best-practice countries and finally the gap between national performance and the regional best-practice level. This convergence model is based on empirical data and takes into account the heterogeneous country-specific historical experiences as well as differences in gains between forerunners and laggards over time and across regions.

BOX 7: FROM THE EXPERT SURVEY

Main forces affecting the future of mortality in high mortality countries:

- changes in biomedical technology
- effectiveness of health care systems
- behavioral changes related to health
- infectious diseases and resurgence of old diseases
- environmental change, disasters and wars
- changes in composition and differential
- trends in population subgroups
- HIV/AIDS

In the high mortality module of the survey 28 questionnaires were completed, with results pertaining to a total of 14 countries.

Meta-expert meeting: Cape Town, South Africa, February 2011

THE FUTURE OF INTERNATIONAL MIGRATION

Nikola Sander[12], Guy J. Abel[12], and Fernando Riosmena[13]

Contributing authors: *Ayla Bonfiglio, Graeme Hugo, Lori Hunter, Siew-Ean Khoo, Douglas Massey, and Philip Rees*

As fertility and mortality rates continue to fall in the developing world, the consequences of international migration for demographic change are set to become even more pronounced. But forecasting migration is difficult, mostly due to a lack of underlying transition theory and adequate baseline data. The approach presented in Chapter 7 departs from the common practice of projecting population based on net international migration. Instead, we use a new set of estimates of global migration flows that we published in *Science*[14] in a superior, multi-regional projection framework where immigration and emigration flows to and from all countries are projected simultaneously.

The chapter begins with a review of the multifaceted determinants of migration, which vary across countries and evolve over time, and proceeds with a discussion of the homogenous baseline data for projecting migrant flows. We summarize the spatial patterns of human movement since the year 1990 as revealed by our unique estimates of global migration flows (see Figure 14), and draw on expert judgment about major forces influencing international migration to derive a set of alternative scenarios of future migration around the globe (see Box 8).

The results of our population projections suggest that the global number of migrants will start declining in about 30 years, reflecting slowed population growth and substantial population ageing. The multi-regional approach provides future populations of key sending and receiving countries that are substantially different to conventional projections of net migration (see Figure 15). Using a medium scenario based on rates rather than numbers emphasizes the effects that changes in population size and age structure in sending countries have on emigration volumes. Differences between scenarios are most pronounced in the traditional destination regions in North America, West Asia, and Europe (for immigration) and the sending regions in South Asia and Africa (for emigration). Under the medium scenario, sub-Saharan population growth is projected to boost emigration numbers, although at lower rates than commonly assumed.

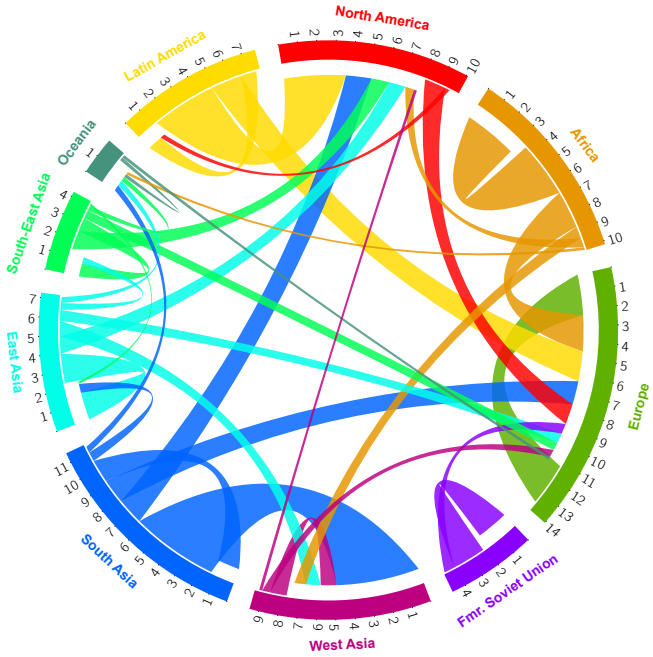

Figure 14: Circular migration plot of estimated migration flows within and between world regions over the five-year period 2005-10. The direction of the flow is defined by the color of its origin, and its width shows the volume of movement. Tick marks show a region's migration in 100,000s. Only flows with at least 140,000 migrants are shown. More details and interactive graphic at www.global-migration.info

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13 Population Program Institute of Behavioral Science (IBS) and Geography Department, University of Colorado at Boulder

14 Abel, G. J., & Sander, N. (2014). Quantifying global international migration flows. Science, 343(6178), 1520–1522.

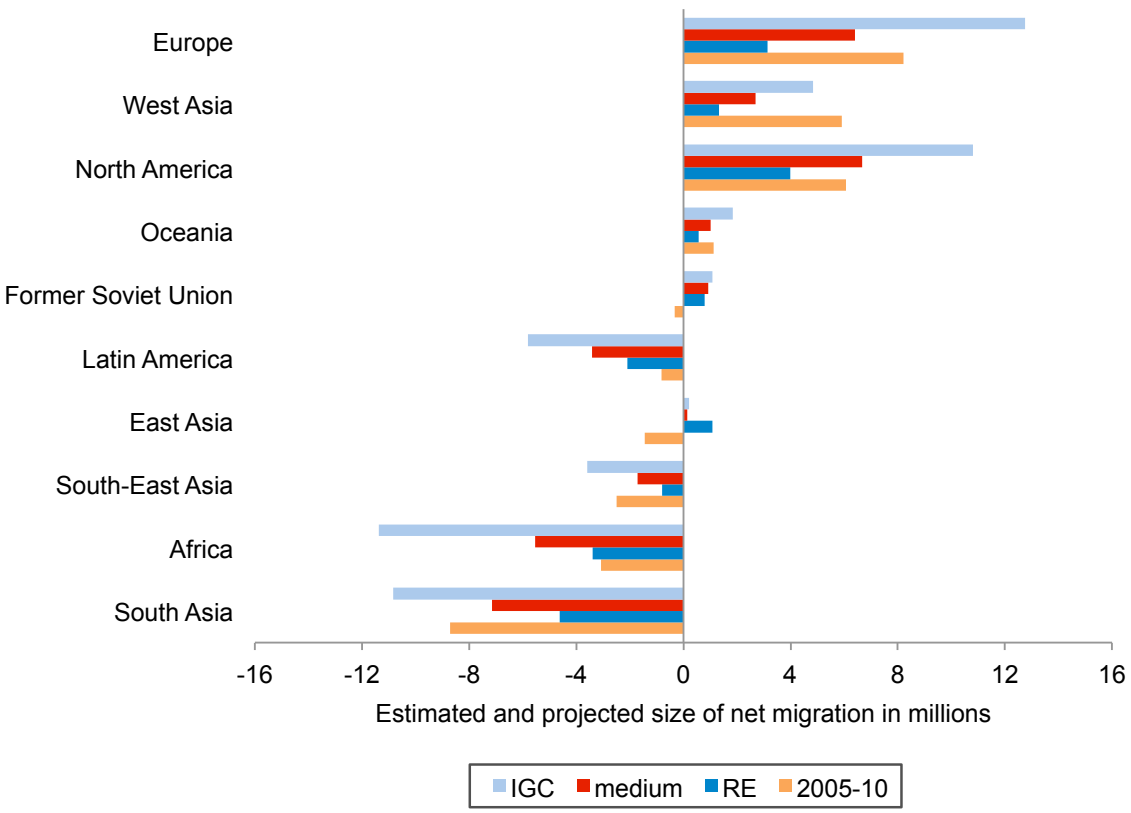

Figure 15 (7.18)**:** Estimated (2005-10) and projected (2055-60) size of net migration under alternative scenarios by region. RE: 'rise of the east' scenario; IGC: "intensifying global competition' scenario.

BOX 8: FROM THE EXPERT SURVEY

Arguments identified as having a positive influence on international migration:

- Remittances will become more important for the economic development of migrant-sending countries.
- Temporary labor migration will increasingly compensate for skills shortages in developed countries and thus replace permanent migration.
- Shifts in cohort size, especially related to the baby boom and bust, will play an important role in shaping international migration levels.
- The propensity to move abroad among 15- to 29-year-olds will be particularly high in countries with a large 'youth bulge.'
- International migration will mostly follow established paths and existing migrant networks.
- Political instability and oppression in African and Middle Eastern countries will result in more people seeking political asylum in democratic countries.

Arguments identified as having a negative influence on international migration:

- Major economic recessions/stagnation in industrialized countries will lead to less demand for migrants.

122 responses in the migration module of the online survey.

Meta-expert meeting: Boulder, Colorado, USA, October 2011

FUTURE EDUCATION TRENDS

Bilal F. Barakat[15] and Rachel E. Durham[16]

The global expansion of formal schooling, especially since the mid-20th century, has been explained with an emphasis on different social, political, and economic factors as well as different characterizations of the growth logic intrinsic to the education system itself. In projecting global educational expansion at different levels of schooling into the future, Chapter 8 weighs numerous theoretical perspectives against each other in terms of their predictive implications.

This analysis justifies a projection model that assumes continued diffusion, with country-specific variation around a typical path of expansion from low shares of population attainment at a given level of schooling to its near universalization. The parameters for such a model are estimated on reconstructed attainment data for 178 countries for the period 1970–2010 and projected into the future to provide a baseline scenario. This is complemented by additional scenarios formalizing more rapid or stagnant educational growth. Especially at low and medium levels of schooling, a consistent pattern can be observed across most countries. In particular, a sigmoidal pattern of diffusion predominates, with initially slow growth leading up to a 'take-off' phase of rapid expansion, and finally an increasingly slow approach to universal participation (see Figure 16).

Differences between school phases, and between males and females within each phase, can be found in the speed of expansion rather than in its overall shape and phasing. At post-secondary level, only the first and—in the most advanced countries—the second of these phases has so far occurred. An important question therefore is to what extent post-secondary expansion is qualitatively different from, or merely slower than, lower levels of schooling.

These patterns are a generalization across a large number of countries. Individual countries do exhibit other trajectories, but deviations exist in both directions, in terms of stagnation as well as in terms of more rapid development. This variation is reflected in the uncertainties of the estimates and also leads to country-specific projections that reflect both individual countries' past experience and the average trend.

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15 Wittgenstein Centre (IIASA, VID/ÖAW, WU), IIASA

16 Wittgenstein Centre (IIASA, VID/ÖAW, WU), WU

The baseline global education trend scenario (GET) is not interpretable as the 'most likely' scenario in a probabilistic sense, but it can be interpreted as the scenario that reality is equally likely to exceed or fall short of. In policy terms, this may be interpreted as 'business-as-usual' but does not imply a static perspective. It is a scenario of sustained effort by the actors involved to actively produce continued expansion. This scenario does factor in the inevitable setbacks and mismatches between ambitious policy targets and actual change 'on the ground'. Accordingly, steady progress may be achieved in terms of overall education participation; however, due to a low quality of education, some groups will not benefit as much in terms of economic and less tangible rewards.

In the 'high' or Fast Track (FT) scenario, the most rapid country-specific expansion parameters are applied to all countries throughout the projection period. In other words, all countries follow the educational development paths taken in the past by the frontrunners in East and South East Asia. In policy terms, this corresponds to a scenario where there is an immediate and concerted global effort to supply a sufficient number of schools, expand teacher training, and pursue the enrolment and retention of marginalized and disadvantaged subpopulations. Two 'low' scenarios are projected. For the constant enrolment rates (CER) scenario, the attainment shares at age 30–34 of future cohorts are fixed at the levels observed in the base year. While in general terms this is a lower bound scenario that is likely to be exceeded in most places, it is not necessarily a 'worst case' scenario.

It is quite possible for an actual country trajectory to fall behind even the CER scenario if the education system is under pressure from population growth, disasters, emergencies, or conflict. Under the constant enrolment numbers (CEN) scenario, the absolute numbers of individuals in each five-year age cohort that complete a given level of schooling by age 30–34 remain constant. Such a scenario may be approximated if educational growth is limited by capacity constraints. In an international comparative perspective, there is reason to believe that inequality between countries that are only beginning to embark on a path towards universalizing schooling will initially increase. This has implications for the direction of international support. Extreme cases illustrate the benefit of projecting long-term scenarios by providing bounds on the scale of progress that can be expected.

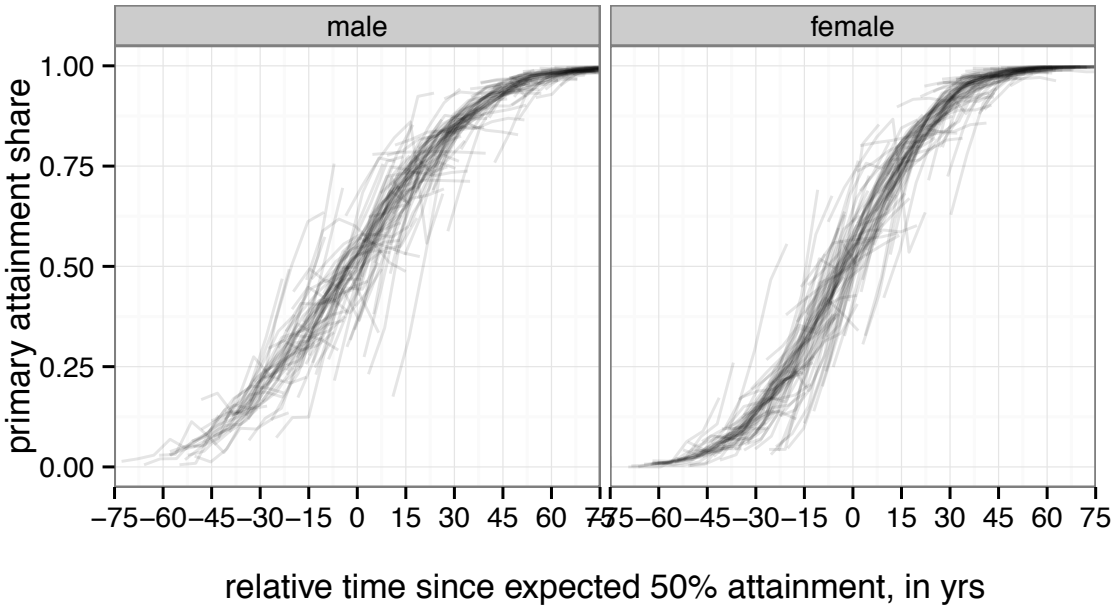


Figure 16 (8.8): Empirical country trajectories of expanding primary education attainment in the 30–34 age group, arranged around global average time since reaching 50 per cent attainment share.

DATA AND METHODS

Samir KC[17], Michaela Potančoková[17], Ramon Bauer[18], Anne Goujon[17], and Erich Striessnig[17]

This chapter describes the base-line data and summarizes the methodology that underlies the multi-dimensional cohort-component projections presented in this book for individual countries for the period 2010–2100 by age, sex, and educational attainment. While internationally consistent data on populations by age and sex are readily available for most countries, data on educational attainment distributions required additional harmonization efforts due to discrepancies across countries, age, and time. Due to the variety of nationally distinct educational systems, UNESCO designed the International Standard Classification of Education (ISCED) to make education statistics comparable across countries. Table 2 summarizes the definitions of the six categories, their correspondence to ISCED 1997, and the main allocation rules.

Categories	ISCED 1997 level	Allocation rules
No education	No level or ISCED 0 Grade 1 of ISCED 1 not completed	Illiterates and persons who have never attended school; persons who were attending 1st grade of primary education at time of survey; persons attending adult literacy courses at time of survey; khalwa (first level of traditional Koranic schools)
Incomplete primary	Incomplete ISCED 1	Persons attending last grade of ISCED 1 at time of survey; persons who indicated an unknown number of grades/years at ISCED 1 level; traditional Koranic schools above khalwa level
Primary	Completed ISCED 1 Incomplete ISCED 2	Completed last grade of ISCED 1 level or grades below the last grade of ISCED 2 level; persons attending last grade of ISCED 2 at time of survey; persons who indicated an unknown number of grades at ISCED 2 level
Lower secondary	Completed ISCED 2 Incomplete ISCED 3	Completed last grade of ISCED 2 level or grades below the last grade of ISCED 3 level; persons attending last grade of ISCED 3 at time of survey; persons who indicated an unknown number of grades at ISCED 3 level
Upper secondary	Completed ISCED 3 Incomplete ISCED 4 or 5B	Completed last grade of ISCED 3 level; completed number grades or years below the standard duration at ISCED 4 or ISCED 5B level; persons who indicated an unknown number of grades at ISCED 4 or 5 level
Post-secondary	ISCED 4 & 5B {first diploma, shorter post-secondary courses} ISCED 5A & 6 {longer post-secondary courses, post-graduate level}	Persons who have completed number of years or grades corresponding to standard duration of ISCED 4 or ISCED 5B programmes; persons holding degrees corresponding to ISCED 4, ISCED 5B, ISCED 5A and ISCED 6 levels

Table 2: Categories of educational attainment and allocation rules.

Note: ISCED 1997 categories are defined as follows: ISCED 0 - pre-primary education; ISCED 1 - primary (elementary/basic) education; ISCED 2 - lower secondary education; ISCED 3 - upper secondary education; ISCED 4 - post-secondary non-post-secondary courses; ISCED 5 - first stage of post-secondary education; ISCED 6 - second stage of post-secondary education (postgraduate).

17 Wittgenstein Centre (IIASA, VID/ÖAW, WU), IIASA

18 Wittgenstein Centre (IIASA, VID/ÖAW, WU), VID/ÖAW

The new empirical base-line data set on which the Wittgenstein Centre projections are based is the most comprehensive collection of harmonized data on educational attainment by age and sex for as many as 171 individual countries (for the remaining 24—mostly small—countries, assumptions on the education structure had to be made by analogy).

In introducing the education dimension in population projections, we also confronted the more challenging task of estimating education-specific vital rates. The empirical data on current education differentials in fertility, mortality, and migration are not officially available in many countries. While we successfully estimated the differentials in fertility for most countries (mostly from surveys), in the case of adult mortality, data on differentials by education were based on generalizations about the differentials reported in the literature for some countries. Migration is the most difficult among the three in this regard. Although we are currently developing new methods for estimating differential migration by education level, here we assume that the education composition of migration flows is equal to that in the origin country and derive the education structure of net-migration by iteration. The methodology to deal with education in population projections is based on an adaptation of the well-established model of multi-dimensional (multi-state) population dynamics. One important modification was that the mortality differentials among children were considered according to their mothers' education while after age 15 their own education was used.

Given the data constraints specifically in terms of education, and the need to have fully consistent sets of age-, sex- and education-specific trajectories of fertility, mortality, and migration that when re-aggregated (and appropriately weighted by the proportions of the populations in the respective education categories) actually produce the given population level indicators, several optimization procedures were developed. A detailed description of these methods is provided in the book.

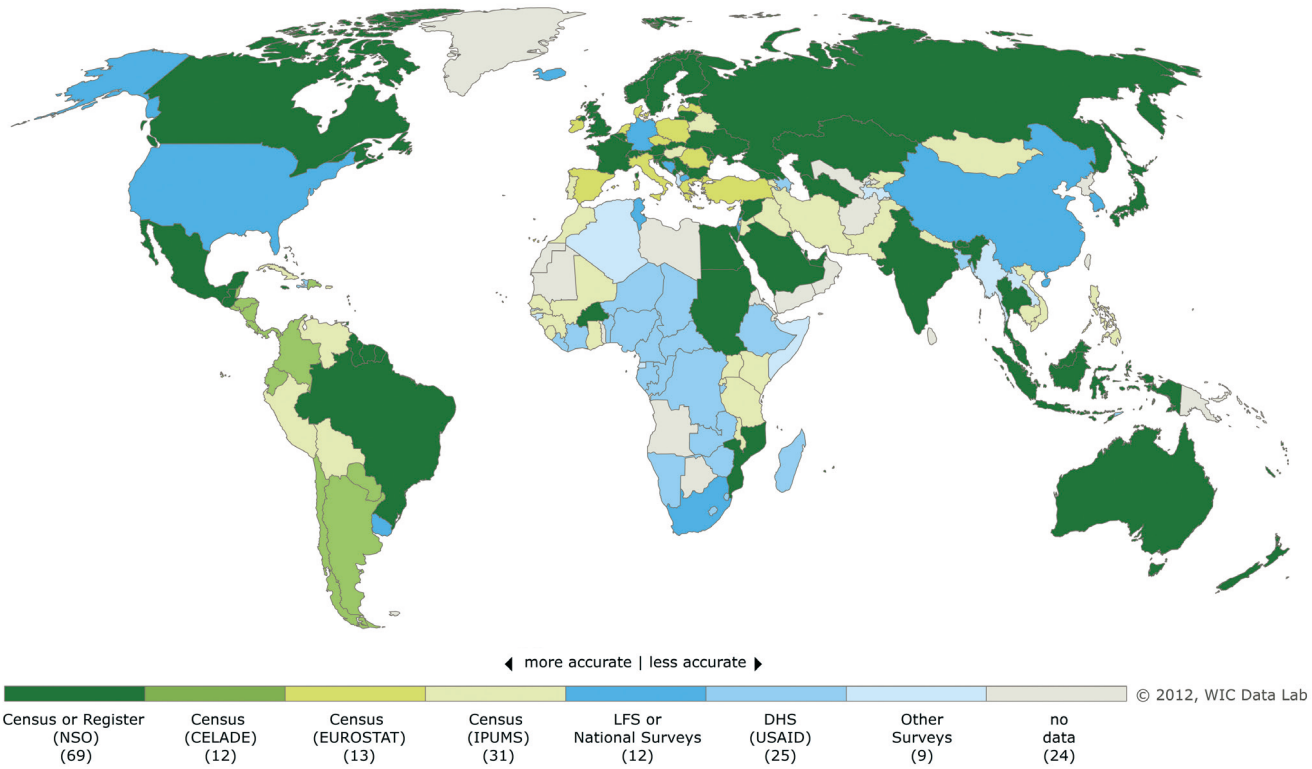


Figure 17 (9.1): Data sources on educational attainment (effective December, 2012). NSO: National Statistical Office; LFS: Labour Force Survey; DHS: Demographic and Health Survey; USAID: U. S. Agency for International Development.

TABLES FOR SELECTED MAJOR COUNTRIES

WORLD | BRAZIL | CHINA | EGYPT | GERMANY

INDIA | INDONESIA | MEXICO | NIGERIA | PAKISTAN

REP. OF KOREA | RUSSIA | SOUTH AFRICA | USA

WORLD

Detailed Human Capital projections to 2060

Demographic indicators, Medium Scenario (SSP2)	2010	2020	2030	2040	2050	2060
Population (in millions)	6895.9	7636.5	8280.3	8795.4	9162.3	9361.1
Proportion age 65+	0.08	0.09	0.12	0.15	0.18	0.21
Proportion below age 20	0.36	0.33	0.30	0.27	0.26	0.24
	2005-2010	2015-2020	2025-2030	2035-2040	2045-2050	2055-2060
Total Fertility Rate	2.52	2.34	2.22	2.11	2.00	1.90
Life expectancy at birth (in years)						
Male	65.71	68.37	70.46	72.38	74.32	76.21
Female	70.14	72.98	75.22	77.25	79.19	81.05
Five-year immigration flow (in '000)	40214	32400	33659	34433	34448	33945
Five-year emigration flow (in '000)	40214	32400	33659	34433	34448	33945

Human Capital indicators, Medium Scenario (SSP2)	2010	2020	2030	2040	2050	2060
Population age 25+: highest educational attainment						
E1 - no education	0.18	0.14	0.11	0.09	0.07	0.05
E2 - incomplete primary	0.07	0.06	0.05	0.04	0.03	0.02
E3 - primary	0.19	0.17	0.15	0.14	0.13	0.12
E4 - lower secondary	0.20	0.21	0.21	0.19	0.18	0.16
E5 - upper secondary	0.24	0.26	0.29	0.32	0.35	0.37
E6 - post-secondary	0.14	0.16	0.19	0.22	0.25	0.28
Mean years of schooling (in years)	7.90	8.60	9.23	9.83	10.42	10.99
Gender gap (population age 25+): highest educational attainment (ratio male/female)						
E1 - no education	0.57	0.58	0.60	0.63	0.66	0.70
E2 - incomplete primary	1.00	0.99	0.98	0.97	0.96	0.95
E3 - primary	0.98	0.94	0.92	0.92	0.93	0.94
E4 - lower secondary	1.22	1.18	1.15	1.11	1.08	1.04
E5 - upper secondary	1.18	1.15	1.13	1.10	1.08	1.06
E6 - post-secondary	1.16	1.08	1.03	1.00	0.99	1.00
Mean years of schooling (male minus female)	1.08	0.86	0.66	0.48	0.34	0.24
Women age 20-39: highest educational attainment						
E1 - no education	0.15	0.11	0.08	0.06	0.04	0.02
E2 - incomplete primary	0.05	0.04	0.03	0.03	0.02	0.01
E3 - primary	0.15	0.14	0.13	0.12	0.11	0.09
E4 - lower secondary	0.22	0.20	0.17	0.14	0.12	0.11
E5 - upper secondary	0.27	0.31	0.35	0.39	0.42	0.44
E6 - post-secondary	0.16	0.19	0.22	0.26	0.29	0.32
Mean years of schooling (in years)	8.58	9.44	10.16	10.85	11.44	11.95

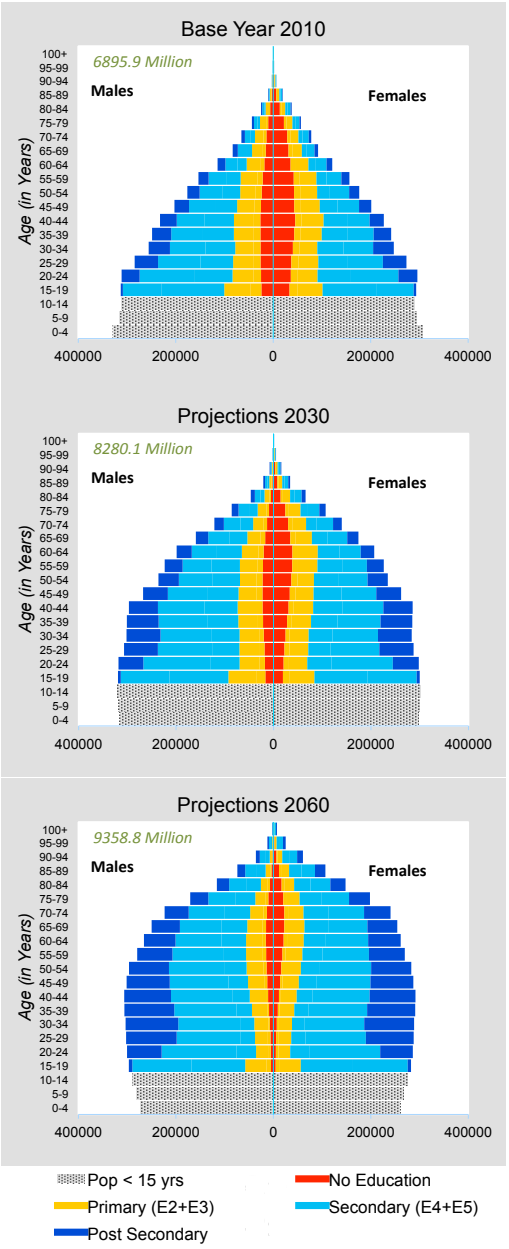
Education scenarios

GET : Global Education Trend Scenario (Medium assumption also used for SSP2)

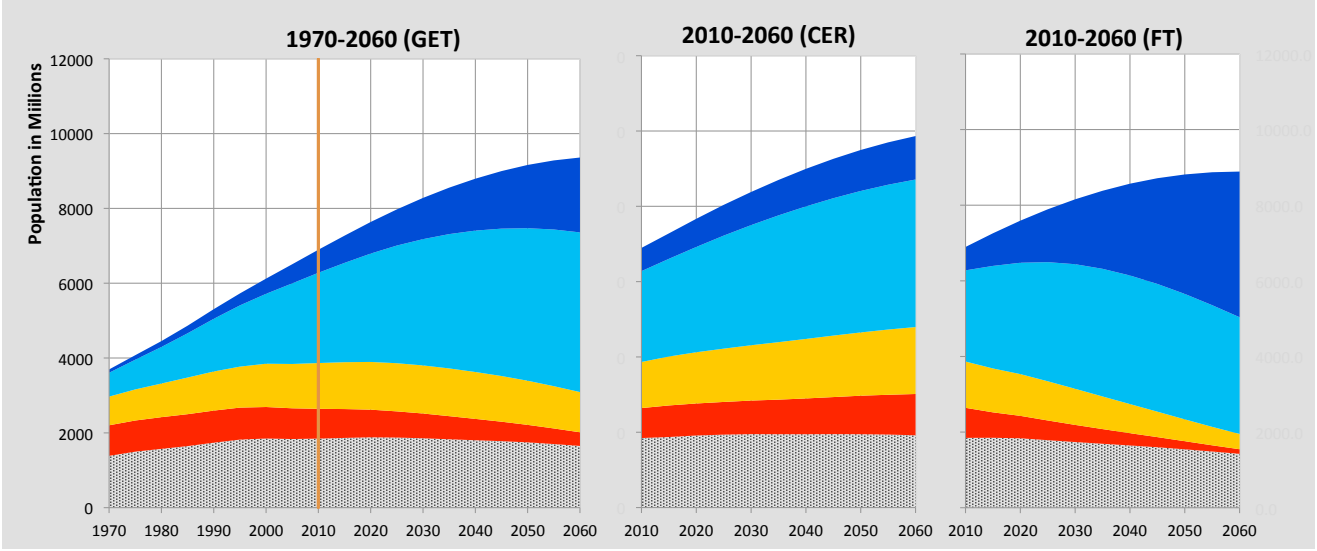
CER: Constant Enrollment Rates Scenario (assumption of no future improvements)

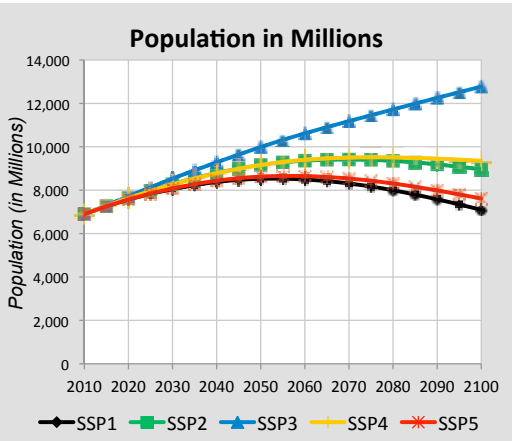
FT: Fast Track Scenario (assumption of education expansion according to fastest historical experience)

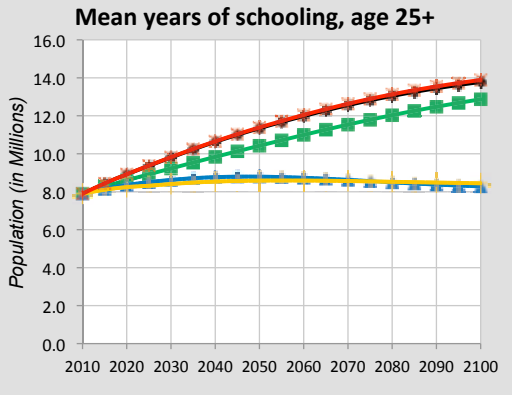
Pyramids by education, Medium Scenario

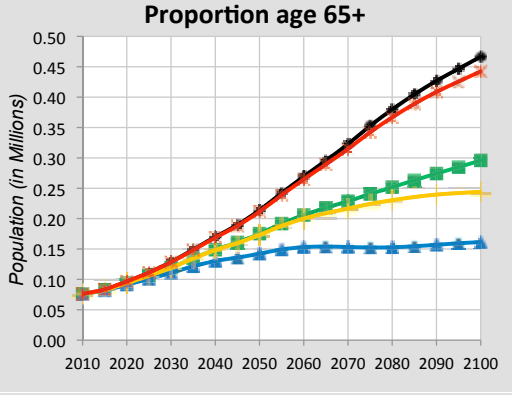


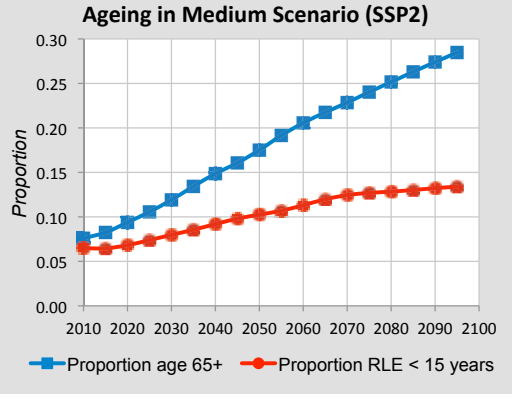
Population size by educational attainment according to three education scenarios: GET, CER, and FT











Alternative scenarios to 2100

Projection results by scenario (SSP 1-5)

	2010	2020	2030	2040	2050	2075	2100
Population (in millions)							
SSP1 - Rapid Development	6896	7560	8048	8380	8525	8169	7096
SSP2 - Medium	6896	7636	8280	8795	9162	9398	8963
SSP3 - Stalled Development	6896	7719	8536	9284	9989	11454	12774
SSP4 - Inequality	6896	7633	8267	8778	9161	9516	9355
SSP5 - Conventional Dev.	6896	7568	8078	8438	8626	8436	7616
Proportion age 65+							
SSP1 - Rapid Development	0.08	0.10	0.13	0.17	0.21	0.35	0.47
SSP2 - Medium	0.08	0.09	0.12	0.15	0.18	0.24	0.30
SSP3 - Stalled Development	0.08	0.09	0.11	0.13	0.14	0.15	0.16
SSP4 - Inequality	0.08	0.09	0.12	0.15	0.17	0.22	0.24
SSP5 - Conventional Dev.	0.08	0.10	0.13	0.17	0.21	0.34	0.44
Proportion below age 20							
SSP1 - Rapid Development	0.36	0.31	0.27	0.23	0.20	0.14	0.11
SSP2 - Medium	0.36	0.33	0.30	0.27	0.26	0.22	0.19
SSP3 - Stalled Development	0.36	0.34	0.33	0.32	0.31	0.30	0.29
SSP4 - Inequality	0.36	0.33	0.30	0.28	0.26	0.24	0.24
SSP5 - Conventional Dev.	0.36	0.32	0.27	0.23	0.20	0.16	0.13
Proportion of Women age 20-39 with at least secondary education							
SSP1 - Rapid Development	0.65	0.77	0.83	0.88	0.91	0.95	0.98
SSP2 - Medium	0.65	0.71	0.75	0.79	0.83	0.91	0.96
SSP3 - Stalled Development	0.65	0.64	0.61	0.58	0.56	0.52	0.50
SSP4 - Inequality	0.65	0.61	0.56	0.54	0.51	0.46	0.42
SSP5 - Conventional Dev.	0.65	0.77	0.83	0.88	0.91	0.96	0.98
Mean years of schooling, age 25+							
SSP1 - Rapid Development	7.90	8.91	9.80	10.63	11.35	12.82	13.78
SSP2 - Medium	7.90	8.60	9.23	9.83	10.42	11.79	12.87
SSP3 - Stalled Development	7.90	8.35	8.62	8.77	8.79	8.56	8.28
SSP4 - Inequality	7.90	8.24	8.41	8.53	8.59	8.54	8.44
SSP5 - Conventional Dev.	7.90	8.92	9.82	10.65	11.39	12.89	13.89

Demographic assumptions underlying SSPs

	2010-2015	2020-2025	2030-2035	2040-2045	2050-2055	2075-2080	2095-2100
Total fertility rate							
SSP1 - Rapid Development	2.27	1.90	1.67	1.54	1.45	1.36	1.33
SSP2 - Medium	2.40	2.28	2.16	2.05	1.95	1.76	1.68
SSP3 - Stalled Development	2.55	2.71	2.75	2.72	2.64	2.45	2.38
SSP4 - Inequality	2.41	2.34	2.27	2.25	2.24	2.16	2.14
SSP5 - Conventional Dev.	2.28	1.93	1.71	1.59	1.53	1.48	1.52
Life expectancy at birth for females (in years)							
SSP1 - Rapid Development	72.5	76.5	80.2	83.7	86.9	94.1	99.8
SSP2 - Medium	71.7	74.1	76.2	78.2	80.2	84.7	88.4
SSP3 - Stalled Development	71.1	70.8	71.4	71.7	72.1	73.0	74.3
SSP4 - Inequality	71.5	71.9	72.7	73.4	73.8	75.0	76.2
SSP5 - Conventional Dev.	72.5	76.6	80.2	83.7	86.9	94.2	99.9
Migration – net flow over five years (in thousands)							
SSP1 - Rapid Development	0	0	0	0	0	0	0
SSP2 - Medium	0	0	0	0	0	0	0
SSP3 - Stalled Development	0	0	0	0	0	0	0
SSP4 - Inequality	0	0	0	0	0	0	0
SSP5 - Conventional Dev.	0	0	0	0	0	0	0

Ageing indicators, Medium Scenario (SSP2)

	2010	2020	2030	2040	2050	2075	2095
Median Age	28.39	31.15	33.86	36.20	38.52	43.62	47.27
Propspective Median Age	28.39	29.38	30.52	31.36	32.30	34.25	35.06
Proportion age 65+	0.08	0.09	0.12	0.15	0.18	0.24	0.28
Proportion RLE < 15 years	0.06	0.07	0.08	0.09	0.10	0.13	0.13

BRAZIL

Detailed Human Capital projections to 2060

Demographic indicators, Medium Scenario (SSP2)	2010	2020	2030	2040	2050	2060
Population (in millions)	194.9	211.0	223.3	230.5	232.7	229.6
Proportion age 65+	0.07	0.10	0.14	0.18	0.23	0.28
Proportion below age 20	0.34	0.29	0.25	0.22	0.20	0.18
	2005-2010	2015-2020	2025-2030	2035-2040	2045-2050	2055-2060
Total Fertility Rate	1.90	1.80	1.72	1.67	1.61	1.59
Life expectancy at birth (in years)						
Male	68.66	72.07	75.12	77.90	80.35	82.34
Female	75.94	78.60	81.29	83.89	86.29	88.21
Five-year immigration flow (in '000)	5	5	5	6	6	5
Five-year emigration flow (in '000)	507	378	359	333	307	278

Human Capital indicators, Medium Scenario (SSP2)	2010	2020	2030	2040	2050	2060
Population age 25+: highest educational attainment						
E1 - no education	0.11	0.08	0.05	0.04	0.03	0.02
E2 - incomplete primary	0.17	0.13	0.10	0.07	0.05	0.03
E3 - primary	0.21	0.19	0.17	0.15	0.13	0.11
E4 - lower secondary	0.15	0.16	0.17	0.16	0.15	0.13
E5 - upper secondary	0.25	0.30	0.36	0.40	0.45	0.48
E6 - post-secondary	0.11	0.13	0.15	0.17	0.19	0.22
Mean years of schooling (in years)	6.97	7.83	8.60	9.25	9.85	10.40
Gender gap (population age 25+): highest educational attainment (ratio male/female)						
E1 - no education	1.02	1.02	1.04	1.06	1.08	1.06
E2 - incomplete primary	1.09	1.08	1.07	1.06	1.05	1.05
E3 - primary	1.06	1.08	1.09	1.10	1.09	1.08
E4 - lower secondary	1.04	1.06	1.07	1.07	1.06	1.04
E5 - upper secondary	0.96	0.99	1.00	1.02	1.03	1.02
E6 - post-secondary	0.79	0.79	0.78	0.80	0.83	0.88
Mean years of schooling (male minus female)	-0.35	-0.35	-0.36	-0.34	-0.28	-0.20
Women age 20-39: highest educational attainment						
E1 - no education	0.04	0.02	0.01	0.01	0.00	0.00
E2 - incomplete primary	0.08	0.04	0.02	0.01	0.01	0.00
E3 - primary	0.17	0.14	0.11	0.09	0.06	0.05
E4 - lower secondary	0.19	0.18	0.15	0.12	0.10	0.08
E5 - upper secondary	0.39	0.46	0.52	0.56	0.59	0.61
E6 - post-secondary	0.13	0.15	0.18	0.21	0.24	0.26
Mean years of schooling (in years)	8.83	9.69	10.36	10.87	11.27	11.57

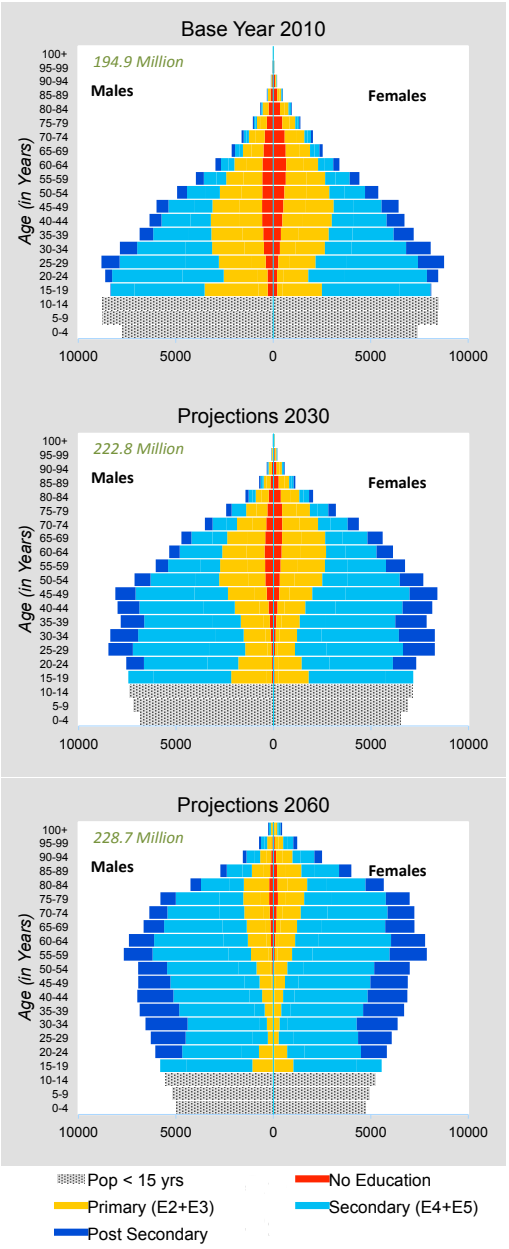
Education scenarios

GET : Global Education Trend Scenario (Medium assumption also used for SSP2)

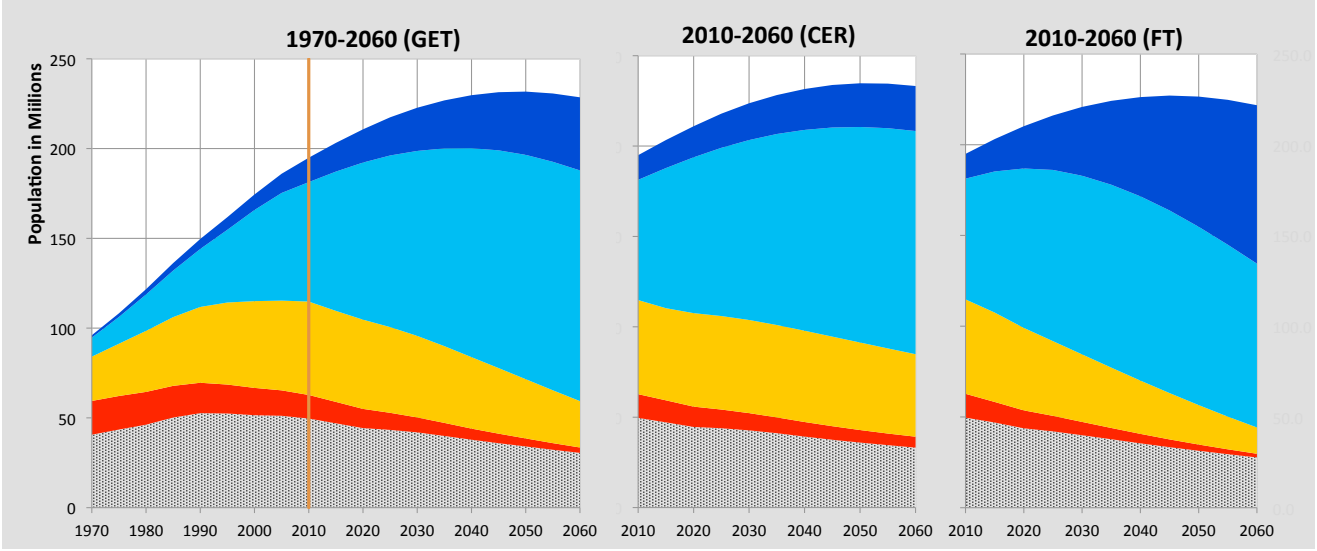
CER: Constant Enrollment Rates Scenario (assumption of no future improvements)

FT: Fast Track Scenario (assumption of education expansion according to fastest historical experience)

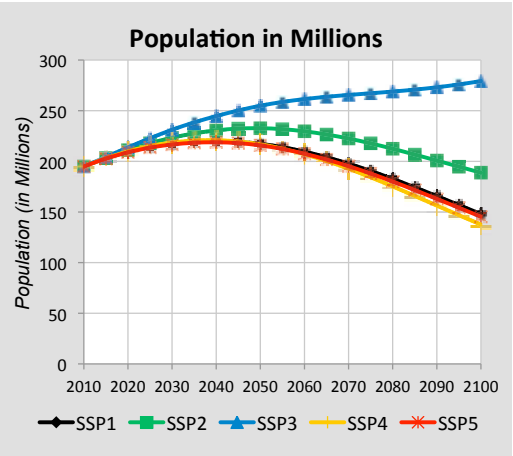
Pyramids by education, Medium Scenario

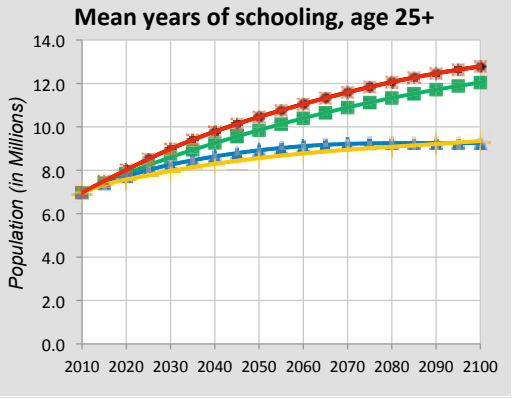


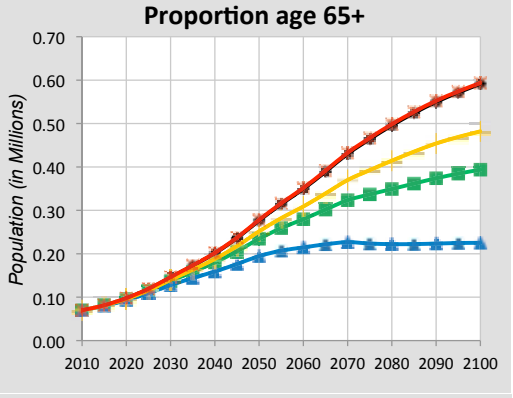
Population size by educational attainment according to three education scenarios: GET, CER, and FT

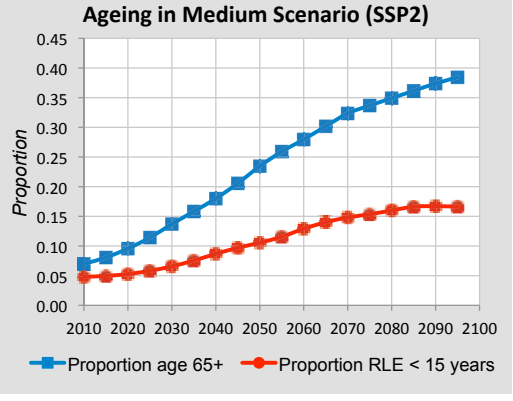


BRAZIL (CONTINUED)









Alternative scenarios to 2100

Projection results by scenario (SSP 1-5)

	2010	2020	2030	2040	2050	2075	2100
Population (in millions)							
SSP1 - Rapid Development	194.95	209.12	217.25	219.93	217.31	190.50	147.98
SSP2 - Medium	194.95	210.99	223.31	230.54	232.72	217.77	188.79
SSP3 - Stalled Development	194.95	213.72	231.17	244.67	254.90	267.21	279.23
SSP4 - Inequality	194.95	209.78	218.53	220.79	216.77	184.29	137.59
SSP5 - Conventional Dev.	194.95	208.90	216.59	218.80	215.71	187.96	145.33
Proportion age 65+							
SSP1 - Rapid Development	0.07	0.10	0.15	0.20	0.28	0.46	0.59
SSP2 - Medium	0.07	0.10	0.14	0.18	0.23	0.34	0.39
SSP3 - Stalled Development	0.07	0.09	0.13	0.16	0.19	0.22	0.23
SSP4 - Inequality	0.07	0.10	0.14	0.19	0.25	0.39	0.48
SSP5 - Conventional Dev.	0.07	0.10	0.15	0.20	0.28	0.47	0.59
Proportion below age 20							
SSP1 - Rapid Development	0.34	0.28	0.22	0.18	0.15	0.10	0.07
SSP2 - Medium	0.34	0.29	0.25	0.22	0.20	0.17	0.15
SSP3 - Stalled Development	0.34	0.30	0.28	0.27	0.26	0.25	0.26
SSP4 - Inequality	0.34	0.29	0.24	0.20	0.16	0.12	0.10
SSP5 - Conventional Dev.	0.34	0.28	0.22	0.18	0.15	0.10	0.07
Proportion of Women age 20-39 with at least secondary education							
SSP1 - Rapid Development	0.71	0.85	0.92	0.94	0.96	0.99	1.00
SSP2 - Medium	0.71	0.80	0.86	0.90	0.93	0.97	0.99
SSP3 - Stalled Development	0.71	0.77	0.78	0.78	0.78	0.78	0.78
SSP4 - Inequality	0.71	0.73	0.70	0.70	0.70	0.70	0.70
SSP5 - Conventional Dev.	0.71	0.85	0.92	0.94	0.96	0.99	1.00
Mean years of schooling, age 25+							
SSP1 - Rapid Development	6.97	8.02	8.99	9.79	10.46	11.84	12.79
SSP2 - Medium	6.97	7.83	8.60	9.25	9.85	11.12	12.04
SSP3 - Stalled Development	6.97	7.72	8.26	8.64	8.92	9.24	9.25
SSP4 - Inequality	6.97	7.58	7.97	8.30	8.56	9.02	9.35
SSP5 - Conventional Dev.	6.97	8.01	8.98	9.78	10.45	11.83	12.78

Demographic assumptions underlying SSPs

	2010-2015	2020-2025	2030-2035	2040-2045	2050-2055	2075-2080	2095-2100
Total fertility rate							
SSP1 - Rapid Development	1.75	1.45	1.29	1.22	1.17	1.19	1.22
SSP2 - Medium	1.83	1.76	1.69	1.64	1.58	1.61	1.63
SSP3 - Stalled Development	1.97	2.09	2.14	2.12	2.11	2.18	2.25
SSP4 - Inequality	1.79	1.58	1.40	1.30	1.25	1.28	1.32
SSP5 - Conventional Dev.	1.75	1.45	1.29	1.22	1.17	1.19	1.22
Life expectancy at birth for females (in years)							
SSP1 - Rapid Development	79.0	82.1	85.5	89.0	92.1	99.1	104.7
SSP2 - Medium	77.3	80.0	82.6	85.2	87.3	91.8	95.4
SSP3 - Stalled Development	78.1	79.5	81.0	82.4	83.3	84.8	86.1
SSP4 - Inequality	78.6	80.9	83.2	85.6	87.6	91.6	94.9
SSP5 - Conventional Dev.	79.0	82.1	85.5	89.0	92.1	99.1	104.7
Migration – net flow over five years (in thousands)							
SSP1 - Rapid Development	-402	-363	-331	-290	-248	-77	0
SSP2 - Medium	-396	-362	-337	-312	-285	-108	0
SSP3 - Stalled Development	-335	-180	-167	-157	-148	-63	0
SSP4 - Inequality	-402	-363	-328	-283	-233	-64	0
SSP5 - Conventional Dev.	-470	-554	-520	-474	-425	-152	0

Ageing indicators, Medium Scenario (SSP2)

	2010	2020	2030	2040	2050	2075	2095
Median Age	29.05	33.33	37.17	41.11	45.07	51.77	55.28
Propspective Median Age	29.05	30.91	32.44	34.21	36.42	39.18	39.45
Proportion age 65+	0.07	0.10	0.14	0.18	0.23	0.34	0.38
Proportion RLE < 15 years	0.05	0.05	0.07	0.09	0.11	0.15	0.17

CHINA

Detailed Human Capital projections to 2060

Demographic indicators, Medium Scenario (SSP2)	2010	2020	2030	2040	2050	2060
Population (in millions)	1341.3	1378.8	1377.7	1334.1	1255.3	1153.9
Proportion age 65+	0.08	0.12	0.17	0.25	0.28	0.34
Proportion below age 20	0.27	0.22	0.19	0.16	0.15	0.14
	2005-2010	**2015-2020**	**2025-2030**	**2035-2040**	**2045-2050**	**2055-2060**
Total Fertility Rate	1.64	1.40	1.40	1.40	1.40	1.41
Life expectancy at birth (in years)						
Male	71.10	73.20	75.24	77.14	79.23	81.22
Female	74.45	76.90	79.09	81.09	83.19	85.21
Five-year immigration flow (in '000)	126	127	136	143	146	146
Five-year emigration flow (in '000)	2011	1406	1188	1008	846	718

Human Capital indicators, Medium Scenario (SSP2)	2010	2020	2030	2040	2050	2060
Population age 25+: highest educational attainment						
E1 - no education	0.10	0.06	0.03	0.02	0.01	0.01
E2 - incomplete primary	0.00	0.00	0.00	0.00	0.00	0.00
E3 - primary	0.28	0.23	0.18	0.14	0.11	0.08
E4 - lower secondary	0.42	0.45	0.46	0.46	0.43	0.39
E5 - upper secondary	0.13	0.16	0.19	0.21	0.24	0.27
E6 - post-secondary	0.07	0.10	0.13	0.17	0.21	0.25
Mean years of schooling (in years)	7.36	8.16	8.78	9.34	9.86	10.38
Gender gap (population age 25+): highest educational attainment (ratio male/female)						
E1 - no education	0.32	0.29	0.27	0.27	0.30	0.35
E2 - incomplete primary	NA	NA	NA	NA	NA	NA
E3 - primary	0.85	0.76	0.70	0.68	0.69	0.75
E4 - lower secondary	1.23	1.17	1.12	1.08	1.03	1.00
E5 - upper secondary	1.37	1.27	1.21	1.16	1.12	1.09
E6 - post-secondary	1.36	1.18	1.11	1.07	1.04	1.02
Mean years of schooling (male minus female)	1.18	0.87	0.66	0.48	0.32	0.21
Women age 20-39: highest educational attainment						
E1 - no education	0.02	0.01	0.00	0.00	0.00	0.00
E2 - incomplete primary	0.00	0.00	0.00	0.00	0.00	0.00
E3 - primary	0.15	0.10	0.08	0.06	0.05	0.03
E4 - lower secondary	0.54	0.48	0.40	0.31	0.24	0.18
E5 - upper secondary	0.16	0.22	0.26	0.31	0.34	0.36
E6 - post-secondary	0.13	0.19	0.25	0.31	0.37	0.43
Mean years of schooling (in years)	8.91	9.70	10.34	10.96	11.51	11.98

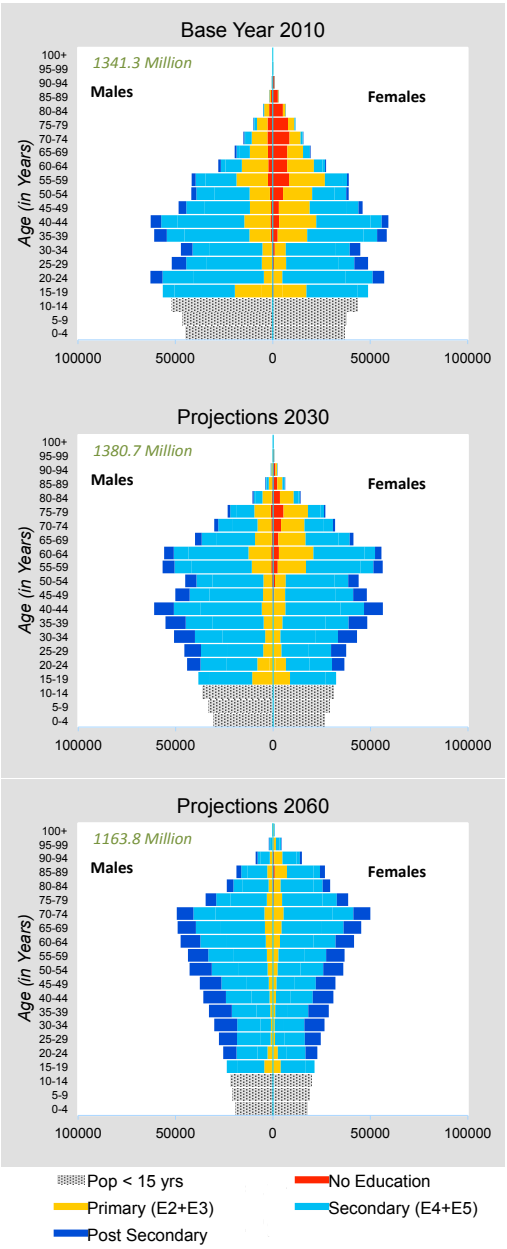
Education scenarios

GET : Global Education Trend Scenario (Medium assumption also used for SSP2)

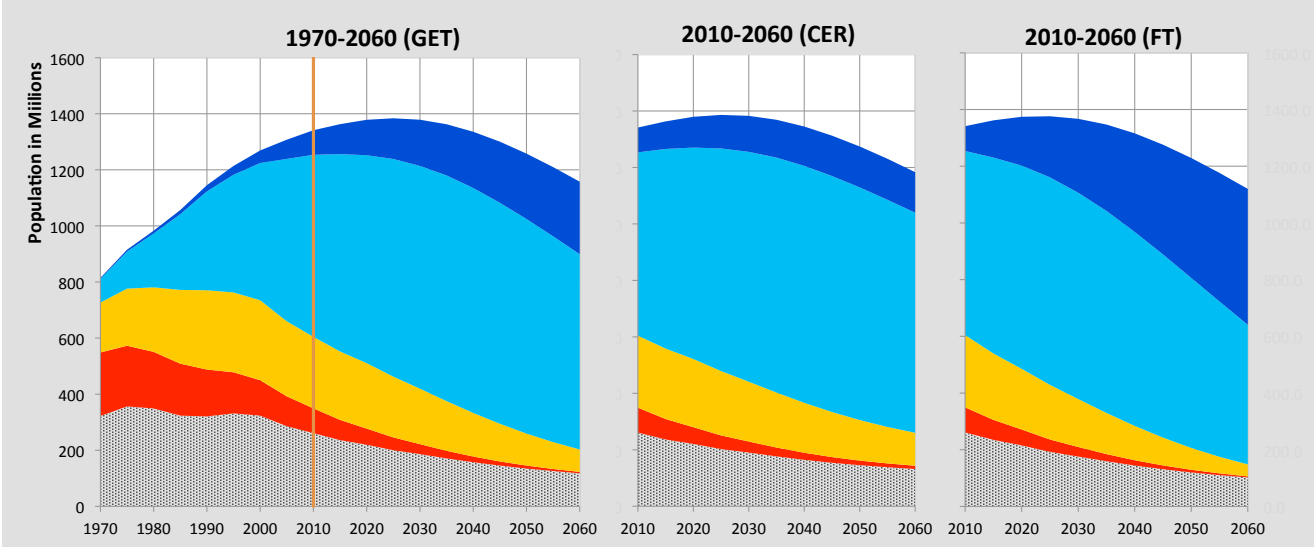
CER: Constant Enrollment Rates Scenario (assumption of no future improvements)

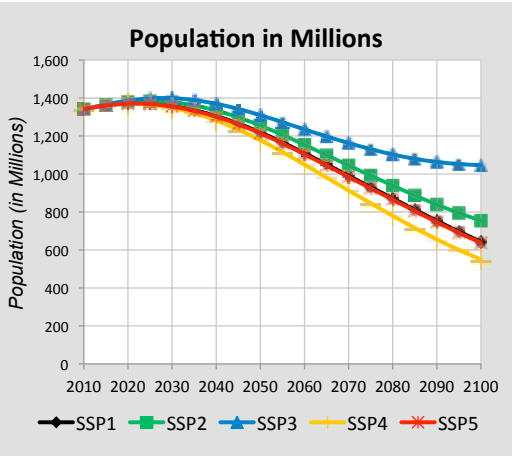
FT: Fast Track Scenario (assumption of education expansion according to fastest historical experience)

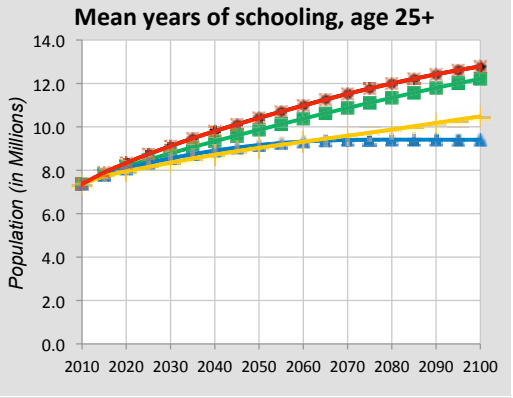
Pyramids by education, Medium Scenario

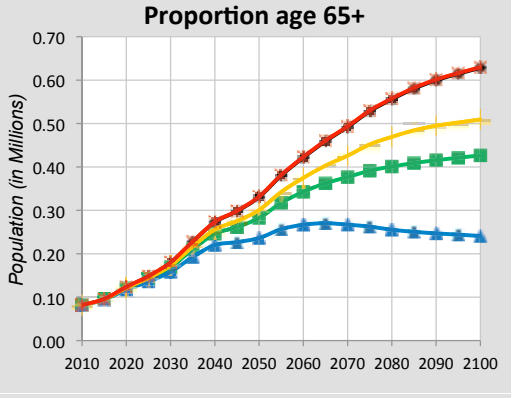


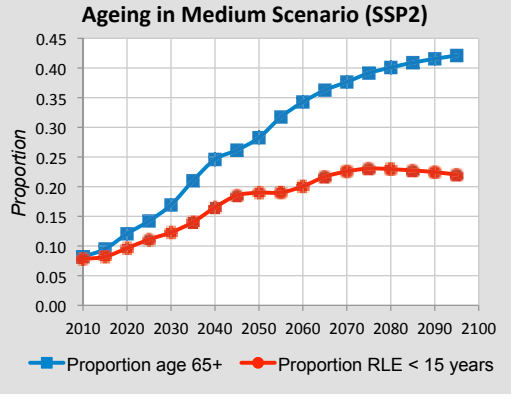
Population size by educational attainment according to three education scenarios: GET, CER, and FT











Alternative scenarios to 2100

Projection results by scenario (SSP 1-5)

	2010	2020	2030	2040	2050	2075	2100
Population (in millions)							
SSP1 - Rapid Development	1341.34	1371.06	1357.27	1304.94	1218.80	931.20	643.59
SSP2 - Medium	1341.34	1378.80	1377.72	1334.09	1255.26	992.05	754.13
SSP3 - Stalled Development	1341.34	1386.54	1399.60	1369.81	1309.80	1131.22	1046.14
SSP4 - Inequality	1341.34	1368.80	1348.12	1282.01	1178.01	846.29	549.55
SSP5 - Conventional Dev.	1341.34	1370.32	1355.16	1301.57	1214.31	924.82	637.36
Proportion age 65+							
SSP1 - Rapid Development	0.08	0.12	0.18	0.27	0.33	0.53	0.63
SSP2 - Medium	0.08	0.12	0.17	0.25	0.28	0.39	0.43
SSP3 - Stalled Development	0.08	0.12	0.16	0.22	0.24	0.26	0.24
SSP4 - Inequality	0.08	0.12	0.17	0.26	0.30	0.45	0.51
SSP5 - Conventional Dev.	0.08	0.12	0.18	0.27	0.33	0.53	0.63
Proportion below age 20							
SSP1 - Rapid Development	0.27	0.21	0.16	0.13	0.11	0.08	0.07
SSP2 - Medium	0.27	0.22	0.19	0.16	0.15	0.13	0.13
SSP3 - Stalled Development	0.27	0.23	0.21	0.20	0.20	0.22	0.24
SSP4 - Inequality	0.27	0.21	0.17	0.14	0.12	0.10	0.09
SSP5 - Conventional Dev.	0.27	0.21	0.16	0.13	0.11	0.08	0.07
Proportion of Women age 20-39 with at least secondary education							
SSP1 - Rapid Development	0.83	0.91	0.94	0.96	0.97	0.99	1.00
SSP2 - Medium	0.83	0.89	0.91	0.93	0.95	0.98	0.99
SSP3 - Stalled Development	0.83	0.87	0.87	0.87	0.87	0.87	0.87
SSP4 - Inequality	0.83	0.82	0.78	0.78	0.78	0.78	0.78
SSP5 - Conventional Dev.	0.83	0.91	0.94	0.96	0.97	0.99	1.00
Mean years of schooling, age 25+							
SSP1 - Rapid Development	7.36	8.34	9.11	9.80	10.42	11.77	12.79
SSP2 - Medium	7.36	8.16	8.78	9.34	9.86	11.11	12.21
SSP3 - Stalled Development	7.36	8.08	8.55	8.90	9.16	9.41	9.40
SSP4 - Inequality	7.36	7.96	8.35	8.72	9.03	9.73	10.48
SSP5 - Conventional Dev.	7.36	8.34	9.11	9.80	10.41	11.77	12.78

Demographic assumptions underlying SSPs

	2010-2015	2020-2025	2030-2035	2040-2045	2050-2055	2075-2080	2095-2100
Total fertility rate							
SSP1 - Rapid Development	1.33	1.16	1.06	1.02	1.01	1.07	1.12
SSP2 - Medium	1.42	1.40	1.40	1.40	1.40	1.46	1.51
SSP3 - Stalled Development	1.50	1.65	1.78	1.86	1.93	2.10	2.22
SSP4 - Inequality	1.35	1.20	1.12	1.09	1.09	1.15	1.20
SSP5 - Conventional Dev.	1.33	1.16	1.06	1.02	1.01	1.07	1.12
Life expectancy at birth for females (in years)							
SSP1 - Rapid Development	78.0	80.7	83.5	86.3	89.2	96.5	102.5
SSP2 - Medium	75.7	78.0	80.1	82.1	84.2	89.2	93.2
SSP3 - Stalled Development	77.3	78.2	79.1	80.0	80.8	82.7	84.3
SSP4 - Inequality	77.7	79.5	81.3	83.0	84.9	89.2	93.0
SSP5 - Conventional Dev.	78.0	80.7	83.5	86.3	89.2	96.5	102.5
Migration – net flow over five years (in thousands)							
SSP1 - Rapid Development	-1480	-1150	-928	-718	-545	-147	0
SSP2 - Medium	-1448	-1143	-944	-771	-627	-202	0
SSP3 - Stalled Development	-1232	-570	-465	-385	-322	-117	0
SSP4 - Inequality	-1480	-1146	-914	-684	-497	-117	0
SSP5 - Conventional Dev.	-1727	-1756	-1462	-1177	-939	-292	0

Ageing indicators, Medium Scenario (SSP2)

	2010	2020	2030	2040	2050	2075	2095
Median Age	34.58	38.31	43.06	47.90	51.56	56.95	58.72
Propspective Median Age	34.58	36.62	39.80	43.08	45.05	46.27	44.31
Proportion age 65+	0.08	0.12	0.17	0.25	0.28	0.39	0.42
Proportion RLE < 15 years	0.08	0.10	0.12	0.17	0.19	0.23	0.22

EGYPT

Detailed Human Capital projections to 2060

Demographic indicators, Medium Scenario (SSP2)	2010	2020	2030	2040	2050	2060
Population (in millions)	81.1	95.1	107.4	118.0	126.5	132.6
Proportion age 65+	0.05	0.07	0.09	0.10	0.14	0.18
Proportion below age 20	0.41	0.38	0.34	0.30	0.27	0.25
	2005-2010	2015-2020	2025-2030	2035-2040	2045-2050	2055-2060
Total Fertility Rate	2.85	2.52	2.28	2.07	1.90	1.85
Life expectancy at birth (in years)						
Male	70.46	71.94	73.71	75.56	77.54	79.53
Female	74.25	75.99	77.89	79.79	81.79	83.79
Five-year immigration flow (in '000)	53	52	54	55	55	54
Five-year emigration flow (in '000)	395	329	352	368	369	363

Human Capital indicators, Medium Scenario (SSP2)	2010	2020	2030	2040	2050	2060
Population age 25+: highest educational attainment						
E1 - no education	0.40	0.29	0.21	0.14	0.09	0.06
E2 - incomplete primary	0.07	0.05	0.04	0.03	0.02	0.01
E3 - primary	0.04	0.04	0.04	0.03	0.03	0.02
E4 - lower secondary	0.04	0.05	0.04	0.04	0.03	0.03
E5 - upper secondary	0.31	0.39	0.46	0.51	0.54	0.55
E6 - post-secondary	0.14	0.18	0.22	0.26	0.30	0.34
Mean years of schooling (in years)	6.77	8.36	9.67	10.79	11.70	12.43
Gender gap (population age 25+): highest educational attainment (ratio male/female)						
E1 - no education	0.60	0.59	0.59	0.58	0.59	0.60
E2 - incomplete primary	1.58	1.41	1.26	1.13	1.01	0.93
E3 - primary	1.37	1.24	1.18	1.13	1.08	1.01
E4 - lower secondary	1.41	1.21	1.13	1.08	1.02	0.97
E5 - upper secondary	1.31	1.20	1.14	1.10	1.07	1.04
E6 - post-secondary	1.47	1.25	1.13	1.05	1.02	1.02
Mean years of schooling (male minus female)	2.20	1.68	1.25	0.87	0.57	0.37
Women age 20-39: highest educational attainment						
E1 - no education	0.25	0.14	0.06	0.03	0.01	0.00
E2 - incomplete primary	0.04	0.02	0.01	0.01	0.00	0.00
E3 - primary	0.04	0.04	0.03	0.02	0.01	0.01
E4 - lower secondary	0.05	0.05	0.04	0.02	0.01	0.01
E5 - upper secondary	0.46	0.54	0.58	0.59	0.58	0.56
E6 - post-secondary	0.17	0.22	0.28	0.33	0.38	0.42
Mean years of schooling (in years)	8.70	10.67	12.07	12.85	13.33	13.64

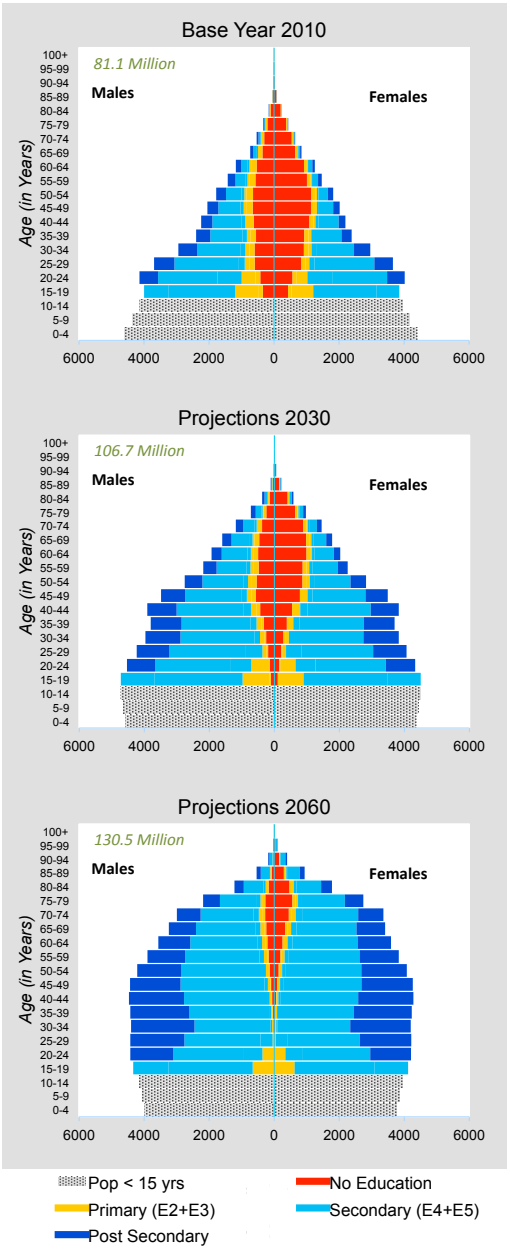
Education scenarios

GET : Global Education Trend Scenario (Medium assumption also used for SSP2)

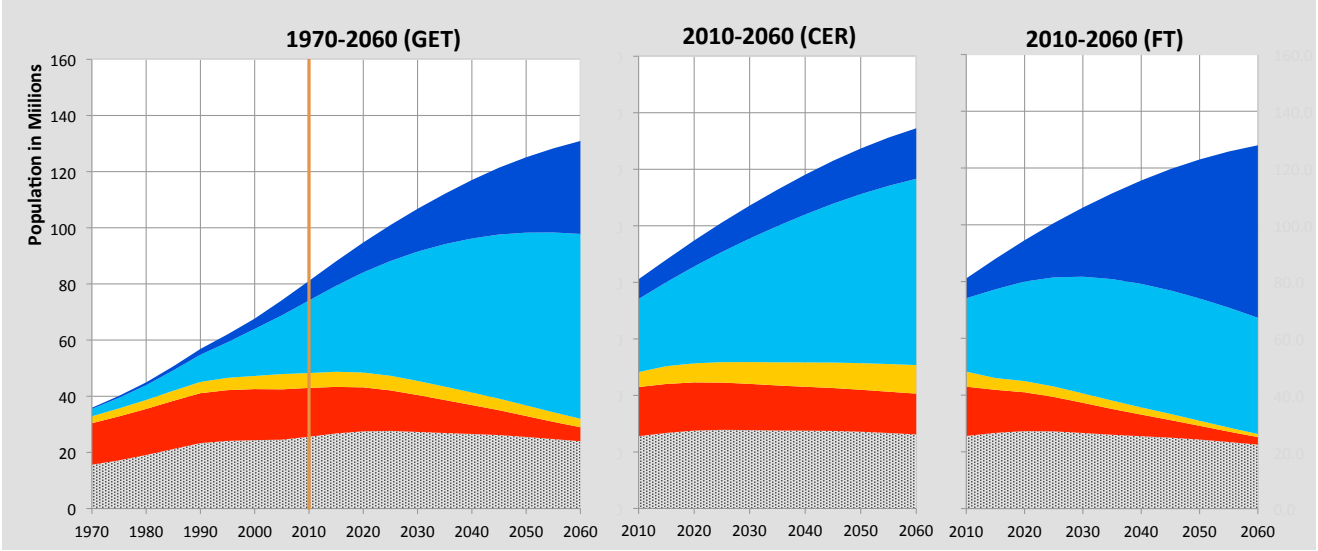
CER: Constant Enrollment Rates Scenario (assumption of no future improvements)

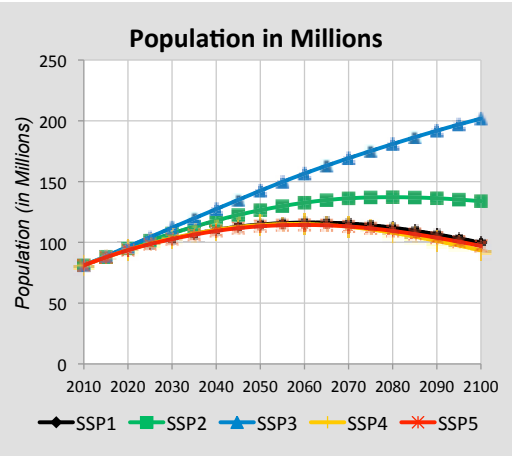
FT: Fast Track Scenario (assumption of education expansion according to fastest historical experience)

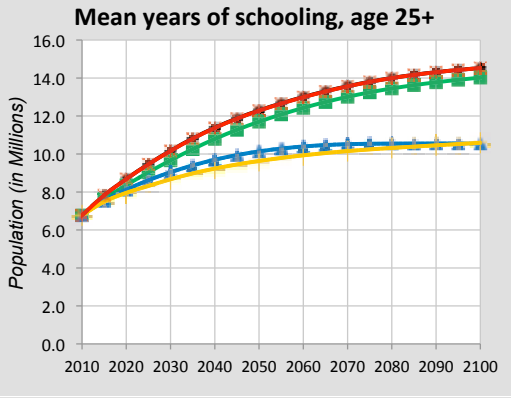
Pyramids by education, Medium Scenario

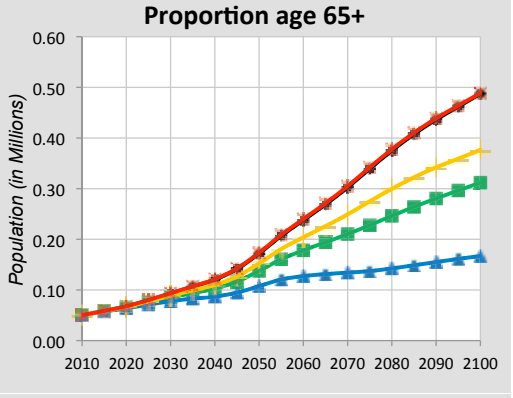


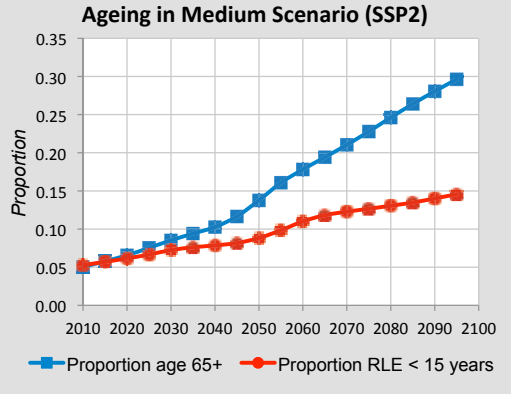
Population size by educational attainment according to three education scenarios: GET, CER, and FT











Alternative scenarios to 2100

Projection results by scenario (SSP 1-5)

	2010	2020	2030	2040	2050	2075	2100
Population (in millions)							
SSP1 - Rapid Development	81.12	93.74	103.23	110.35	114.69	114.09	99.80
SSP2 - Medium	81.12	95.05	107.38	117.98	126.47	136.97	133.87
SSP3 - Stalled Development	81.12	96.46	112.13	127.38	142.49	175.15	201.83
SSP4 - Inequality	81.12	93.72	103.22	110.19	114.17	110.69	93.46
SSP5 - Conventional Dev.	81.12	93.58	102.70	109.39	113.25	111.57	97.09
Proportion age 65+							
SSP1 - Rapid Development	0.05	0.07	0.09	0.12	0.17	0.34	0.49
SSP2 - Medium	0.05	0.07	0.09	0.10	0.14	0.23	0.31
SSP3 - Stalled Development	0.05	0.06	0.08	0.09	0.11	0.14	0.17
SSP4 - Inequality	0.05	0.07	0.09	0.11	0.15	0.27	0.38
SSP5 - Conventional Dev.	0.05	0.07	0.09	0.12	0.17	0.34	0.49
Proportion below age 20							
SSP1 - Rapid Development	0.41	0.37	0.31	0.25	0.21	0.14	0.10
SSP2 - Medium	0.41	0.38	0.34	0.30	0.27	0.22	0.18
SSP3 - Stalled Development	0.41	0.39	0.37	0.35	0.33	0.30	0.28
SSP4 - Inequality	0.41	0.37	0.31	0.27	0.23	0.17	0.13
SSP5 - Conventional Dev.	0.41	0.37	0.31	0.25	0.21	0.14	0.10
Proportion of Women age 20-39 with at least secondary education							
SSP1 - Rapid Development	0.67	0.84	0.93	0.97	0.98	0.99	1.00
SSP2 - Medium	0.67	0.81	0.90	0.95	0.97	1.00	1.00
SSP3 - Stalled Development	0.67	0.74	0.76	0.76	0.76	0.76	0.76
SSP4 - Inequality	0.67	0.70	0.68	0.68	0.68	0.68	0.68
SSP5 - Conventional Dev.	0.67	0.84	0.93	0.97	0.98	0.99	1.00
Mean years of schooling, age 25+							
SSP1 - Rapid Development	6.77	8.69	10.17	11.38	12.29	13.80	14.53
SSP2 - Medium	6.77	8.36	9.67	10.79	11.70	13.25	14.02
SSP3 - Stalled Development	6.77	8.12	9.04	9.70	10.14	10.54	10.56
SSP4 - Inequality	6.77	7.96	8.67	9.23	9.63	10.24	10.59
SSP5 - Conventional Dev.	6.77	8.68	10.16	11.37	12.28	13.79	14.52

Demographic assumptions underlying SSPs

	2010-2015	2020-2025	2030-2035	2040-2045	2050-2055	2075-2080	2095-2100
Total fertility rate							
SSP1 - Rapid Development	2.52	2.01	1.68	1.49	1.38	1.25	1.19
SSP2 - Medium	2.67	2.39	2.17	1.99	1.87	1.69	1.60
SSP3 - Stalled Development	2.80	2.81	2.74	2.61	2.51	2.30	2.19
SSP4 - Inequality	2.53	2.08	1.78	1.60	1.50	1.36	1.29
SSP5 - Conventional Dev.	2.52	2.01	1.68	1.49	1.38	1.25	1.19
Life expectancy at birth for females (in years)							
SSP1 - Rapid Development	77.4	79.8	82.5	85.2	88.0	95.2	101.0
SSP2 - Medium	75.1	76.9	78.8	80.8	82.8	87.8	91.8
SSP3 - Stalled Development	76.7	77.3	78.0	78.7	79.4	81.1	82.6
SSP4 - Inequality	77.0	78.5	80.2	81.9	83.5	87.6	91.1
SSP5 - Conventional Dev.	77.4	79.8	82.5	85.2	88.0	95.2	101.0
Migration – net flow over five years (in thousands)							
SSP1 - Rapid Development	-290	-286	-299	-294	-275	-102	0
SSP2 - Medium	-283	-284	-304	-313	-311	-136	0
SSP3 - Stalled Development	-241	-142	-150	-156	-159	-77	0
SSP4 - Inequality	-290	-284	-294	-280	-251	-82	0
SSP5 - Conventional Dev.	-338	-435	-471	-481	-470	-198	0

Ageing indicators, Medium Scenario (SSP2)

	2010	2020	2030	2040	2050	2075	2095
Median Age	24.36	27.32	29.97	32.88	36.12	43.46	48.53
Propspective Median Age	24.36	25.98	27.21	28.43	29.98	32.96	34.36
Proportion age 65+	0.05	0.07	0.09	0.10	0.14	0.23	0.30
Proportion RLE < 15 years	0.05	0.06	0.07	0.08	0.09	0.13	0.15

GERMANY

Detailed Human Capital projections to 2060

Demographic indicators, Medium Scenario (SSP2)

	2010	2020	2030	2040	2050	2060
Population (in millions)	82.3	81.9	81.4	80.4	78.9	77.1
Proportion age 65+	0.20	0.23	0.29	0.32	0.34	0.35
Proportion below age 20	0.19	0.17	0.17	0.17	0.16	0.17
	2005-2010	2015-2020	2025-2030	2035-2040	2045-2050	2055-2060
Total Fertility Rate	1.36	1.42	1.52	1.57	1.59	1.61
Life expectancy at birth (in years)						
Male	77.20	79.99	82.45	84.41	86.52	88.51
Female	82.39	84.49	86.61	88.61	90.69	92.69
Five-year immigration flow (in '000)	1337	1317	1370	1404	1406	1387
Five-year emigration flow (in '000)	788	516	458	424	407	392

Human Capital indicators, Medium Scenario (SSP2)

	2010	2020	2030	2040	2050	2060
Population age 25+: highest educational attainment						
E1 - no education	0.01	0.01	0.01	0.01	0.00	0.00
E2 - incomplete primary	0.00	0.00	0.00	0.00	0.00	0.00
E3 - primary	0.03	0.02	0.02	0.02	0.01	0.01
E4 - lower secondary	0.16	0.13	0.11	0.09	0.08	0.07
E5 - upper secondary	0.51	0.50	0.48	0.46	0.43	0.40
E6 - post-secondary	0.30	0.34	0.39	0.43	0.48	0.52
Mean years of schooling (in years)	13.71	14.03	14.28	14.50	14.72	14.93
Gender gap (population age 25+): highest educational attainment (ratio male/female)						
E1 - no education	0.81	0.82	0.80	0.77	0.74	0.71
E2 - incomplete primary	NA	NA	NA	NA	NA	NA
E3 - primary	0.78	0.81	0.83	0.85	0.86	0.88
E4 - lower secondary	0.44	0.55	0.69	0.82	0.92	0.97
E5 - upper secondary	1.06	1.03	1.03	1.04	1.06	1.06
E6 - post-secondary	1.38	1.20	1.08	1.01	0.97	0.96
Mean years of schooling (male minus female)	0.90	0.58	0.31	0.11	-0.01	-0.07
Women age 20-39: highest educational attainment						
E1 - no education	0.01	0.01	0.00	0.00	0.00	0.00
E2 - incomplete primary	0.00	0.00	0.00	0.00	0.00	0.00
E3 - primary	0.02	0.01	0.01	0.01	0.00	0.00
E4 - lower secondary	0.13	0.11	0.09	0.07	0.06	0.05
E5 - upper secondary	0.50	0.47	0.45	0.44	0.43	0.42
E6 - post-secondary	0.34	0.41	0.46	0.49	0.51	0.53
Mean years of schooling (in years)	13.94	14.39	14.46	14.66	14.80	14.91

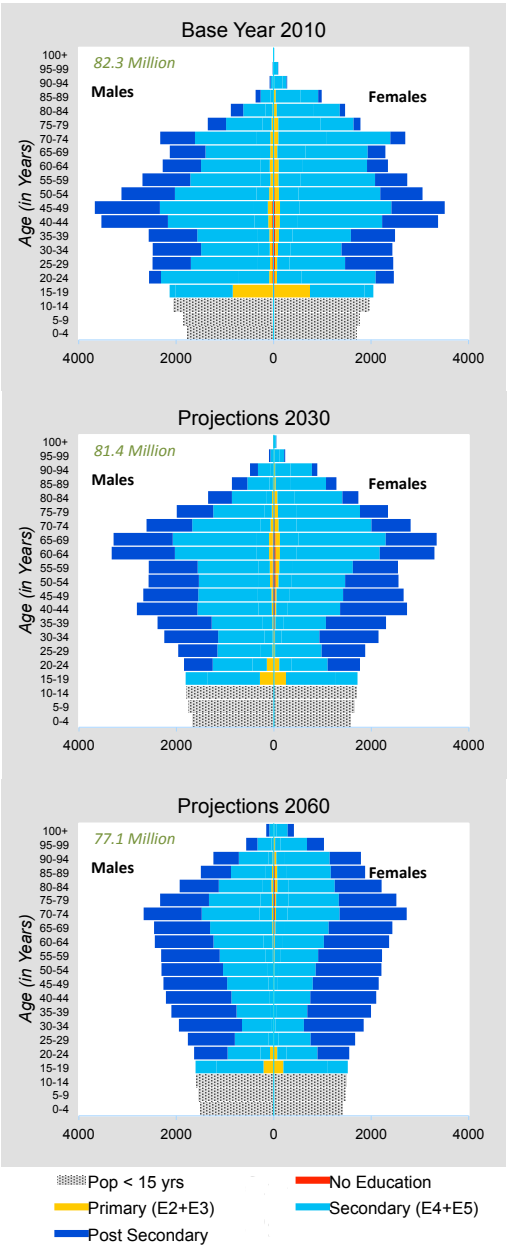
Education scenarios

GET : Global Education Trend Scenario (Medium assumption also used for SSP2)

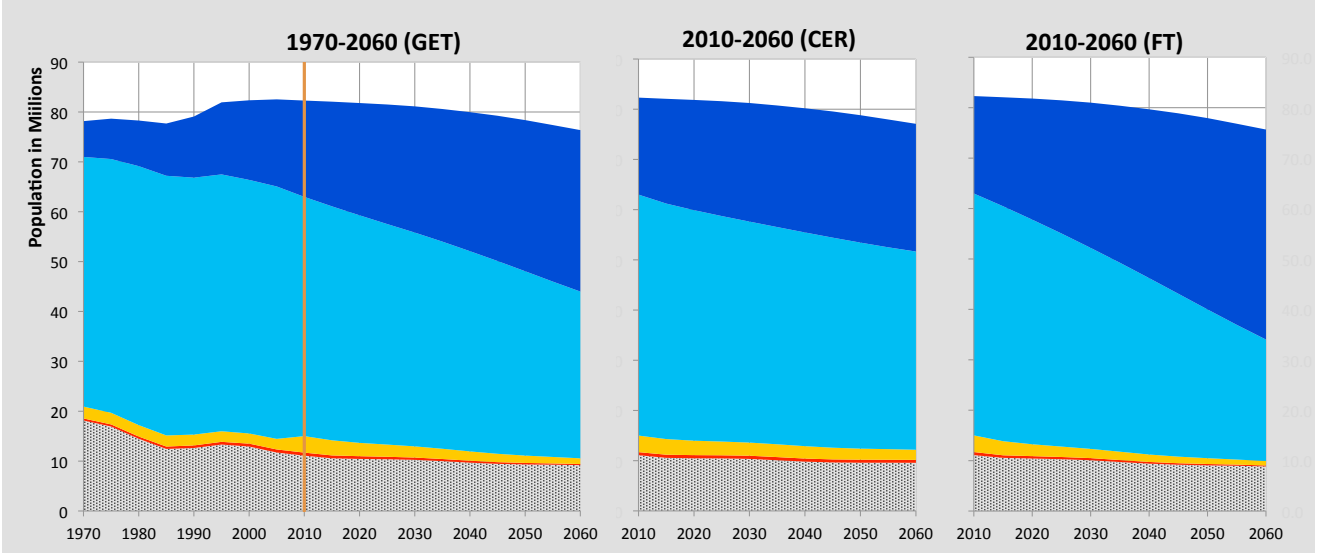
CER: Constant Enrollment Rates Scenario (assumption of no future improvements)

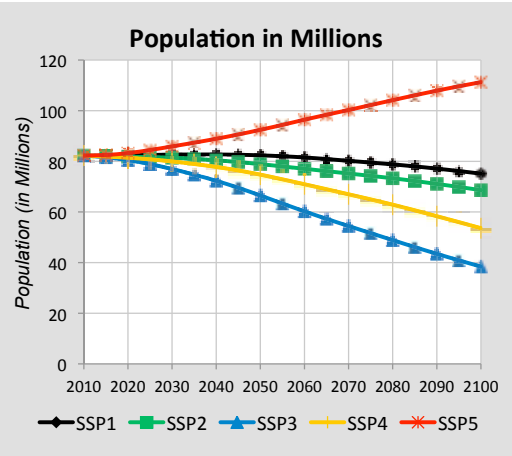
FT: Fast Track Scenario (assumption of education expansion according to fastest historical experience)

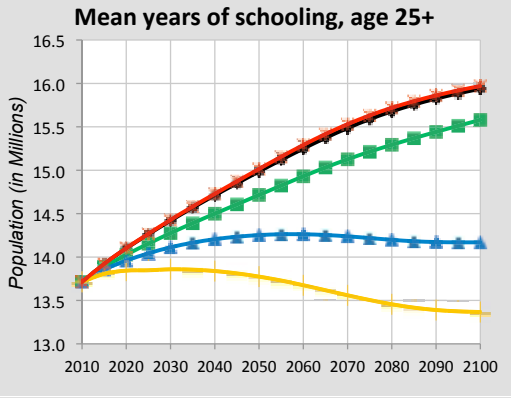
Pyramids by education, Medium Scenario

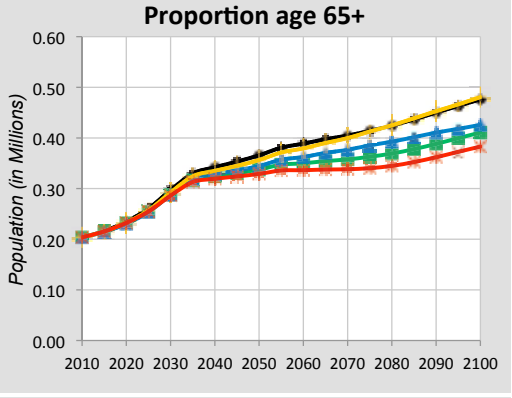


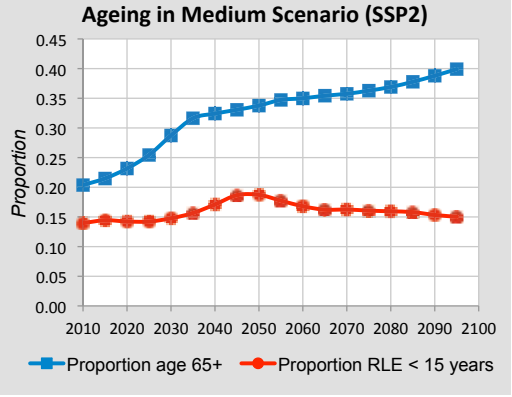
Population size by educational attainment according to three education scenarios: GET, CER, and FT











Alternative scenarios to 2100

Projection results by scenario (SSP 1-5)

	2010	2020	2030	2040	2050	2075	2100
Population (in millions)							
SSP1 - Rapid Development	82.30	82.33	82.65	82.69	82.37	79.51	75.14
SSP2 - Medium	82.30	81.86	81.39	80.41	78.91	74.26	68.61
SSP3 - Stalled Development	82.30	80.49	76.95	72.31	66.52	51.67	38.43
SSP4 - Inequality	82.30	81.43	79.96	77.78	74.74	64.97	53.60
SSP5 - Conventional Dev.	82.30	83.26	85.90	88.92	92.45	102.21	111.26
Proportion age 65+							
SSP1 - Rapid Development	0.20	0.23	0.30	0.34	0.37	0.41	0.48
SSP2 - Medium	0.20	0.23	0.29	0.32	0.34	0.36	0.41
SSP3 - Stalled Development	0.20	0.23	0.29	0.33	0.34	0.39	0.43
SSP4 - Inequality	0.20	0.23	0.29	0.34	0.36	0.41	0.48
SSP5 - Conventional Dev.	0.20	0.23	0.29	0.32	0.33	0.34	0.38
Proportion below age 20							
SSP1 - Rapid Development	0.19	0.17	0.17	0.16	0.16	0.15	0.14
SSP2 - Medium	0.19	0.17	0.17	0.17	0.16	0.16	0.15
SSP3 - Stalled Development	0.19	0.17	0.15	0.14	0.14	0.13	0.12
SSP4 - Inequality	0.19	0.17	0.15	0.14	0.14	0.13	0.11
SSP5 - Conventional Dev.	0.19	0.18	0.18	0.19	0.19	0.20	0.19
Proportion of Women age 20-39 with at least secondary education							
SSP1 - Rapid Development	0.97	0.99	0.99	1.00	1.00	1.00	1.00
SSP2 - Medium	0.97	0.98	0.99	0.99	0.99	1.00	1.00
SSP3 - Stalled Development	0.97	0.98	0.98	0.98	0.98	0.98	0.98
SSP4 - Inequality	0.97	0.98	0.98	0.98	0.98	0.98	0.98
SSP5 - Conventional Dev.	0.97	0.99	0.99	1.00	1.00	1.00	1.00
Mean years of schooling, age 25+							
SSP1 - Rapid Development	13.71	14.10	14.42	14.71	14.99	15.59	15.94
SSP2 - Medium	13.71	14.03	14.28	14.50	14.72	15.21	15.58
SSP3 - Stalled Development	13.71	13.96	14.11	14.21	14.25	14.22	14.17
SSP4 - Inequality	13.71	13.84	13.86	13.84	13.77	13.50	13.37
SSP5 - Conventional Dev.	13.71	14.10	14.43	14.73	15.02	15.63	15.97

Demographic assumptions underlying SSPs

	2010-2015	2020-2025	2030-2035	2040-2045	2050-2055	2075-2080	2095-2100
Total fertility rate							
SSP1 - Rapid Development	1.37	1.46	1.53	1.57	1.59	1.62	1.64
SSP2 - Medium	1.36	1.47	1.56	1.58	1.60	1.63	1.65
SSP3 - Stalled Development	1.30	1.26	1.24	1.24	1.24	1.27	1.29
SSP4 - Inequality	1.31	1.29	1.28	1.28	1.27	1.30	1.33
SSP5 - Conventional Dev.	1.44	1.68	1.85	1.94	1.98	2.02	2.05
Life expectancy at birth for females (in years)							
SSP1 - Rapid Development	84.2	87.3	90.3	93.3	96.3	104.0	110.1
SSP2 - Medium	83.4	85.5	87.6	89.7	91.7	96.9	101.0
SSP3 - Stalled Development	83.3	84.3	85.4	86.4	87.4	89.9	91.9
SSP4 - Inequality	83.7	85.8	87.8	89.8	91.8	96.8	100.7
SSP5 - Conventional Dev.	84.2	87.3	90.3	93.3	96.3	104.0	110.1
Migration – net flow over five years (in thousands)							
SSP1 - Rapid Development	682	854	939	956	929	346	0
SSP2 - Medium	689	849	932	968	967	391	0
SSP3 - Stalled Development	568	428	470	480	469	181	0
SSP4 - Inequality	682	851	931	948	929	368	0
SSP5 - Conventional Dev.	796	1281	1431	1517	1550	665	0

Ageing indicators, Medium Scenario (SSP2)

	2010	2020	2030	2040	2050	2075	2095
Median Age	44.35	47.90	49.28	51.18	52.19	53.09	56.06
Propspective Median Age	44.35	45.72	45.08	45.06	44.24	40.00	38.99
Proportion age 65+	0.20	0.23	0.29	0.32	0.34	0.36	0.40
Proportion RLE < 15 years	0.14	0.14	0.15	0.17	0.19	0.16	0.15

INDIA

Detailed Human Capital projections to 2060

Demographic indicators, Medium Scenario (SSP2)	2010	2020	2030	2040	2050	2060
Population (in millions)	1224.6	1385.2	1520.6	1632.5	1714.6	1754.6
Proportion age 65+	0.05	0.06	0.08	0.11	0.15	0.19
Proportion below age 20	0.40	0.36	0.32	0.28	0.25	0.23
	2005-2010	2015-2020	2025-2030	2035-2040	2045-2050	2055-2060
Total Fertility Rate	2.73	2.37	2.10	1.97	1.85	1.75
Life expectancy at birth (in years)						
Male	62.80	66.12	69.22	72.54	75.56	77.25
Female	65.73	69.48	72.88	76.39	79.50	81.19
Five-year immigration flow (in '000)	792	768	793	810	812	803
Five-year emigration flow (in '000)	3697	3015	3123	3131	3031	2897

Human Capital indicators, Medium Scenario (SSP2)	2010	2020	2030	2040	2050	2060
Population age 25+: highest educational attainment						
E1 - no education	0.39	0.32	0.25	0.19	0.15	0.11
E2 - incomplete primary	0.08	0.07	0.05	0.04	0.03	0.02
E3 - primary	0.14	0.15	0.15	0.14	0.14	0.12
E4 - lower secondary	0.11	0.13	0.13	0.13	0.13	0.12
E5 - upper secondary	0.18	0.23	0.27	0.32	0.37	0.41
E6 - post-secondary	0.09	0.11	0.14	0.16	0.19	0.22
Mean years of schooling (in years)	5.53	6.56	7.53	8.46	9.32	10.12
Gender gap (population age 25+): highest educational attainment (ratio male/female)						
E1 - no education	0.54	0.54	0.56	0.58	0.60	0.62
E2 - incomplete primary	1.21	1.17	1.10	1.04	0.99	0.96
E3 - primary	1.19	1.07	1.00	0.97	0.95	0.93
E4 - lower secondary	1.54	1.36	1.25	1.18	1.12	1.07
E5 - upper secondary	1.70	1.41	1.24	1.15	1.09	1.06
E6 - post-secondary	1.91	1.63	1.43	1.29	1.20	1.14
Mean years of schooling (male minus female)	2.56	2.15	1.73	1.34	1.01	0.74
Women age 20-39: highest educational attainment						
E1 - no education	0.34	0.23	0.15	0.09	0.05	0.03
E2 - incomplete primary	0.06	0.04	0.03	0.02	0.01	0.01
E3 - primary	0.15	0.16	0.15	0.13	0.11	0.08
E4 - lower secondary	0.13	0.14	0.13	0.12	0.10	0.08
E5 - upper secondary	0.23	0.31	0.38	0.44	0.49	0.52
E6 - post-secondary	0.09	0.12	0.16	0.20	0.24	0.29
Mean years of schooling (in years)	6.26	7.79	9.08	10.23	11.18	11.95

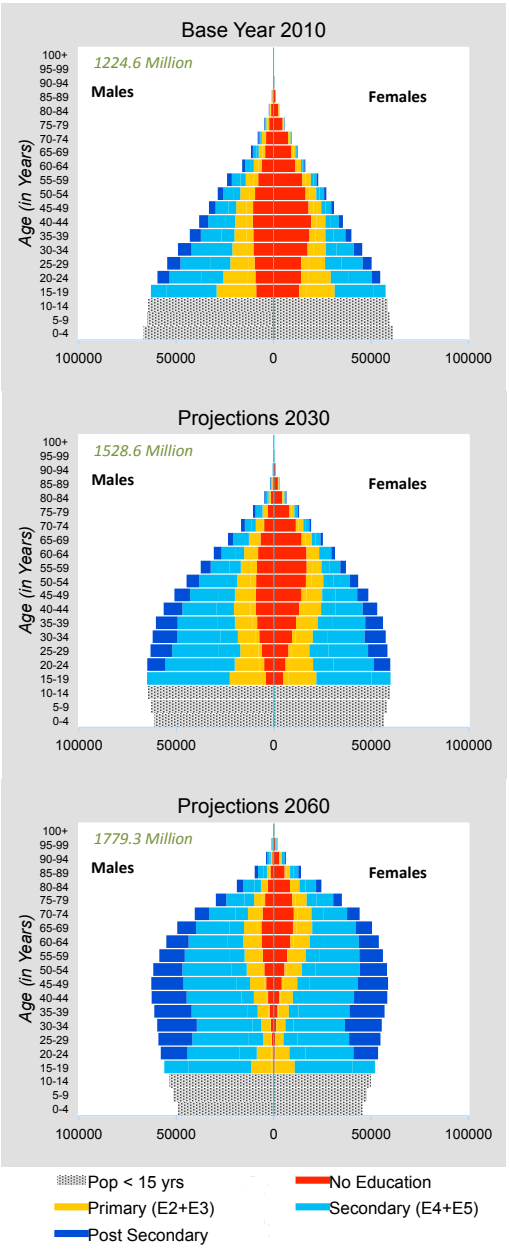
Education scenarios

GET : Global Education Trend Scenario (Medium assumption also used for SSP2)

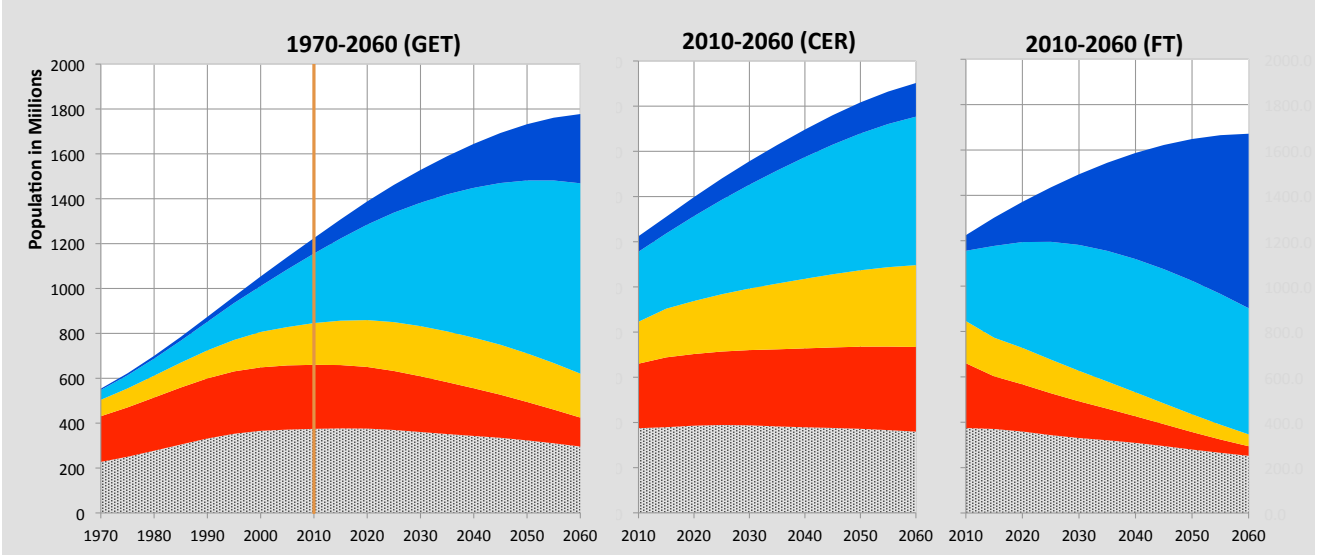
CER: Constant Enrollment Rates Scenario (assumption of no future improvements)

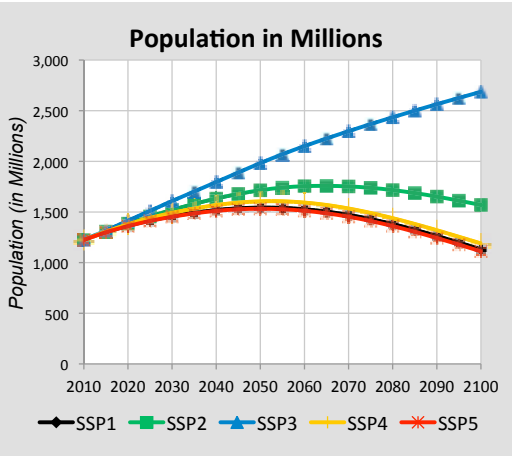
FT: Fast Track Scenario (assumption of education expansion according to fastest historical experience)

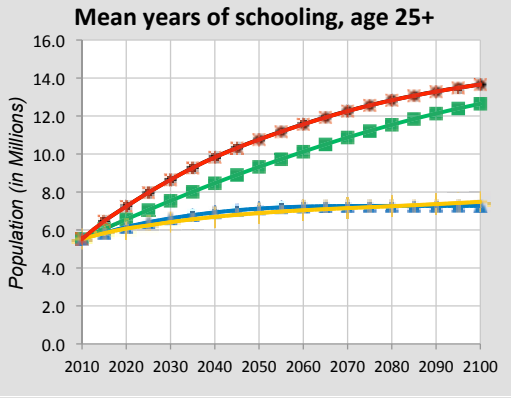
Pyramids by education, Medium Scenario

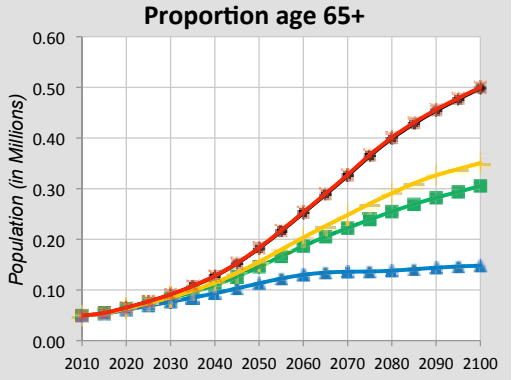


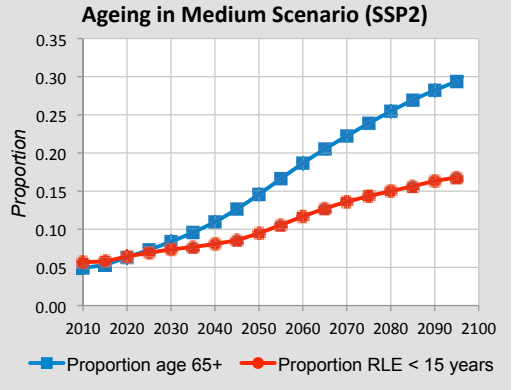
Population size by educational attainment according to three education scenarios: GET, CER, and FT











Alternative scenarios to 2100

Projection results by scenario (SSP 1-5)

	2010	2020	2030	2040	2050	2075	2100
Population (in millions)							
SSP1 - Rapid Development	1224.61	1361.85	1456.61	1518.60	1543.02	1429.58	1130.90
SSP2 - Medium	1224.61	1385.24	1520.63	1632.48	1714.61	1738.46	1569.46
SSP3 - Stalled Development	1224.61	1414.01	1607.98	1795.49	1982.47	2367.65	2686.57
SSP4 - Inequality	1224.61	1378.21	1491.13	1567.97	1604.86	1490.47	1189.56
SSP5 - Conventional Dev.	1224.61	1360.52	1452.27	1510.85	1531.68	1410.79	1111.50
Proportion age 65+							
SSP1 - Rapid Development	0.05	0.07	0.09	0.13	0.18	0.36	0.50
SSP2 - Medium	0.05	0.06	0.08	0.11	0.15	0.24	0.31
SSP3 - Stalled Development	0.05	0.06	0.08	0.09	0.11	0.14	0.15
SSP4 - Inequality	0.05	0.06	0.09	0.11	0.16	0.27	0.35
SSP5 - Conventional Dev.	0.05	0.07	0.09	0.13	0.18	0.37	0.50
Proportion below age 20							
SSP1 - Rapid Development	0.40	0.35	0.28	0.23	0.19	0.12	0.09
SSP2 - Medium	0.40	0.36	0.32	0.28	0.25	0.20	0.17
SSP3 - Stalled Development	0.40	0.37	0.36	0.34	0.33	0.30	0.29
SSP4 - Inequality	0.40	0.36	0.30	0.26	0.22	0.16	0.14
SSP5 - Conventional Dev.	0.40	0.35	0.28	0.23	0.19	0.12	0.09
Proportion of Women age 20-39 with at least secondary education							
SSP1 - Rapid Development	0.45	0.69	0.80	0.87	0.91	0.97	0.99
SSP2 - Medium	0.45	0.57	0.67	0.76	0.83	0.94	0.98
SSP3 - Stalled Development	0.45	0.44	0.44	0.44	0.44	0.44	0.44
SSP4 - Inequality	0.45	0.41	0.39	0.39	0.39	0.39	0.39
SSP5 - Conventional Dev.	0.45	0.69	0.80	0.87	0.91	0.97	0.99
Mean years of schooling, age 25+							
SSP1 - Rapid Development	5.53	7.24	8.65	9.83	10.77	12.56	13.66
SSP2 - Medium	5.53	6.56	7.53	8.46	9.32	11.21	12.65
SSP3 - Stalled Development	5.53	6.16	6.61	6.92	7.13	7.27	7.27
SSP4 - Inequality	5.53	6.07	6.41	6.69	6.89	7.20	7.48
SSP5 - Conventional Dev.	5.53	7.24	8.64	9.82	10.76	12.56	13.66

Demographic assumptions underlying SSPs

	2010-2015	2020-2025	2030-2035	2040-2045	2050-2055	2075-2080	2095-2100
Total fertility rate							
SSP1 - Rapid Development	2.35	1.81	1.53	1.39	1.30	1.23	1.18
SSP2 - Medium	2.53	2.22	2.03	1.91	1.81	1.69	1.60
SSP3 - Stalled Development	2.74	2.78	2.72	2.63	2.55	2.46	2.40
SSP4 - Inequality	2.48	2.07	1.77	1.61	1.51	1.45	1.40
SSP5 - Conventional Dev.	2.35	1.81	1.53	1.39	1.30	1.23	1.18
Life expectancy at birth for females (in years)							
SSP1 - Rapid Development	71.3	74.9	78.9	83.0	86.1	92.0	96.5
SSP2 - Medium	67.7	71.2	74.6	78.1	80.5	84.0	86.7
SSP3 - Stalled Development	70.6	72.4	74.5	76.6	77.7	77.8	78.0
SSP4 - Inequality	70.8	73.9	76.8	79.8	81.7	84.1	86.1
SSP5 - Conventional Dev.	71.3	74.9	78.9	83.0	86.1	92.0	96.5
Migration – net flow over five years (in thousands)							
SSP1 - Rapid Development	-2380	-2271	-2260	-2085	-1855	-612	0
SSP2 - Medium	-2348	-2270	-2317	-2266	-2155	-861	0
SSP3 - Stalled Development	-1981	-1129	-1152	-1162	-1152	-539	0
SSP4 - Inequality	-2380	-2274	-2272	-2100	-1831	-566	0
SSP5 - Conventional Dev.	-2777	-3463	-3553	-3410	-3177	-1198	0

Ageing indicators, Medium Scenario (SSP2)

	2010	2020	2030	2040	2050	2075	2095
Median Age	25.14	28.13	31.39	34.64	38.02	45.02	49.12
Propspective Median Age	25.14	25.86	26.95	27.76	29.37	33.79	35.71
Proportion age 65+	0.05	0.06	0.08	0.11	0.15	0.24	0.29
Proportion RLE < 15 years	0.06	0.06	0.07	0.08	0.09	0.14	0.17

INDONESIA

Detailed Human Capital projections to 2060

Demographic indicators, Medium Scenario (SSP2)	2010	2020	2030	2040	2050	2060
Population (in millions)	239.9	261.3	276.4	284.8	285.5	279.6
Proportion age 65+	0.06	0.07	0.10	0.14	0.19	0.23
Proportion below age 20	0.36	0.32	0.27	0.24	0.21	0.19
	2005-2010	2015-2020	2025-2030	2035-2040	2045-2050	2055-2060
Total Fertility Rate	2.19	1.94	1.75	1.63	1.52	1.53
Life expectancy at birth (in years)						
Male	66.29	68.43	70.58	73.16	75.51	77.50
Female	69.43	72.22	74.68	77.41	79.80	81.80
Five-year immigration flow (in '000)	1	1	1	1	1	1
Five-year emigration flow (in '000)	1274	948	930	877	801	724

Human Capital indicators, Medium Scenario (SSP2)	2010	2020	2030	2040	2050	2060
Population age 25+: highest educational attainment						
E1 - no education	0.10	0.06	0.04	0.02	0.01	0.01
E2 - incomplete primary	0.09	0.06	0.04	0.03	0.02	0.01
E3 - primary	0.36	0.32	0.28	0.23	0.18	0.14
E4 - lower secondary	0.16	0.17	0.17	0.16	0.14	0.12
E5 - upper secondary	0.21	0.28	0.35	0.40	0.45	0.49
E6 - post-secondary	0.08	0.10	0.13	0.16	0.19	0.23
Mean years of schooling (in years)	7.96	8.93	9.75	10.47	11.10	11.67
Gender gap (population age 25+): highest educational attainment (ratio male/female)						
E1 - no education	0.55	0.53	0.52	0.52	0.53	0.57
E2 - incomplete primary	0.80	0.78	0.76	0.75	0.74	0.76
E3 - primary	0.94	0.92	0.91	0.89	0.89	0.89
E4 - lower secondary	1.14	1.09	1.07	1.05	1.02	0.98
E5 - upper secondary	1.38	1.23	1.16	1.12	1.10	1.07
E6 - post-secondary	1.14	1.03	0.97	0.94	0.95	0.97
Mean years of schooling (male minus female)	0.96	0.68	0.46	0.30	0.19	0.12
Women age 20-39: highest educational attainment						
E1 - no education	0.03	0.01	0.01	0.01	0.01	0.01
E2 - incomplete primary	0.04	0.02	0.01	0.00	0.00	0.00
E3 - primary	0.31	0.22	0.16	0.11	0.07	0.04
E4 - lower secondary	0.21	0.19	0.14	0.10	0.06	0.04
E5 - upper secondary	0.32	0.43	0.52	0.57	0.60	0.60
E6 - post-secondary	0.10	0.13	0.17	0.22	0.27	0.31
Mean years of schooling (in years)	9.47	10.48	11.30	11.93	12.42	12.78

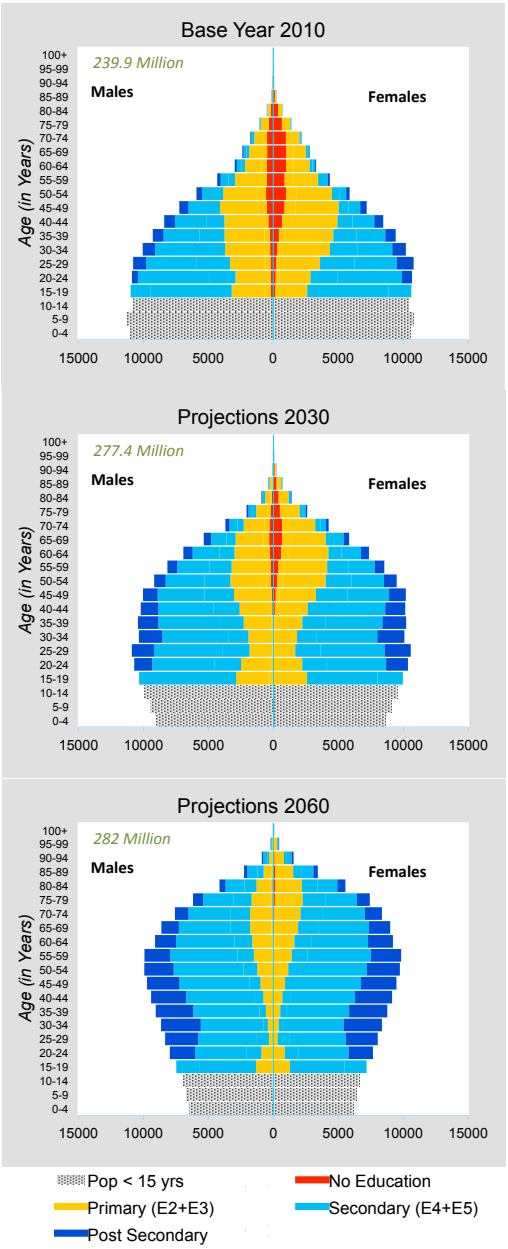
Education scenarios

GET : Global Education Trend Scenario (Medium assumption also used for SSP2)

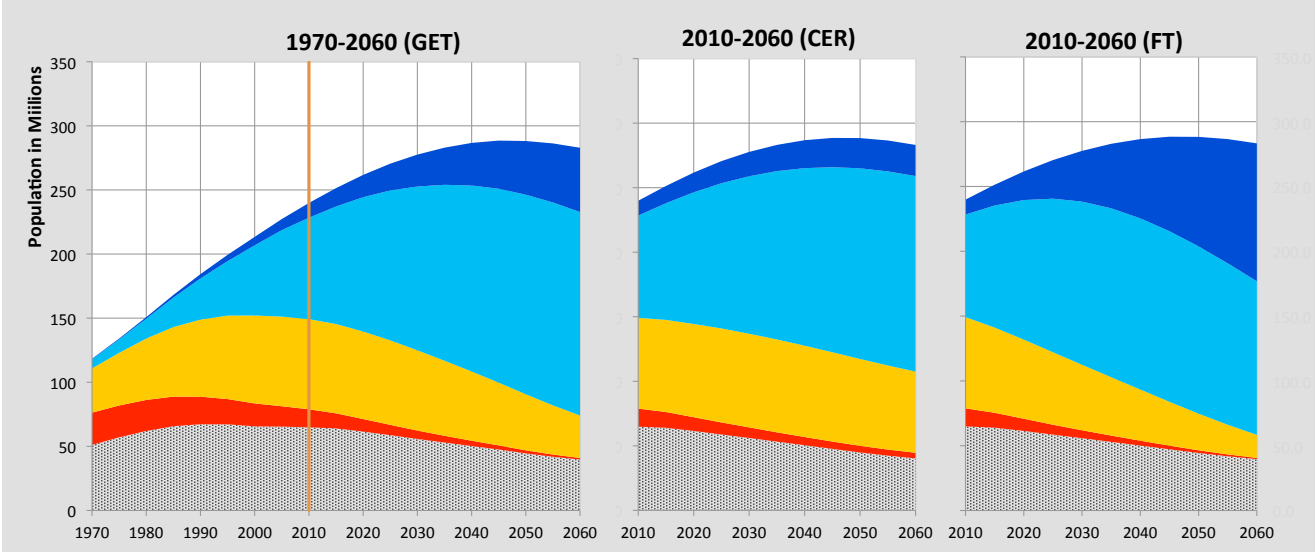
CER: Constant Enrollment Rates Scenario (assumption of no future improvements)

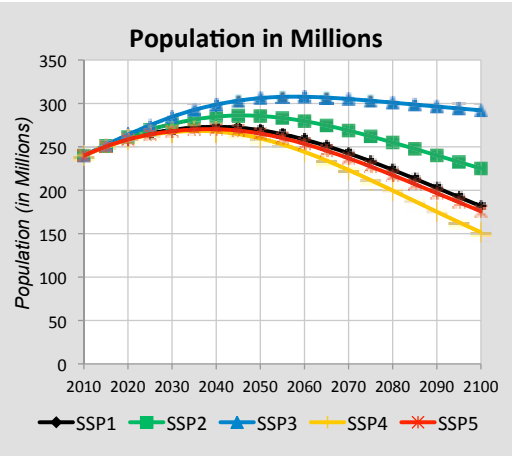
FT: Fast Track Scenario (assumption of education expansion according to fastest historical experience)

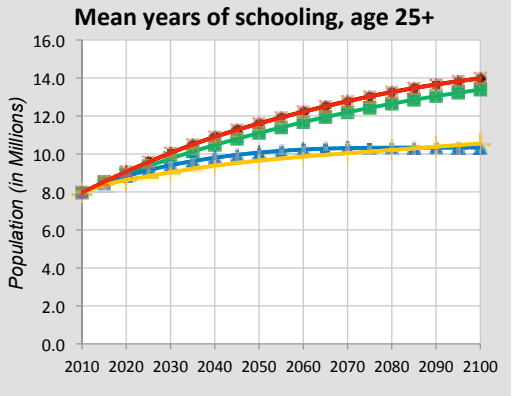
Pyramids by education, Medium Scenario

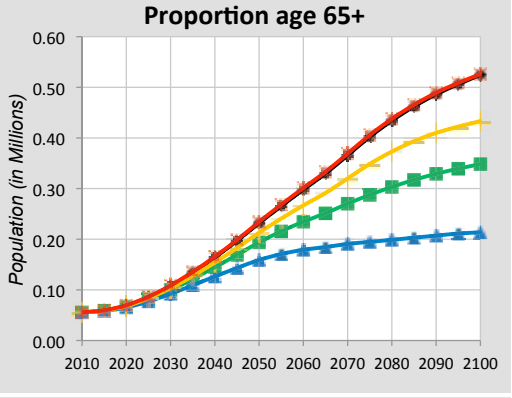


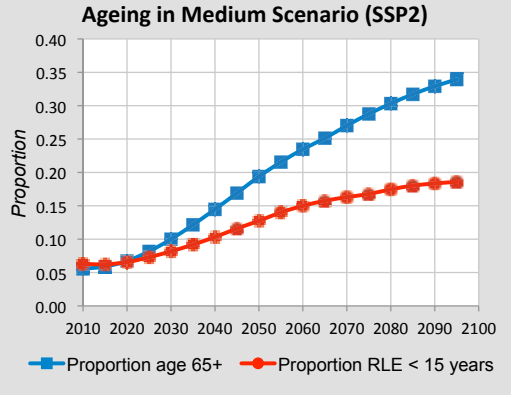
Population size by educational attainment according to three education scenarios: GET, CER, and FT











Alternative scenarios to 2100

Projection results by scenario (SSP 1-5)

	2010	2020	2030	2040	2050	2075	2100
Population (in millions)							
SSP1 - Rapid Development	239.87	258.99	269.53	273.07	269.18	233.32	181.59
SSP2 - Medium	239.87	261.32	276.37	284.81	285.50	262.13	225.10
SSP3 - Stalled Development	239.87	264.00	284.61	298.63	306.17	303.16	292.13
SSP4 - Inequality	239.87	258.22	266.98	267.61	259.72	211.71	151.54
SSP5 - Conventional Dev.	239.87	258.46	267.91	270.31	265.31	227.37	175.79
Proportion age 65+							
SSP1 - Rapid Development	0.06	0.07	0.11	0.16	0.23	0.40	0.52
SSP2 - Medium	0.06	0.07	0.10	0.14	0.19	0.29	0.35
SSP3 - Stalled Development	0.06	0.07	0.09	0.13	0.16	0.19	0.21
SSP4 - Inequality	0.06	0.07	0.10	0.15	0.21	0.35	0.43
SSP5 - Conventional Dev.	0.06	0.07	0.11	0.17	0.23	0.41	0.53
Proportion below age 20							
SSP1 - Rapid Development	0.36	0.31	0.25	0.20	0.16	0.11	0.09
SSP2 - Medium	0.36	0.32	0.27	0.24	0.21	0.18	0.16
SSP3 - Stalled Development	0.36	0.33	0.30	0.28	0.26	0.24	0.24
SSP4 - Inequality	0.36	0.31	0.25	0.20	0.17	0.13	0.11
SSP5 - Conventional Dev.	0.36	0.31	0.25	0.20	0.16	0.11	0.09
Proportion of Women age 20-39 with at least secondary education							
SSP1 - Rapid Development	0.62	0.79	0.89	0.94	0.96	0.99	1.00
SSP2 - Medium	0.62	0.75	0.83	0.88	0.93	0.98	0.99
SSP3 - Stalled Development	0.62	0.72	0.73	0.73	0.73	0.73	0.73
SSP4 - Inequality	0.62	0.68	0.66	0.66	0.66	0.66	0.66
SSP5 - Conventional Dev.	0.62	0.79	0.89	0.94	0.96	0.99	1.00
Mean years of schooling, age 25+							
SSP1 - Rapid Development	7.96	9.07	10.05	10.90	11.61	13.03	13.98
SSP2 - Medium	7.96	8.93	9.75	10.47	11.10	12.43	13.39
SSP3 - Stalled Development	7.96	8.83	9.41	9.80	10.07	10.32	10.33
SSP4 - Inequality	7.96	8.64	9.04	9.38	9.65	10.12	10.55
SSP5 - Conventional Dev.	7.96	9.07	10.04	10.89	11.60	13.02	13.98

Demographic assumptions underlying SSPs

	2010-2015	2020-2025	2030-2035	2040-2045	2050-2055	2075-2080	2095-2100
Total fertility rate							
SSP1 - Rapid Development	1.94	1.56	1.32	1.20	1.14	1.17	1.20
SSP2 - Medium	2.05	1.84	1.68	1.57	1.52	1.56	1.59
SSP3 - Stalled Development	2.14	2.13	2.05	1.96	1.93	1.98	2.03
SSP4 - Inequality	1.94	1.57	1.33	1.21	1.15	1.18	1.21
SSP5 - Conventional Dev.	1.94	1.56	1.32	1.20	1.14	1.17	1.20
Life expectancy at birth for females (in years)							
SSP1 - Rapid Development	72.9	76.2	79.6	83.1	86.1	92.9	98.4
SSP2 - Medium	70.8	73.5	76.0	78.7	80.9	85.4	89.0
SSP3 - Stalled Development	72.1	73.5	74.9	76.4	77.4	78.9	80.1
SSP4 - Inequality	72.5	74.9	77.2	79.7	81.6	85.4	88.6
SSP5 - Conventional Dev.	72.9	76.2	79.6	83.1	86.1	92.9	98.4
Migration – net flow over five years (in thousands)							
SSP1 - Rapid Development	-1027	-932	-883	-785	-678	-220	0
SSP2 - Medium	-1010	-929	-897	-833	-758	-282	0
SSP3 - Stalled Development	-855	-461	-440	-410	-378	-148	0
SSP4 - Inequality	-1027	-927	-861	-732	-597	-162	0
SSP5 - Conventional Dev.	-1198	-1419	-1383	-1277	-1152	-425	0

Ageing indicators, Medium Scenario (SSP2)

	2010	2020	2030	2040	2050	2075	2095
Median Age	27.75	31.39	35.05	38.62	42.34	49.11	52.29
Propspective Median Age	27.75	29.25	30.86	32.19	34.10	37.14	37.27
Proportion age 65+	0.06	0.07	0.10	0.14	0.19	0.29	0.34
Proportion RLE < 15 years	0.06	0.07	0.08	0.10	0.13	0.17	0.19

MEXICO

Detailed Human Capital projections to 2060

Demographic indicators, Medium Scenario (SSP2)	2010	2020	2030	2040	2050	2060
Population (in millions)	113.4	126.9	138.3	146.9	152.2	154.1
Proportion age 65+	0.06	0.08	0.12	0.16	0.20	0.23
Proportion below age 20	0.39	0.34	0.30	0.27	0.25	0.22
	2005-2010	2015-2020	2025-2030	2035-2040	2045-2050	2055-2060
Total Fertility Rate	2.41	2.20	2.04	1.93	1.84	1.74
Life expectancy at birth (in years)						
Male	73.73	76.21	78.30	80.23	82.19	84.23
Female	78.62	80.99	83.09	85.01	86.91	88.91
Five-year immigration flow (in '000)	123	122	127	130	131	129
Five-year emigration flow (in '000)	1921	1553	1586	1568	1512	1434

Human Capital indicators, Medium Scenario (SSP2)	2010	2020	2030	2040	2050	2060
Population age 25+: highest educational attainment						
E1 - no education	0.09	0.06	0.04	0.02	0.01	0.01
E2 - incomplete primary	0.16	0.12	0.08	0.06	0.04	0.02
E3 - primary	0.22	0.20	0.18	0.16	0.13	0.11
E4 - lower secondary	0.26	0.30	0.30	0.29	0.27	0.25
E5 - upper secondary	0.13	0.16	0.20	0.23	0.26	0.29
E6 - post-secondary	0.14	0.17	0.20	0.24	0.28	0.32
Mean years of schooling (in years)	8.29	9.22	10.00	10.67	11.28	11.83
Gender gap (population age 25+): highest educational attainment (ratio male/female)						
E1 - no education	0.74	0.71	0.69	0.67	0.68	0.69
E2 - incomplete primary	0.95	0.93	0.89	0.85	0.82	0.80
E3 - primary	0.97	0.99	0.99	0.98	0.98	0.97
E4 - lower secondary	0.99	0.99	1.01	1.01	1.01	0.99
E5 - upper secondary	1.16	1.12	1.10	1.09	1.08	1.06
E6 - post-secondary	1.21	1.09	1.03	0.99	0.98	0.99
Mean years of schooling (male minus female)	0.60	0.43	0.30	0.20	0.12	0.09
Women age 20-39: highest educational attainment						
E1 - no education	0.03	0.02	0.01	0.00	0.00	0.00
E2 - incomplete primary	0.07	0.04	0.02	0.01	0.00	0.00
E3 - primary	0.19	0.14	0.12	0.09	0.07	0.05
E4 - lower secondary	0.35	0.33	0.28	0.22	0.16	0.12
E5 - upper secondary	0.20	0.26	0.31	0.35	0.39	0.41
E6 - post-secondary	0.16	0.22	0.27	0.33	0.38	0.42
Mean years of schooling (in years)	9.93	10.87	11.54	12.18	12.69	13.10

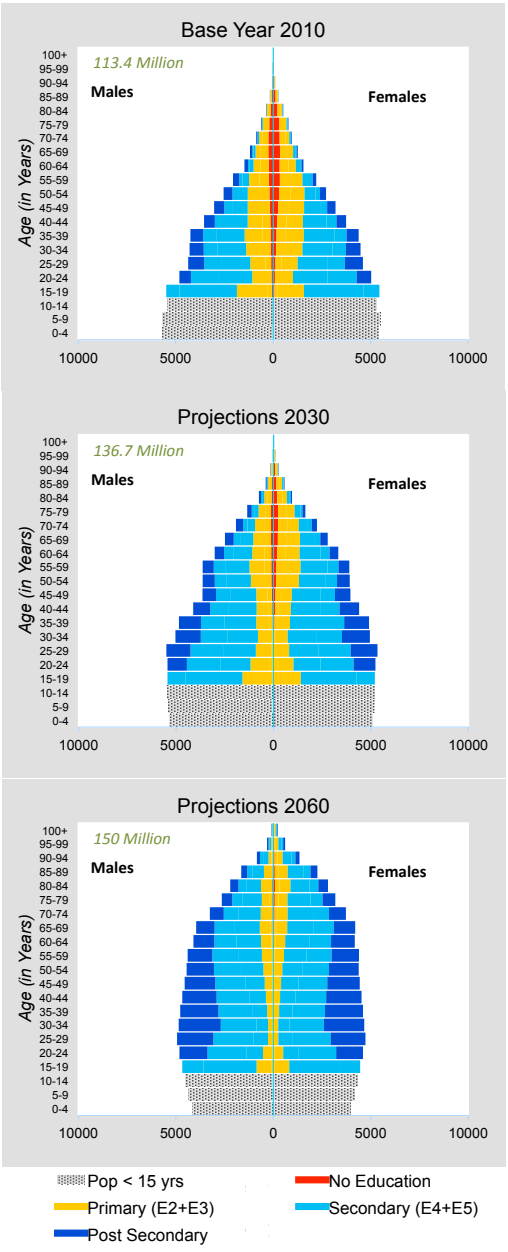
Education scenarios

GET : Global Education Trend Scenario (Medium assumption also used for SSP2)

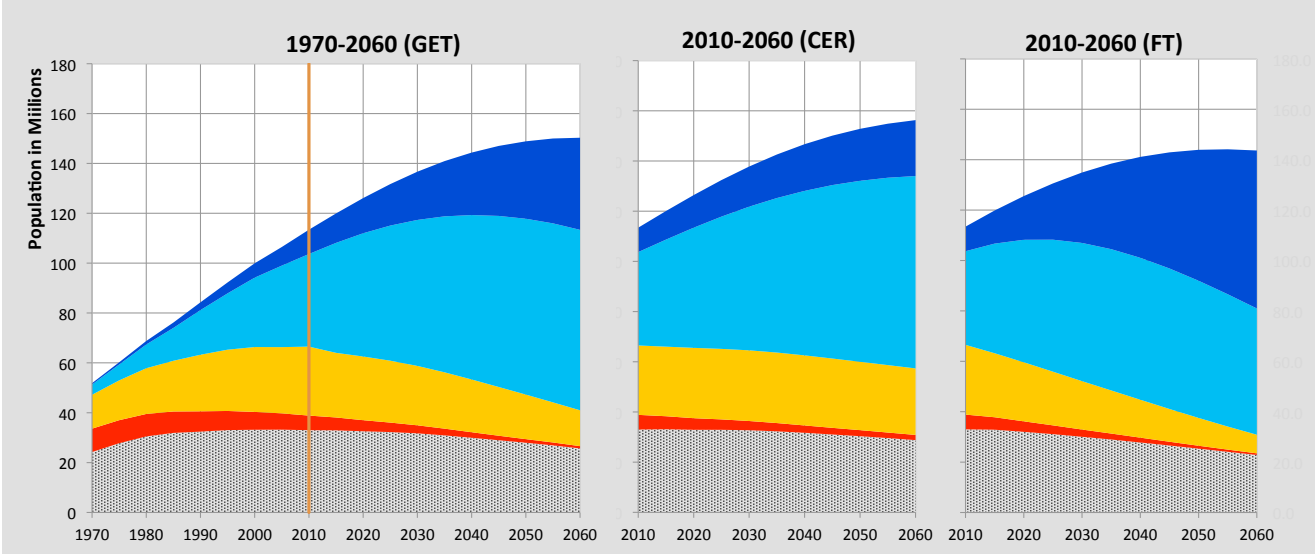
CER: Constant Enrollment Rates Scenario (assumption of no future improvements)

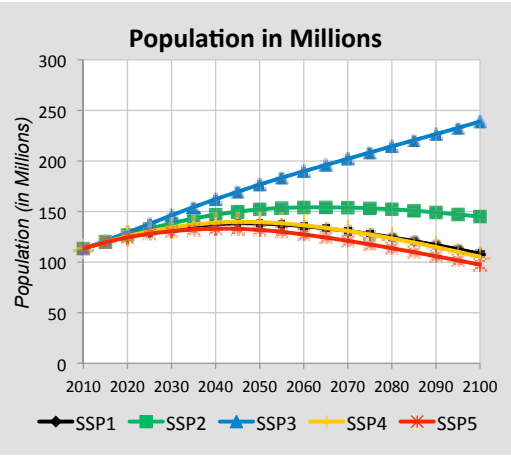
FT: Fast Track Scenario (assumption of education expansion according to fastest historical experience)

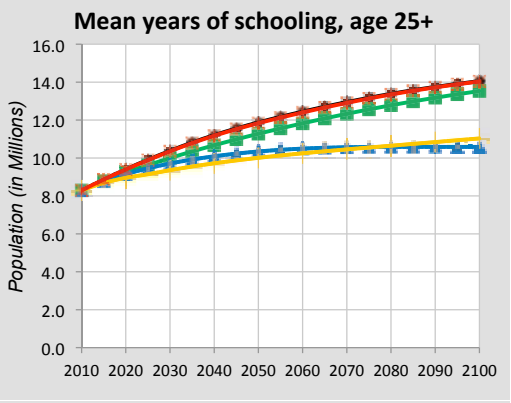
Pyramids by education, Medium Scenario

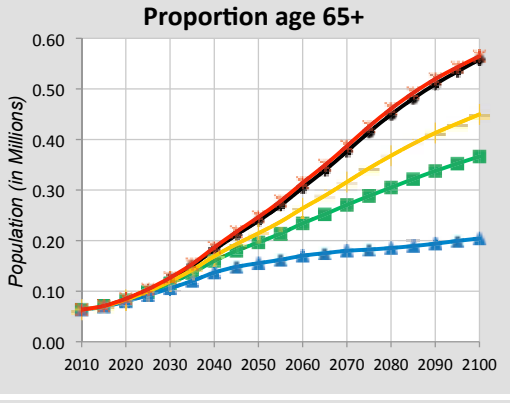


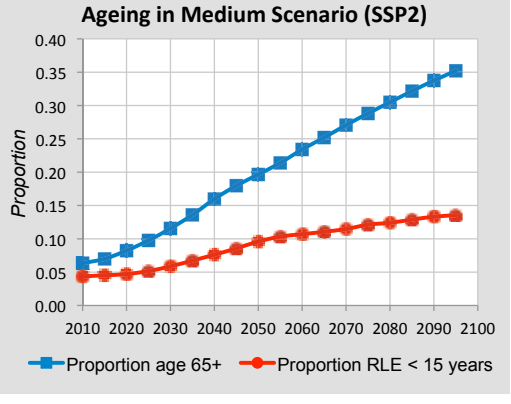
Population size by educational attainment according to three education scenarios: GET, CER, and FT











Alternative scenarios to 2100

Projection results by scenario (SSP 1-5)

	2010	2020	2030	2040	2050	2075	2100
Population (in millions)							
SSP1 - Rapid Development	113.42	125.18	133.07	137.55	138.23	127.79	108.28
SSP2 - Medium	113.42	126.86	138.31	146.91	152.18	153.28	145.08
SSP3 - Stalled Development	113.42	129.27	146.28	162.13	176.69	208.35	238.99
SSP4 - Inequality	113.42	125.56	134.11	138.91	139.47	127.36	105.34
SSP5 - Conventional Dev.	113.42	124.36	130.48	133.05	131.80	117.48	97.50
Proportion age 65+							
SSP1 - Rapid Development	0.06	0.08	0.12	0.18	0.24	0.41	0.56
SSP2 - Medium	0.06	0.08	0.12	0.16	0.20	0.29	0.37
SSP3 - Stalled Development	0.06	0.08	0.11	0.14	0.16	0.18	0.20
SSP4 - Inequality	0.06	0.08	0.12	0.17	0.21	0.34	0.45
SSP5 - Conventional Dev.	0.06	0.09	0.13	0.19	0.25	0.43	0.56
Proportion below age 20							
SSP1 - Rapid Development	0.39	0.33	0.27	0.22	0.18	0.12	0.08
SSP2 - Medium	0.39	0.34	0.30	0.27	0.25	0.19	0.16
SSP3 - Stalled Development	0.39	0.35	0.34	0.32	0.31	0.29	0.27
SSP4 - Inequality	0.39	0.34	0.28	0.24	0.21	0.15	0.11
SSP5 - Conventional Dev.	0.39	0.33	0.27	0.22	0.19	0.12	0.08
Proportion of Women age 20-39 with at least secondary education							
SSP1 - Rapid Development	0.71	0.85	0.91	0.94	0.96	0.98	0.99
SSP2 - Medium	0.71	0.81	0.86	0.90	0.93	0.97	0.99
SSP3 - Stalled Development	0.71	0.79	0.81	0.81	0.81	0.81	0.81
SSP4 - Inequality	0.71	0.75	0.73	0.73	0.73	0.73	0.73
SSP5 - Conventional Dev.	0.71	0.85	0.91	0.94	0.96	0.98	0.99
Mean years of schooling, age 25+							
SSP1 - Rapid Development	8.29	9.40	10.38	11.20	11.87	13.17	14.05
SSP2 - Medium	8.29	9.22	10.00	10.67	11.28	12.56	13.53
SSP3 - Stalled Development	8.29	9.15	9.71	10.09	10.34	10.58	10.59
SSP4 - Inequality	8.29	8.96	9.36	9.72	10.01	10.55	11.03
SSP5 - Conventional Dev.	8.29	9.39	10.35	11.17	11.84	13.14	14.03

Demographic assumptions underlying SSPs

	2010-2015	2020-2025	2030-2035	2040-2045	2050-2055	2075-2080	2095-2100
Total fertility rate							
SSP1 - Rapid Development	2.16	1.74	1.50	1.38	1.30	1.21	1.18
SSP2 - Medium	2.29	2.12	1.98	1.88	1.80	1.64	1.59
SSP3 - Stalled Development	2.42	2.49	2.52	2.48	2.41	2.28	2.24
SSP4 - Inequality	2.20	1.87	1.64	1.50	1.41	1.31	1.27
SSP5 - Conventional Dev.	2.16	1.74	1.50	1.38	1.30	1.21	1.18
Life expectancy at birth for females (in years)							
SSP1 - Rapid Development	81.3	84.0	86.9	89.7	92.6	100.4	106.6
SSP2 - Medium	79.8	82.0	84.1	85.9	87.9	93.1	97.3
SSP3 - Stalled Development	80.5	81.4	82.3	83.1	83.9	86.2	87.9
SSP4 - Inequality	80.8	82.7	84.6	86.3	88.1	92.9	96.9
SSP5 - Conventional Dev.	81.3	84.0	86.9	89.7	92.6	100.4	106.6
Migration – net flow over five years (in thousands)							
SSP1 - Rapid Development	-1521	-1440	-1421	-1313	-1167	-390	0
SSP2 - Medium	-1520	-1456	-1462	-1424	-1356	-544	0
SSP3 - Stalled Development	-1266	-719	-721	-718	-714	-334	0
SSP4 - Inequality	-1521	-1438	-1410	-1280	-1107	-335	0
SSP5 - Conventional Dev.	-1775	-2181	-2190	-2075	-1903	-697	0

Ageing indicators, Medium Scenario (SSP2)

	2010	2020	2030	2040	2050	2075	2095
Median Age	26.60	29.60	33.10	36.52	39.83	47.23	52.34
Propspective Median Age	26.60	27.84	29.55	31.42	32.95	35.54	36.73
Proportion age 65+	0.06	0.08	0.12	0.16	0.20	0.29	0.35
Proportion RLE < 15 years	0.04	0.05	0.06	0.08	0.10	0.12	0.14

NIGERIA

Detailed Human Capital projections to 2060

Demographic indicators, Medium Scenario (SSP2)	2010	2020	2030	2040	2050	2060
Population (in millions)	158.4	201.6	252.8	310.3	370.7	425.3
Proportion age 65+	0.03	0.03	0.04	0.04	0.05	0.06
Proportion below age 20	0.53	0.52	0.50	0.47	0.44	0.40
	2005-2010	2015-2020	2025-2030	2035-2040	2045-2050	2055-2060
Total Fertility Rate	5.61	4.99	4.45	3.93	3.46	2.79
Life expectancy at birth (in years)						
Male	49.50	53.74	55.89	57.38	59.03	61.57
Female	51.02	55.60	58.18	60.28	62.38	65.18
Five-year immigration flow (in '000)	151	147	152	154	153	149
Five-year emigration flow (in '000)	436	408	512	626	744	862

Human Capital indicators, Medium Scenario (SSP2)	2010	2020	2030	2040	2050	2060
Population age 25+: highest educational attainment						
E1 - no education	0.40	0.29	0.20	0.13	0.08	0.05
E2 - incomplete primary	0.06	0.05	0.03	0.02	0.01	0.01
E3 - primary	0.19	0.17	0.14	0.11	0.09	0.06
E4 - lower secondary	0.05	0.08	0.09	0.09	0.08	0.06
E5 - upper secondary	0.19	0.26	0.33	0.38	0.42	0.44
E6 - post-secondary	0.12	0.16	0.21	0.26	0.32	0.38
Mean years of schooling (in years)	6.13	7.71	9.22	10.54	11.62	12.48
Gender gap (population age 25+): highest educational attainment (ratio male/female)						
E1 - no education	0.60	0.59	0.59	0.60	0.62	0.65
E2 - incomplete primary	0.73	0.73	0.74	0.76	0.79	0.81
E3 - primary	1.15	0.98	0.88	0.83	0.82	0.83
E4 - lower secondary	1.33	1.21	1.10	1.03	1.00	0.97
E5 - upper secondary	1.80	1.45	1.26	1.15	1.09	1.05
E6 - post-secondary	1.81	1.46	1.27	1.14	1.08	1.04
Mean years of schooling (male minus female)	2.63	2.16	1.61	1.08	0.66	0.38
Women age 20-39: highest educational attainment						
E1 - no education	0.34	0.21	0.11	0.05	0.02	0.01
E2 - incomplete primary	0.05	0.04	0.03	0.01	0.01	0.00
E3 - primary	0.19	0.16	0.13	0.09	0.06	0.03
E4 - lower secondary	0.09	0.11	0.11	0.10	0.08	0.07
E5 - upper secondary	0.24	0.34	0.43	0.48	0.51	0.52
E6 - post-secondary	0.10	0.15	0.20	0.26	0.32	0.37
Mean years of schooling (in years)	6.70	8.70	10.35	11.60	12.48	13.07

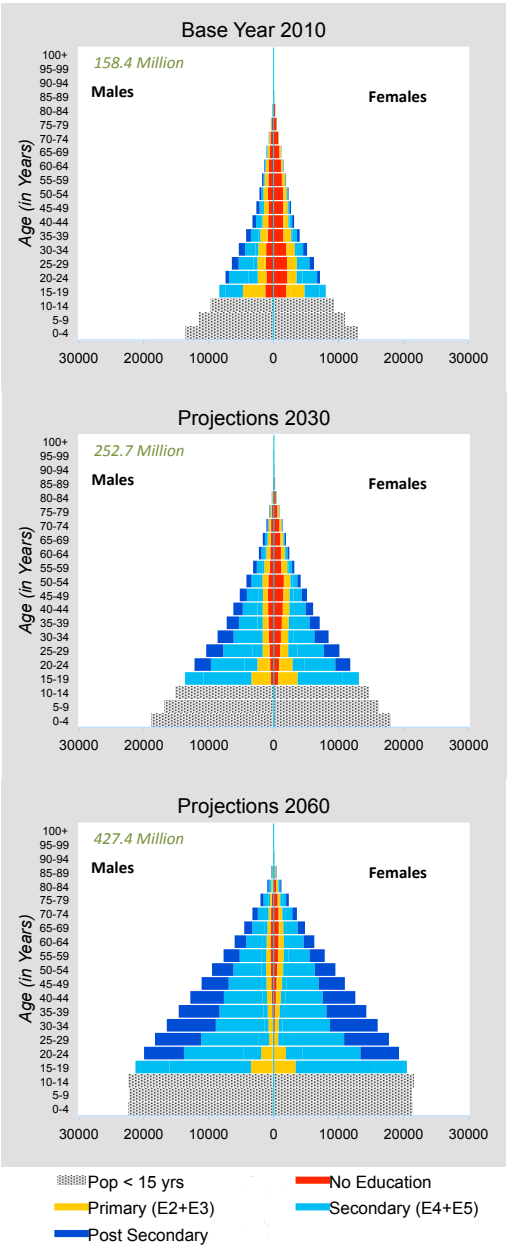
Education scenarios

GET : Global Education Trend Scenario (Medium assumption also used for SSP2)

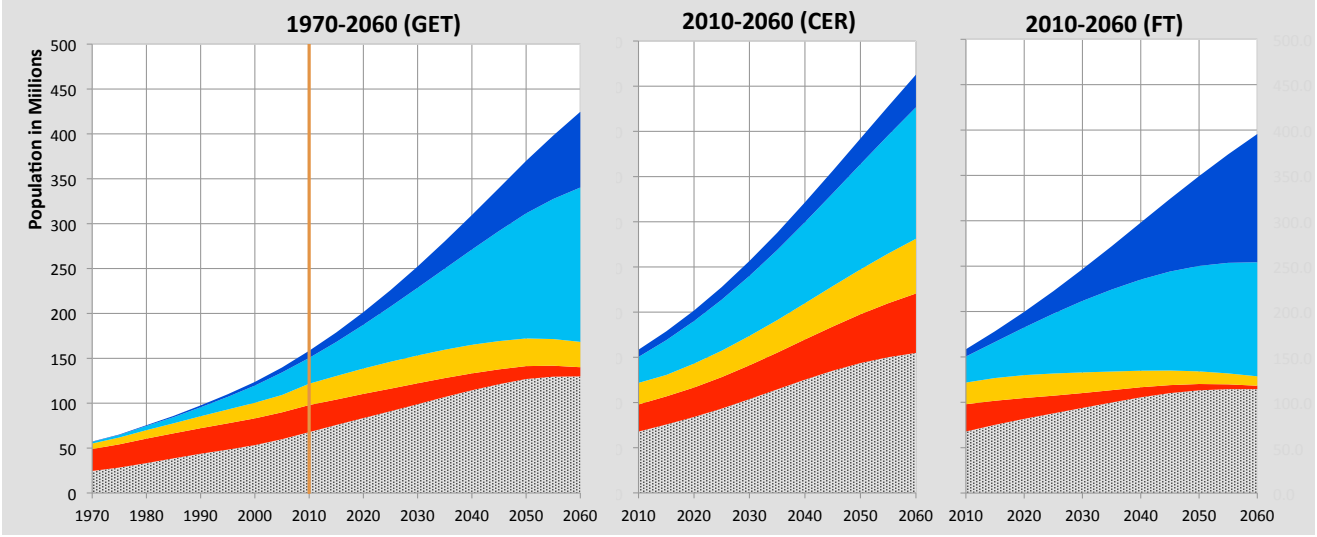
CER: Constant Enrollment Rates Scenario (assumption of no future improvements)

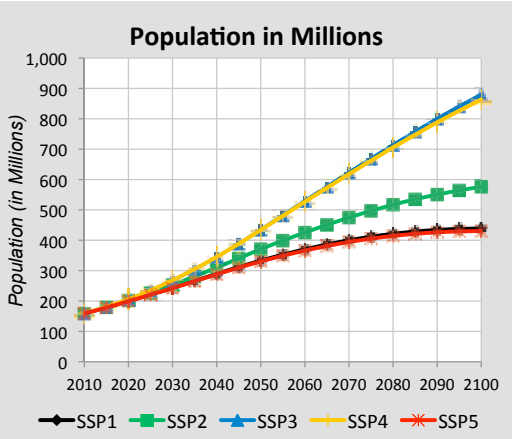
FT: Fast Track Scenario (assumption of education expansion according to fastest historical experience)

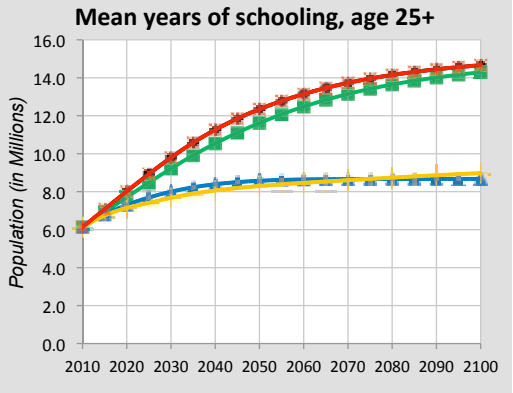
Pyramids by education, Medium Scenario

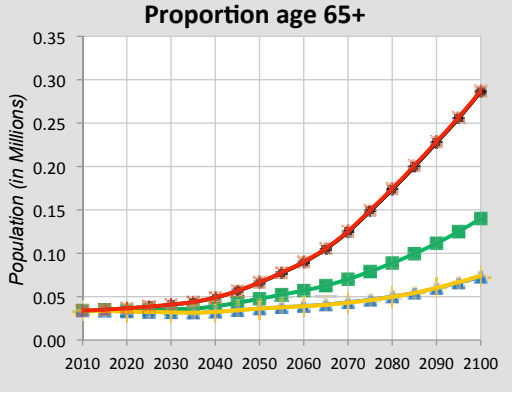


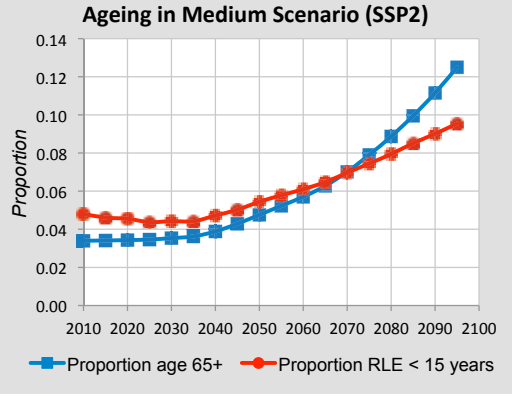
Population size by educational attainment according to three education scenarios: GET, CER, and FT











Alternative scenarios to 2100

Projection results by scenario (SSP 1-5)

	2010	2020	2030	2040	2050	2075	2100
Population (in millions)							
SSP1 - Rapid Development	158.42	199.14	242.96	289.16	332.77	411.59	438.71
SSP2 - Medium	158.42	201.62	252.76	310.28	370.67	496.64	576.13
SSP3 - Stalled Development	158.42	205.74	267.95	345.15	434.57	668.10	879.43
SSP4 - Inequality	158.42	205.81	268.21	345.17	433.84	661.92	862.98
SSP5 - Conventional Dev.	158.42	198.98	242.30	287.70	330.19	405.26	430.39
Proportion age 65+							
SSP1 - Rapid Development	0.03	0.04	0.04	0.05	0.07	0.15	0.29
SSP2 - Medium	0.03	0.03	0.04	0.04	0.05	0.08	0.14
SSP3 - Stalled Development	0.03	0.03	0.03	0.03	0.04	0.05	0.07
SSP4 - Inequality	0.03	0.03	0.03	0.03	0.04	0.05	0.07
SSP5 - Conventional Dev.	0.03	0.04	0.04	0.05	0.07	0.15	0.29
Proportion below age 20							
SSP1 - Rapid Development	0.53	0.51	0.46	0.41	0.37	0.25	0.17
SSP2 - Medium	0.53	0.52	0.50	0.47	0.44	0.34	0.26
SSP3 - Stalled Development	0.53	0.53	0.53	0.53	0.51	0.43	0.36
SSP4 - Inequality	0.53	0.53	0.54	0.53	0.51	0.43	0.36
SSP5 - Conventional Dev.	0.53	0.51	0.46	0.41	0.37	0.25	0.17
Proportion of Women age 20-39 with at least secondary education							
SSP1 - Rapid Development	0.42	0.64	0.80	0.89	0.94	0.98	0.99
SSP2 - Medium	0.42	0.59	0.73	0.84	0.91	0.98	1.00
SSP3 - Stalled Development	0.42	0.49	0.50	0.50	0.50	0.50	0.50
SSP4 - Inequality	0.42	0.46	0.45	0.45	0.45	0.45	0.45
SSP5 - Conventional Dev.	0.42	0.64	0.80	0.89	0.94	0.98	0.99
Mean years of schooling, age 25+							
SSP1 - Rapid Development	6.13	8.02	9.80	11.27	12.35	13.96	14.66
SSP2 - Medium	6.13	7.71	9.22	10.54	11.62	13.42	14.29
SSP3 - Stalled Development	6.13	7.31	8.00	8.39	8.57	8.66	8.67
SSP4 - Inequality	6.13	7.15	7.68	8.06	8.30	8.67	8.98
SSP5 - Conventional Dev.	6.13	8.01	9.79	11.26	12.34	13.96	14.66

Demographic assumptions underlying SSPs

	2010-2015	2020-2025	2030-2035	2040-2045	2050-2055	2075-2080	2095-2100
Total fertility rate							
SSP1 - Rapid Development	5.01	3.90	3.15	2.67	2.24	1.56	1.38
SSP2 - Medium	5.27	4.72	4.18	3.69	3.08	2.11	1.87
SSP3 - Stalled Development	5.63	5.79	5.74	5.35	4.66	3.16	2.77
SSP4 - Inequality	5.64	5.85	5.80	5.37	4.65	3.11	2.72
SSP5 - Conventional Dev.	5.01	3.90	3.16	2.67	2.24	1.56	1.38
Life expectancy at birth for females (in years)							
SSP1 - Rapid Development	58.5	65.0	69.1	72.9	76.7	85.9	93.3
SSP2 - Medium	53.4	56.9	59.3	61.2	63.7	71.1	76.9
SSP3 - Stalled Development	56.0	55.0	56.0	56.8	57.5	61.4	64.5
SSP4 - Inequality	56.0	54.9	55.9	56.7	57.4	61.3	64.5
SSP5 - Conventional Dev.	58.5	65.0	69.1	72.9	76.7	85.9	93.3
Migration – net flow over five years (in thousands)							
SSP1 - Rapid Development	-244	-303	-407	-509	-604	-335	0
SSP2 - Medium	-245	-303	-410	-527	-650	-401	0
SSP3 - Stalled Development	-202	-146	-194	-250	-315	-209	0
SSP4 - Inequality	-242	-298	-407	-539	-694	-462	0
SSP5 - Conventional Dev.	-285	-462	-642	-836	-1043	-661	0

Ageing indicators, Medium Scenario (SSP2)

	2010	2020	2030	2040	2050	2075	2095
Median Age	18.41	18.96	20.15	21.49	23.09	29.54	35.54
Propspective Median Age	18.41	17.17	17.11	17.28	17.59	19.60	21.53
Proportion age 65+	0.03	0.03	0.04	0.04	0.05	0.08	0.13
Proportion RLE < 15 years	0.05	0.05	0.04	0.05	0.05	0.07	0.10

PAKISTAN

Detailed Human Capital projections to 2060

Demographic indicators, Medium Scenario (SSP2)	2010	2020	2030	2040	2050	2060
Population (in millions)	173.6	206.5	237.2	263.8	286.3	301.7
Proportion age 65+	0.04	0.05	0.06	0.07	0.10	0.13
Proportion below age 20	0.47	0.42	0.39	0.34	0.31	0.28
	2005-2010	2015-2020	2025-2030	2035-2040	2045-2050	2055-2060
Total Fertility Rate	3.65	3.07	2.65	2.40	2.19	1.99
Life expectancy at birth (in years)						
Male	63.78	65.28	67.03	68.85	70.70	72.73
Female	65.42	67.62	69.88	72.12	74.18	76.39
Five-year immigration flow (in '000)	44	43	44	45	45	44
Five-year emigration flow (in '000)	2029	1808	1959	2107	2175	2172

Human Capital indicators, Medium Scenario (SSP2)	2010	2020	2030	2040	2050	2060
Population age 25+: highest educational attainment						
E1 - no education	0.57	0.49	0.41	0.34	0.27	0.20
E2 - incomplete primary	0.05	0.04	0.04	0.03	0.03	0.02
E3 - primary	0.10	0.11	0.12	0.12	0.12	0.12
E4 - lower secondary	0.09	0.11	0.11	0.12	0.12	0.12
E5 - upper secondary	0.14	0.18	0.23	0.29	0.34	0.40
E6 - post-secondary	0.05	0.07	0.08	0.10	0.12	0.14
Mean years of schooling (in years)	3.78	4.76	5.73	6.72	7.74	8.70
Gender gap (population age 25+): highest educational attainment (ratio male/female)						
E1 - no education	0.65	0.65	0.66	0.68	0.70	0.72
E2 - incomplete primary	1.51	1.48	1.36	1.26	1.17	1.09
E3 - primary	1.49	1.28	1.16	1.09	1.04	1.01
E4 - lower secondary	2.26	1.84	1.61	1.44	1.31	1.20
E5 - upper secondary	1.82	1.44	1.25	1.14	1.08	1.05
E6 - post-secondary	2.01	1.75	1.55	1.39	1.26	1.17
Mean years of schooling (male minus female)	2.26	2.02	1.71	1.37	1.04	0.78
Women age 20-39: highest educational attainment						
E1 - no education	0.56	0.44	0.32	0.22	0.14	0.08
E2 - incomplete primary	0.04	0.03	0.02	0.02	0.01	0.01
E3 - primary	0.11	0.12	0.13	0.13	0.12	0.10
E4 - lower secondary	0.08	0.10	0.11	0.11	0.11	0.10
E5 - upper secondary	0.17	0.25	0.33	0.41	0.49	0.54
E6 - post-secondary	0.05	0.07	0.09	0.11	0.15	0.18
Mean years of schooling (in years)	4.05	5.51	6.97	8.43	9.67	10.72

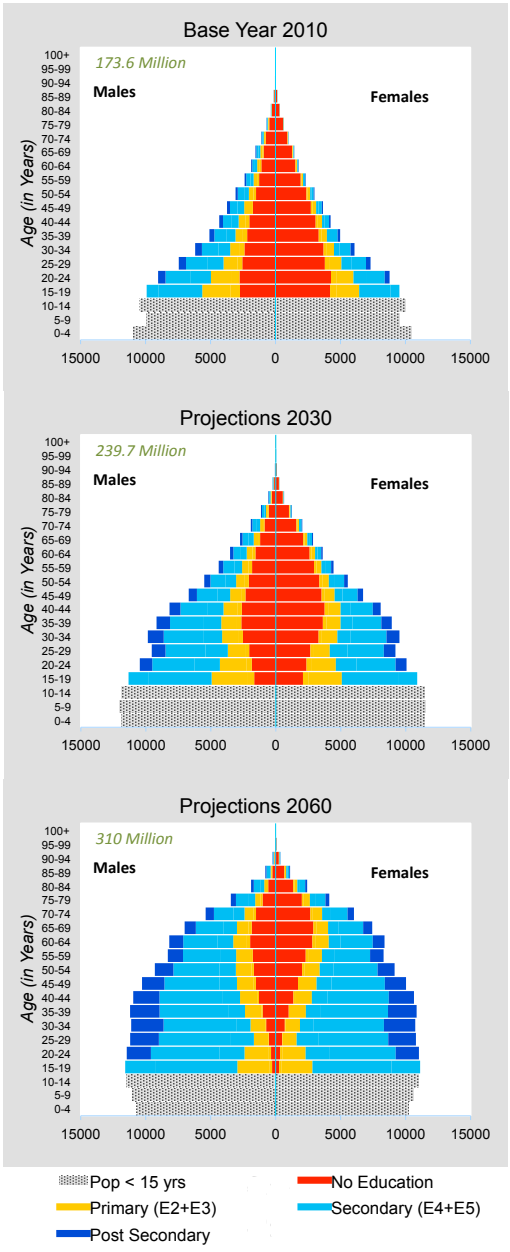
Education scenarios

GET : Global Education Trend Scenario (Medium assumption also used for SSP2)

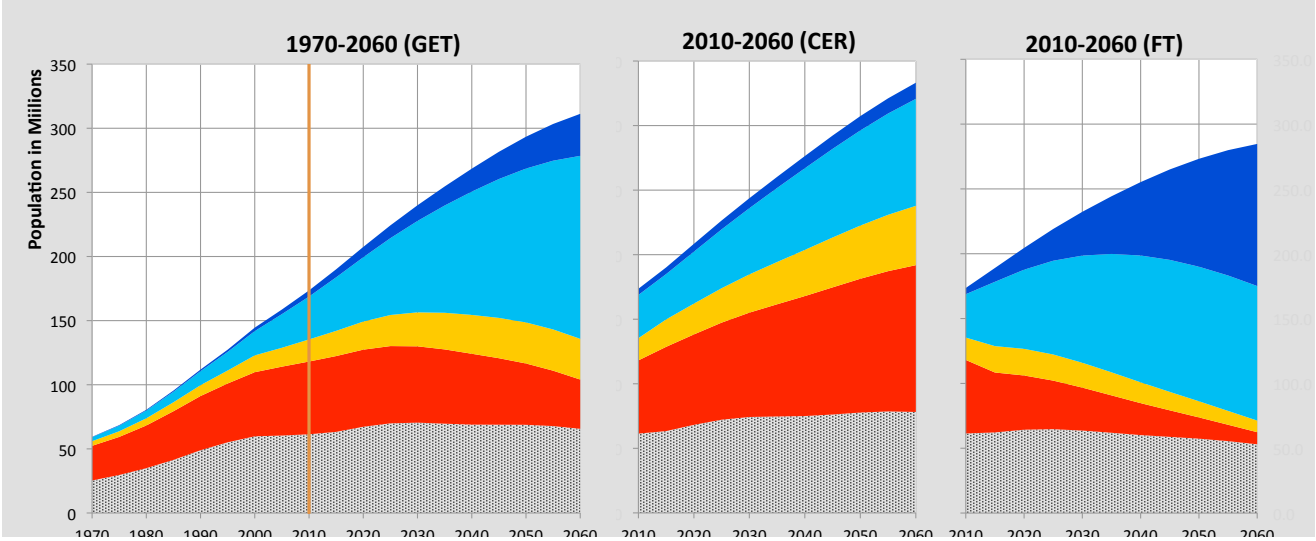
CER: Constant Enrollment Rates Scenario (assumption of no future improvements)

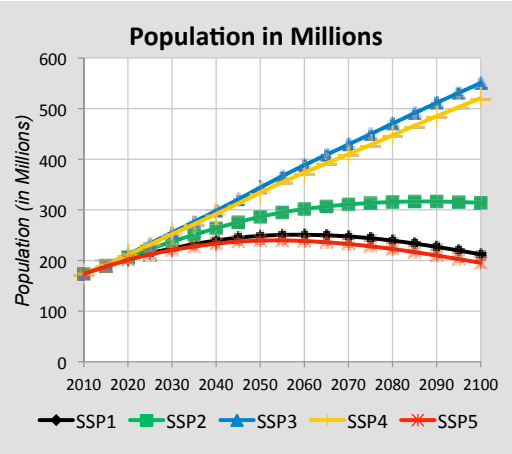
FT: Fast Track Scenario (assumption of education expansion according to fastest historical experience)

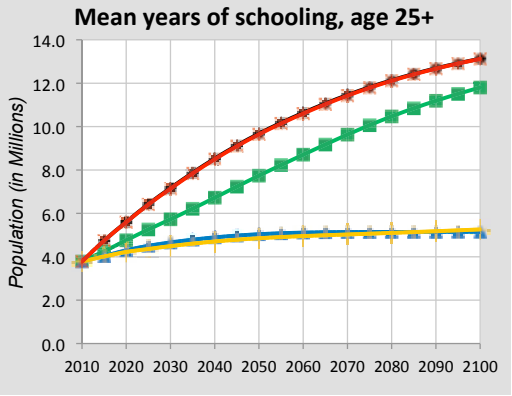
Pyramids by education, Medium Scenario

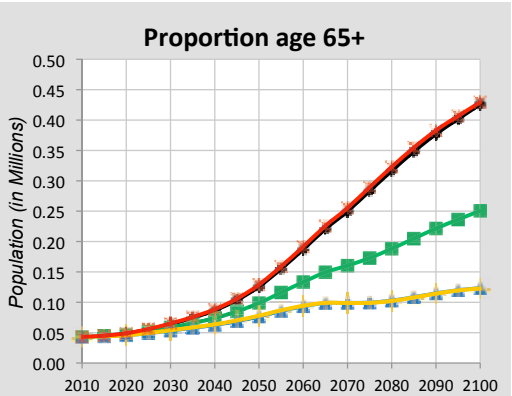


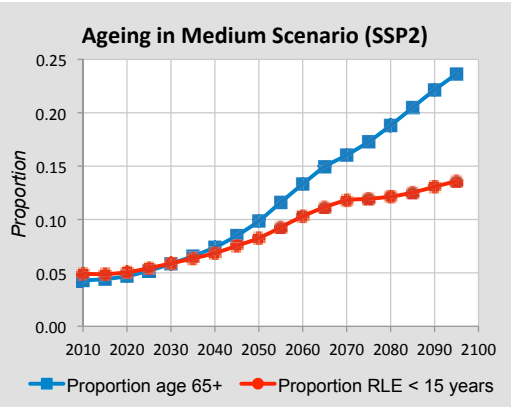
Population size by educational attainment according to three education scenarios: GET, CER, and FT











Alternative scenarios to 2100

Projection results by scenario (SSP 1-5)

	2010	2020	2030	2040	2050	2075	2100
Population (in millions)							
SSP1 - Rapid Development	173.59	202.00	223.81	239.42	248.62	243.97	212.16
SSP2 - Medium	173.59	206.52	237.24	263.76	286.35	313.69	313.97
SSP3 - Stalled Development	173.59	211.83	255.17	298.14	344.12	449.70	550.59
SSP4 - Inequality	173.59	210.89	251.90	291.81	333.95	428.47	521.04
SSP5 - Conventional Dev.	173.59	200.98	220.40	233.23	239.38	228.13	195.47
Proportion age 65+							
SSP1 - Rapid Development	0.04	0.05	0.06	0.09	0.13	0.28	0.43
SSP2 - Medium	0.04	0.05	0.06	0.07	0.10	0.17	0.25
SSP3 - Stalled Development	0.04	0.05	0.05	0.06	0.08	0.10	0.12
SSP4 - Inequality	0.04	0.05	0.05	0.06	0.08	0.10	0.12
SSP5 - Conventional Dev.	0.04	0.05	0.07	0.09	0.13	0.29	0.43
Proportion below age 20							
SSP1 - Rapid Development	0.47	0.40	0.34	0.28	0.24	0.16	0.11
SSP2 - Medium	0.47	0.42	0.39	0.34	0.31	0.24	0.20
SSP3 - Stalled Development	0.47	0.43	0.42	0.40	0.38	0.34	0.31
SSP4 - Inequality	0.47	0.43	0.43	0.40	0.38	0.34	0.31
SSP5 - Conventional Dev.	0.47	0.40	0.35	0.29	0.24	0.16	0.11
Proportion of Women age 20-39 with at least secondary education							
SSP1 - Rapid Development	0.30	0.54	0.69	0.78	0.85	0.94	0.98
SSP2 - Medium	0.30	0.41	0.52	0.64	0.74	0.90	0.97
SSP3 - Stalled Development	0.30	0.28	0.28	0.28	0.28	0.28	0.28
SSP4 - Inequality	0.30	0.26	0.25	0.25	0.25	0.25	0.25
SSP5 - Conventional Dev.	0.30	0.54	0.69	0.78	0.85	0.94	0.98
Mean years of schooling, age 25+							
SSP1 - Rapid Development	3.78	5.60	7.16	8.53	9.68	11.81	13.13
SSP2 - Medium	3.78	4.76	5.73	6.72	7.74	10.07	11.80
SSP3 - Stalled Development	3.78	4.30	4.66	4.89	5.04	5.14	5.15
SSP4 - Inequality	3.78	4.22	4.49	4.70	4.85	5.06	5.26
SSP5 - Conventional Dev.	3.78	5.59	7.14	8.49	9.64	11.79	13.12

Demographic assumptions underlying SSPs

	2010-2015	2020-2025	2030-2035	2040-2045	2050-2055	2075-2080	2095-2100
Total fertility rate							
SSP1 - Rapid Development	3.08	2.29	1.85	1.62	1.47	1.28	1.20
SSP2 - Medium	3.32	2.85	2.52	2.29	2.08	1.77	1.64
SSP3 - Stalled Development	3.52	3.48	3.35	3.17	2.98	2.63	2.51
SSP4 - Inequality	3.53	3.50	3.36	3.18	2.97	2.60	2.47
SSP5 - Conventional Dev.	3.08	2.29	1.85	1.62	1.47	1.28	1.20
Life expectancy at birth for females (in years)							
SSP1 - Rapid Development	70.9	73.2	76.1	78.9	81.8	89.3	95.3
SSP2 - Medium	66.5	68.7	71.0	73.1	75.3	80.9	85.4
SSP3 - Stalled Development	70.4	70.9	71.9	72.8	73.5	75.3	76.7
SSP4 - Inequality	70.4	70.9	71.9	72.8	73.4	75.2	76.7
SSP5 - Conventional Dev.	70.9	73.2	76.1	78.9	81.8	89.3	95.3
Migration – net flow over five years (in thousands)							
SSP1 - Rapid Development	-1775	-1820	-1921	-1926	-1823	-697	0
SSP2 - Medium	-1763	-1835	-1988	-2114	-2142	-984	0
SSP3 - Stalled Development	-1477	-908	-983	-1074	-1134	-602	0
SSP4 - Inequality	-1774	-1839	-2032	-2265	-2423	-1282	0
SSP5 - Conventional Dev.	-2071	-2763	-2984	-3084	-3026	-1286	0

Ageing indicators, Medium Scenario (SSP2)

	2010	2020	2030	2040	2050	2075	2095
Median Age	21.61	24.32	26.89	29.49	32.41	39.26	44.36
Propspective Median Age	21.61	23.19	24.61	26.07	27.76	30.90	32.47
Proportion age 65+	0.04	0.05	0.06	0.07	0.10	0.17	0.24
Proportion RLE < 15 years	0.05	0.05	0.06	0.07	0.08	0.12	0.14

REPUBLIC OF KOREA

Detailed Human Capital projections to 2060

Demographic indicators, Medium Scenario (SSP2)	2010	2020	2030	2040	2050	2060
Population (in millions)	48.2	49.6	50.0	48.9	46.4	43.0
Proportion age 65+	0.11	0.16	0.24	0.32	0.37	0.40
Proportion below age 20	0.24	0.18	0.17	0.16	0.14	0.14
	2005-2010	2015-2020	2025-2030	2035-2040	2045-2050	2055-2060
Total Fertility Rate	1.29	1.32	1.38	1.40	1.40	1.41
Life expectancy at birth (in years)						
Male	76.48	78.36	80.40	82.36	84.41	86.45
Female	83.26	85.01	86.91	88.81	90.79	92.80
Five-year immigration flow (in '000)	80	79	82	84	84	83
Five-year emigration flow (in '000)	110	75	62	53	47	41

Human Capital indicators, Medium Scenario (SSP2)	2010	2020	2030	2040	2050	2060
Population age 25+: highest educational attainment						
E1 - no education	0.05	0.02	0.01	0.00	0.00	0.00
E2 - incomplete primary	0.01	0.01	0.00	0.00	0.00	0.00
E3 - primary	0.11	0.08	0.05	0.03	0.01	0.00
E4 - lower secondary	0.10	0.08	0.06	0.04	0.02	0.01
E5 - upper secondary	0.37	0.36	0.34	0.32	0.28	0.24
E6 - post-secondary	0.36	0.45	0.53	0.60	0.68	0.75
Mean years of schooling (in years)	11.85	12.76	13.50	14.08	14.55	14.93
Gender gap (population age 25+): highest educational attainment (ratio male/female)						
E1 - no education	0.25	0.22	0.24	0.37	0.57	0.77
E2 - incomplete primary	0.41	0.35	0.32	0.35	0.40	0.54
E3 - primary	0.60	0.49	0.41	0.35	0.32	0.34
E4 - lower secondary	0.87	0.77	0.66	0.55	0.48	0.50
E5 - upper secondary	1.07	1.03	0.97	0.92	0.87	0.87
E6 - post-secondary	1.35	1.25	1.19	1.15	1.10	1.06
Mean years of schooling (male minus female)	1.51	1.17	0.85	0.60	0.39	0.21
Women age 20-39: highest educational attainment						
E1 - no education	0.00	0.00	0.00	0.00	0.00	0.00
E2 - incomplete primary	0.00	0.00	0.00	0.00	0.00	0.00
E3 - primary	0.00	0.00	0.00	0.00	0.00	0.00
E4 - lower secondary	0.01	0.01	0.00	0.00	0.00	0.00
E5 - upper secondary	0.43	0.34	0.29	0.29	0.28	0.28
E6 - post-secondary	0.55	0.65	0.71	0.71	0.71	0.72
Mean years of schooling (in years)	14.12	14.56	14.80	14.81	14.82	14.86

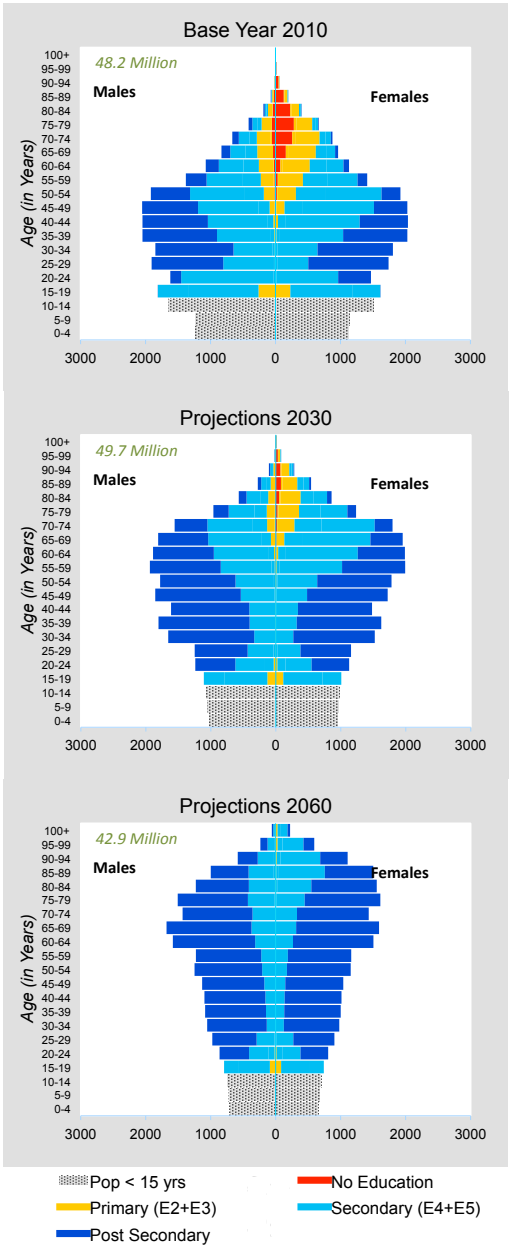
Education scenarios

GET : Global Education Trend Scenario (Medium assumption also used for SSP2)

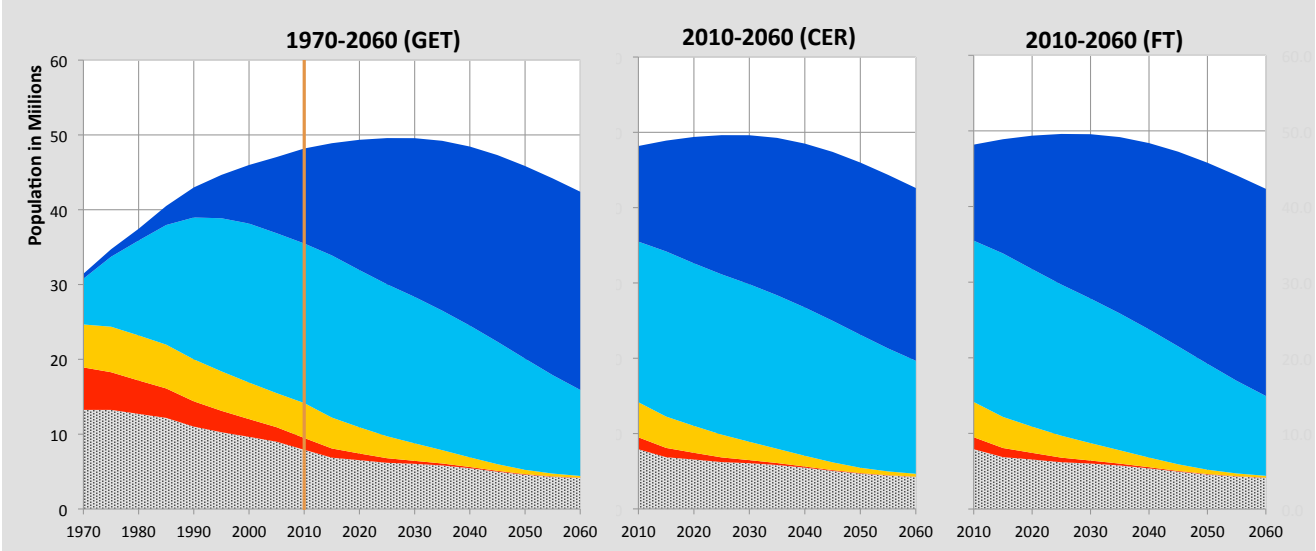
CER: Constant Enrollment Rates Scenario (assumption of no future improvements)

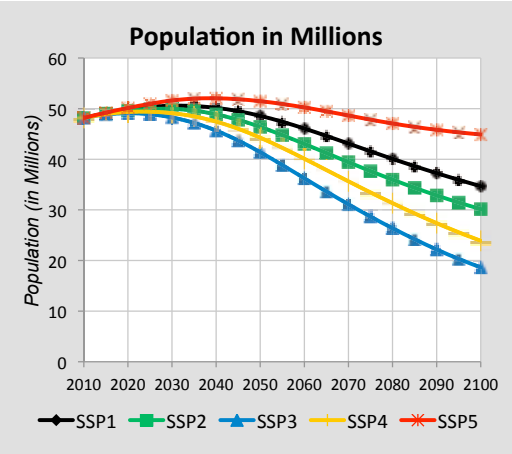
FT: Fast Track Scenario (assumption of education expansion according to fastest historical experience)

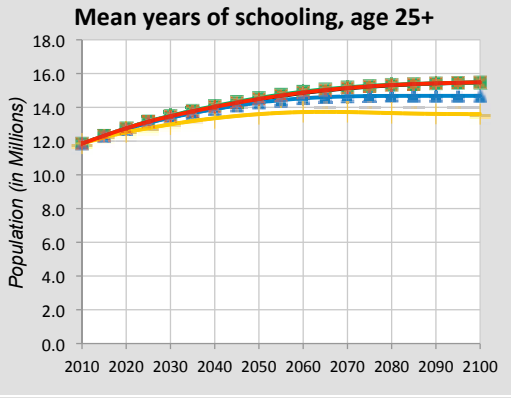
Pyramids by education, Medium Scenario

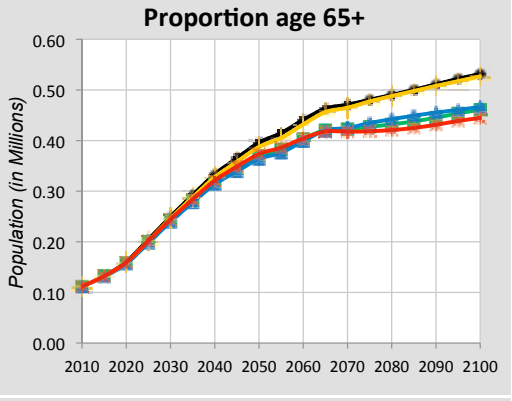


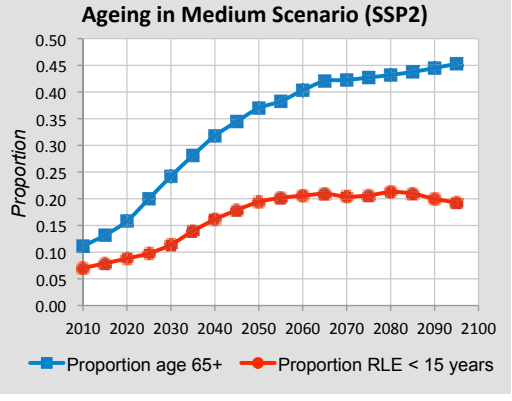
Population size by educational attainment according to three education scenarios: GET, CER, and FT











Alternative scenarios to 2100

Projection results by scenario (SSP 1-5)

	2010	2020	2030	2040	2050	2075	2100
Population (in millions)							
SSP1 - Rapid Development	48.18	49.81	50.56	50.15	48.57	41.58	34.68
SSP2 - Medium	48.18	49.61	49.95	48.88	46.39	37.66	30.15
SSP3 - Stalled Development	48.18	49.10	48.26	45.66	41.40	28.68	18.63
SSP4 - Inequality	48.18	49.34	49.10	47.43	44.27	33.45	23.89
SSP5 - Conventional Dev.	48.18	50.14	51.62	52.05	51.48	47.83	44.89
Proportion age 65+							
SSP1 - Rapid Development	0.11	0.16	0.25	0.33	0.40	0.48	0.53
SSP2 - Medium	0.11	0.16	0.24	0.32	0.37	0.43	0.46
SSP3 - Stalled Development	0.11	0.16	0.24	0.31	0.36	0.43	0.47
SSP4 - Inequality	0.11	0.16	0.25	0.33	0.39	0.48	0.53
SSP5 - Conventional Dev.	0.11	0.16	0.24	0.32	0.37	0.42	0.44
Proportion below age 20							
SSP1 - Rapid Development	0.24	0.18	0.17	0.15	0.13	0.12	0.11
SSP2 - Medium	0.24	0.18	0.17	0.16	0.14	0.13	0.13
SSP3 - Stalled Development	0.24	0.18	0.15	0.13	0.12	0.11	0.10
SSP4 - Inequality	0.24	0.18	0.16	0.14	0.12	0.10	0.10
SSP5 - Conventional Dev.	0.24	0.19	0.18	0.17	0.16	0.16	0.16
Proportion of Women age 20-39 with at least secondary education							
SSP1 - Rapid Development	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SSP2 - Medium	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SSP3 - Stalled Development	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SSP4 - Inequality	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SSP5 - Conventional Dev.	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Mean years of schooling, age 25+							
SSP1 - Rapid Development	11.85	12.76	13.47	14.02	14.48	15.22	15.48
SSP2 - Medium	11.85	12.76	13.50	14.08	14.55	15.27	15.47
SSP3 - Stalled Development	11.85	12.71	13.38	13.90	14.28	14.67	14.68
SSP4 - Inequality	11.85	12.53	12.99	13.35	13.60	13.69	13.60
SSP5 - Conventional Dev.	11.85	12.76	13.47	14.03	14.49	15.24	15.48

Demographic assumptions underlying SSPs

	2010-2015	2020-2025	2030-2035	2040-2045	2050-2055	2075-2080	2095-2100
Total fertility rate							
SSP1 - Rapid Development	1.30	1.35	1.38	1.39	1.40	1.46	1.51
SSP2 - Medium	1.30	1.35	1.40	1.40	1.40	1.46	1.51
SSP3 - Stalled Development	1.24	1.15	1.11	1.08	1.07	1.12	1.15
SSP4 - Inequality	1.24	1.19	1.17	1.15	1.14	1.18	1.22
SSP5 - Conventional Dev.	1.37	1.55	1.68	1.73	1.75	1.82	1.88
Life expectancy at birth for females (in years)							
SSP1 - Rapid Development	85.3	88.0	90.7	93.6	96.5	103.9	109.8
SSP2 - Medium	84.1	85.9	87.9	89.8	91.8	96.8	100.8
SSP3 - Stalled Development	84.3	85.1	85.8	86.8	87.6	89.9	91.9
SSP4 - Inequality	84.8	86.6	88.3	90.2	92.1	96.7	100.5
SSP5 - Conventional Dev.	85.3	88.0	90.7	93.6	96.5	103.9	109.8
Migration – net flow over five years (in thousands)							
SSP1 - Rapid Development	-9	12	25	33	37	15	0
SSP2 - Medium	-8	12	26	34	39	17	0
SSP3 - Stalled Development	-7	6	13	17	20	9	0
SSP4 - Inequality	-9	12	25	33	37	16	0
SSP5 - Conventional Dev.	-10	18	38	50	58	26	0

Ageing indicators, Medium Scenario (SSP2)

	2010	2020	2030	2040	2050	2075	2095
Median Age	37.93	43.32	48.01	51.93	55.40	58.80	61.07
Propspective Median Age	37.93	41.59	44.44	46.66	48.41	47.22	45.61
Proportion age 65+	0.11	0.16	0.24	0.32	0.37	0.43	0.45
Proportion RLE < 15 years	0.07	0.09	0.11	0.16	0.19	0.21	0.19

RUSSIAN FEDERATION

Detailed Human Capital projections to 2060

Demographic indicators, Medium Scenario (SSP2)	2010	2020	2030	2040	2050	2060
Population (in millions)	143.0	142.1	138.5	134.9	132.2	128.9
Proportion age 65+	0.13	0.15	0.19	0.20	0.24	0.27
Proportion below age 20	0.21	0.22	0.21	0.19	0.20	0.20
	2005-2010	2015-2020	2025-2030	2035-2040	2045-2050	2055-2060
Total Fertility Rate	1.44	1.56	1.51	1.58	1.68	1.70
Life expectancy at birth (in years)						
Male	61.56	64.94	68.13	70.90	73.45	76.10
Female	74.03	76.00	78.09	79.99	81.89	83.99
Five-year immigration flow (in '000)	1399	1376	1431	1464	1466	1445
Five-year emigration flow (in '000)	267	167	151	142	129	122

Human Capital indicators, Medium Scenario (SSP2)	2010	2020	2030	2040	2050	2060
Population age 25+: highest educational attainment						
E1 - no education	0.00	0.00	0.00	0.00	0.00	0.00
E2 - incomplete primary	0.00	0.00	0.00	0.00	0.00	0.00
E3 - primary	0.04	0.01	0.01	0.00	0.00	0.00
E4 - lower secondary	0.08	0.05	0.03	0.02	0.01	0.01
E5 - upper secondary	0.67	0.71	0.72	0.71	0.69	0.68
E6 - post-secondary	0.21	0.23	0.25	0.27	0.29	0.31
Mean years of schooling (in years)	10.44	10.93	11.24	11.53	11.80	12.05
Gender gap (population age 25+): highest educational attainment (ratio male/female)						
E1 - no education	0.65	0.80	0.89	0.89	0.90	0.93
E2 - incomplete primary	0.56	0.69	0.83	0.87	0.88	0.91
E3 - primary	0.62	0.66	0.86	1.13	1.21	1.20
E4 - lower secondary	0.92	1.00	1.15	1.24	1.21	1.14
E5 - upper secondary	1.08	1.08	1.08	1.08	1.08	1.07
E6 - post-secondary	0.88	0.81	0.79	0.79	0.82	0.87
Mean years of schooling (male minus female)	0.03	-0.10	-0.16	-0.15	-0.13	-0.09
Women age 20-39: highest educational attainment						
E1 - no education	0.00	0.00	0.00	0.00	0.00	0.00
E2 - incomplete primary	0.00	0.00	0.00	0.00	0.00	0.00
E3 - primary	0.00	0.00	0.00	0.00	0.00	0.00
E4 - lower secondary	0.04	0.03	0.03	0.03	0.02	0.03
E5 - upper secondary	0.72	0.70	0.68	0.66	0.64	0.63
E6 - post-secondary	0.24	0.28	0.29	0.31	0.34	0.34
Mean years of schooling (in years)	11.15	11.80	12.06	12.17	12.27	12.29

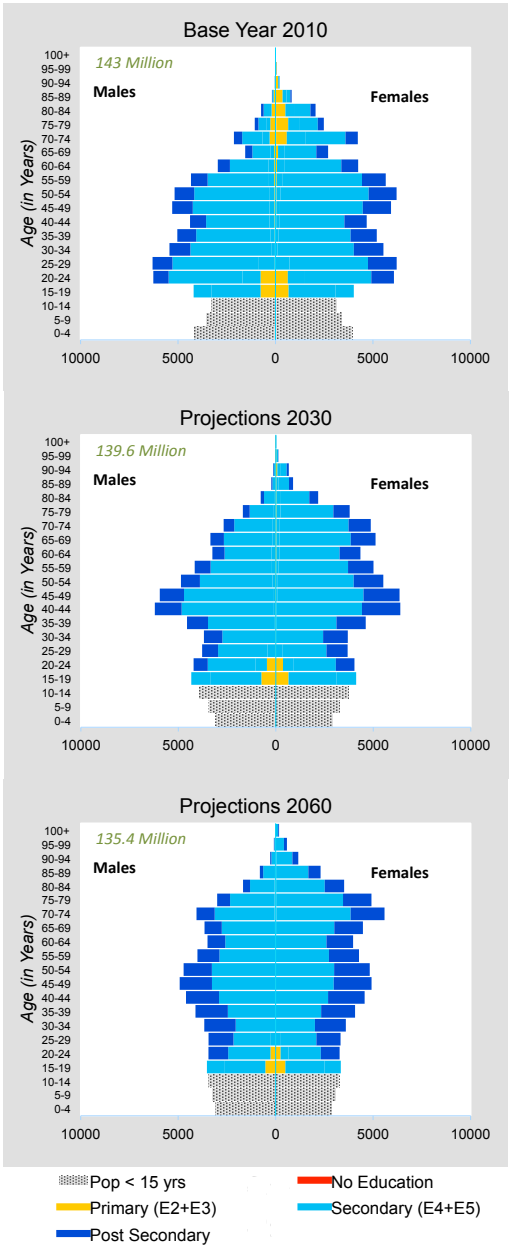
Education scenarios

GET : Global Education Trend Scenario (Medium assumption also used for SSP2)

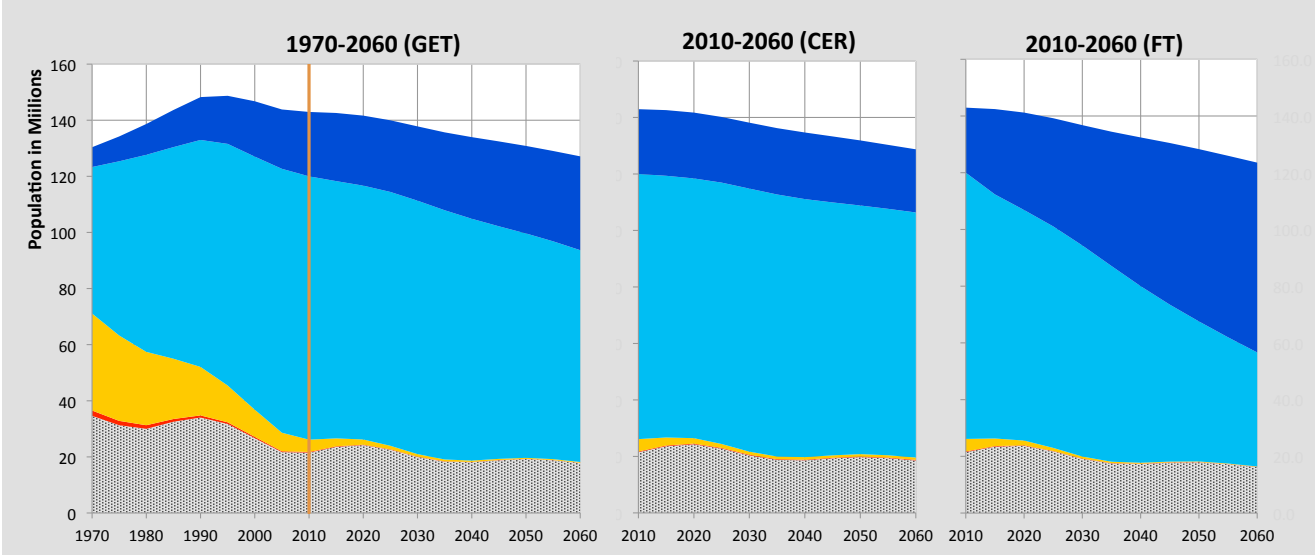
CER: Constant Enrollment Rates Scenario (assumption of no future improvements)

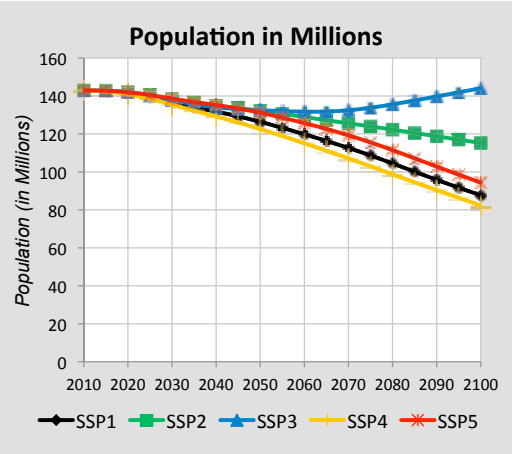
FT: Fast Track Scenario (assumption of education expansion according to fastest historical experience)

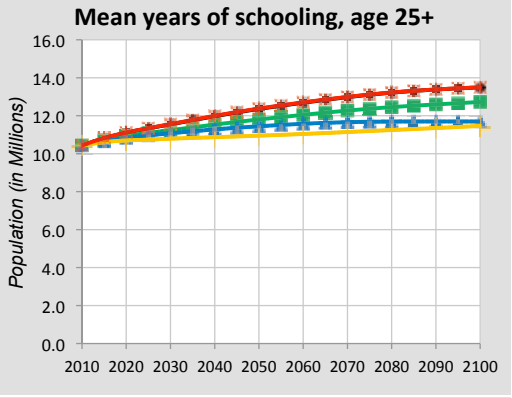
Pyramids by education, Medium Scenario

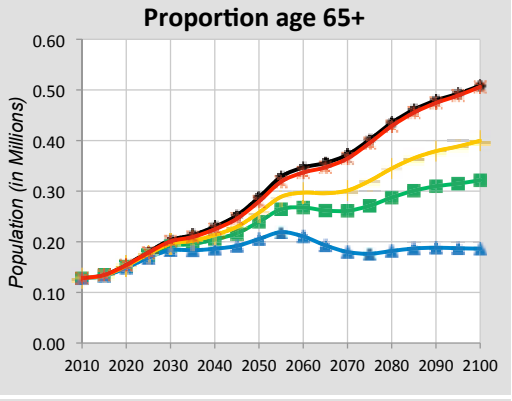


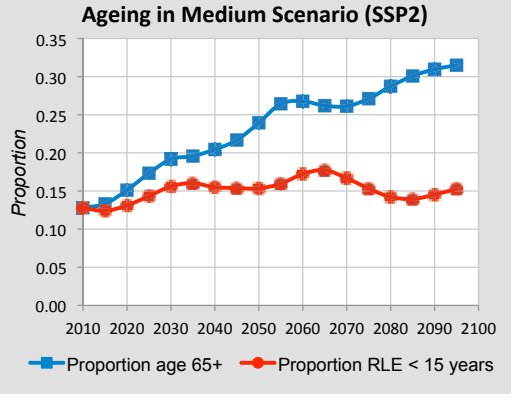
Population size by educational attainment according to three education scenarios: GET, CER, and FT











Alternative scenarios to 2100

Projection results by scenario (SSP 1-5)

	2010	2020	2030	2040	2050	2075	2100
Population (in millions)							
SSP1 - Rapid Development	142.96	141.28	136.60	131.77	126.41	108.68	87.68
SSP2 - Medium	142.96	142.09	138.45	134.88	132.18	124.00	115.25
SSP3 - Stalled Development	142.96	141.94	137.85	134.01	132.52	133.81	144.13
SSP4 - Inequality	142.96	140.92	135.41	129.20	122.58	102.98	82.29
SSP5 - Conventional Dev.	142.96	141.91	138.64	135.25	131.17	115.56	94.37
Proportion age 65+							
SSP1 - Rapid Development	0.13	0.15	0.20	0.23	0.29	0.40	0.51
SSP2 - Medium	0.13	0.15	0.19	0.20	0.24	0.27	0.32
SSP3 - Stalled Development	0.13	0.15	0.18	0.19	0.21	0.18	0.19
SSP4 - Inequality	0.13	0.15	0.20	0.21	0.26	0.32	0.40
SSP5 - Conventional Dev.	0.13	0.15	0.20	0.22	0.28	0.40	0.51
Proportion below age 20							
SSP1 - Rapid Development	0.21	0.21	0.19	0.15	0.15	0.12	0.10
SSP2 - Medium	0.21	0.22	0.21	0.19	0.20	0.19	0.18
SSP3 - Stalled Development	0.21	0.23	0.24	0.22	0.25	0.26	0.27
SSP4 - Inequality	0.21	0.22	0.19	0.16	0.16	0.14	0.13
SSP5 - Conventional Dev.	0.21	0.21	0.19	0.15	0.15	0.12	0.10
Proportion of Women age 20-39 with at least secondary education							
SSP1 - Rapid Development	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SSP2 - Medium	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SSP3 - Stalled Development	1.00	0.99	0.99	0.99	0.99	0.99	0.99
SSP4 - Inequality	1.00	0.94	0.89	0.89	0.89	0.89	0.89
SSP5 - Conventional Dev.	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Mean years of schooling, age 25+							
SSP1 - Rapid Development	10.44	11.11	11.55	11.98	12.36	13.11	13.50
SSP2 - Medium	10.44	10.93	11.24	11.53	11.80	12.37	12.73
SSP3 - Stalled Development	10.44	10.83	11.08	11.28	11.45	11.68	11.70
SSP4 - Inequality	10.44	10.70	10.79	10.87	10.95	11.20	11.46
SSP5 - Conventional Dev.	10.44	11.12	11.56	11.99	12.38	13.12	13.50

Demographic assumptions underlying SSPs

	2010-2015	2020-2025	2030-2035	2040-2045	2050-2055	2075-2080	2095-2100
Total fertility rate							
SSP1 - Rapid Development	1.49	1.28	1.19	1.21	1.24	1.26	1.27
SSP2 - Medium	1.58	1.54	1.53	1.63	1.70	1.71	1.72
SSP3 - Stalled Development	1.66	1.80	1.91	2.05	2.16	2.21	2.23
SSP4 - Inequality	1.50	1.34	1.26	1.27	1.30	1.32	1.33
SSP5 - Conventional Dev.	1.49	1.28	1.19	1.21	1.24	1.26	1.27
Life expectancy at birth for females (in years)							
SSP1 - Rapid Development	76.2	79.0	81.9	84.7	87.7	95.5	101.9
SSP2 - Medium	75.0	77.0	79.0	80.9	82.9	88.3	92.7
SSP3 - Stalled Development	75.3	76.1	77.1	77.9	78.9	81.6	83.9
SSP4 - Inequality	75.8	77.6	79.4	81.2	83.1	88.2	92.5
SSP5 - Conventional Dev.	76.2	79.0	81.9	84.7	87.7	95.5	101.9
Migration – net flow over five years (in thousands)							
SSP1 - Rapid Development	1120	1223	1232	1150	1035	323	0
SSP2 - Medium	1155	1243	1296	1318	1308	557	0
SSP3 - Stalled Development	932	624	689	791	899	545	0
SSP4 - Inequality	1119	1224	1261	1255	1222	491	0
SSP5 - Conventional Dev.	1308	1819	1808	1656	1467	444	0

Ageing indicators, Medium Scenario (SSP2)

	2010	2020	2030	2040	2050	2075	2095
Median Age	37.81	39.63	43.37	45.59	44.59	47.57	49.76
Propspective Median Age	37.81	37.36	39.16	39.64	36.41	33.92	31.60
Proportion age 65+	0.13	0.15	0.19	0.20	0.24	0.27	0.31
Proportion RLE < 15 years	0.13	0.13	0.16	0.15	0.15	0.15	0.15

SOUTH AFRICA

Detailed Human Capital projections to 2060

Demographic indicators, Medium Scenario (SSP2)	2010	2020	2030	2040	2050	2060
Population (in millions)	50.1	54.7	58.6	61.3	63.2	64.2
Proportion age 65+	0.05	0.06	0.07	0.08	0.09	0.12
Proportion below age 20	0.40	0.37	0.34	0.31	0.29	0.27
	2005-2010	2015-2020	2025-2030	2035-2040	2045-2050	2055-2060
Total Fertility Rate	2.55	2.25	2.03	1.91	1.81	1.71
Life expectancy at birth (in years)						
Male	50.12	55.45	57.79	58.76	60.42	62.72
Female	52.08	55.80	58.50	61.00	63.60	66.41
Five-year immigration flow (in '000)	796	781	811	830	830	818
Five-year emigration flow (in '000)	97	76	78	78	76	74

Human Capital indicators, Medium Scenario (SSP2)	2010	2020	2030	2040	2050	2060
Population age 25+: highest educational attainment						
E1 - no education	0.09	0.05	0.03	0.01	0.01	0.00
E2 - incomplete primary	0.15	0.10	0.07	0.04	0.02	0.01
E3 - primary	0.13	0.11	0.09	0.07	0.06	0.05
E4 - lower secondary	0.29	0.31	0.31	0.29	0.26	0.22
E5 - upper secondary	0.29	0.37	0.44	0.51	0.57	0.63
E6 - post-secondary	0.05	0.06	0.06	0.07	0.08	0.10
Mean years of schooling (in years)	8.94	9.71	10.33	10.83	11.24	11.56
Gender gap (population age 25+): highest educational attainment (ratio male/female)						
E1 - no education	0.67	0.61	0.58	0.59	0.67	0.75
E2 - incomplete primary	1.00	0.94	0.89	0.89	0.93	0.93
E3 - primary	0.96	0.96	0.97	1.00	1.03	1.02
E4 - lower secondary	1.02	1.04	1.05	1.05	1.04	1.01
E5 - upper secondary	1.09	1.06	1.04	1.02	1.02	1.02
E6 - post-secondary	1.15	0.97	0.87	0.82	0.83	0.90
Mean years of schooling (male minus female)	0.45	0.33	0.17	0.03	-0.05	-0.04
Women age 20-39: highest educational attainment						
E1 - no education	0.02	0.01	0.00	0.00	0.00	0.00
E2 - incomplete primary	0.06	0.03	0.01	0.01	0.00	0.00
E3 - primary	0.09	0.08	0.07	0.05	0.04	0.03
E4 - lower secondary	0.39	0.36	0.31	0.26	0.21	0.17
E5 - upper secondary	0.39	0.47	0.54	0.60	0.65	0.69
E6 - post-secondary	0.04	0.06	0.07	0.08	0.09	0.10
Mean years of schooling (in years)	10.31	10.69	11.07	11.40	11.67	11.89

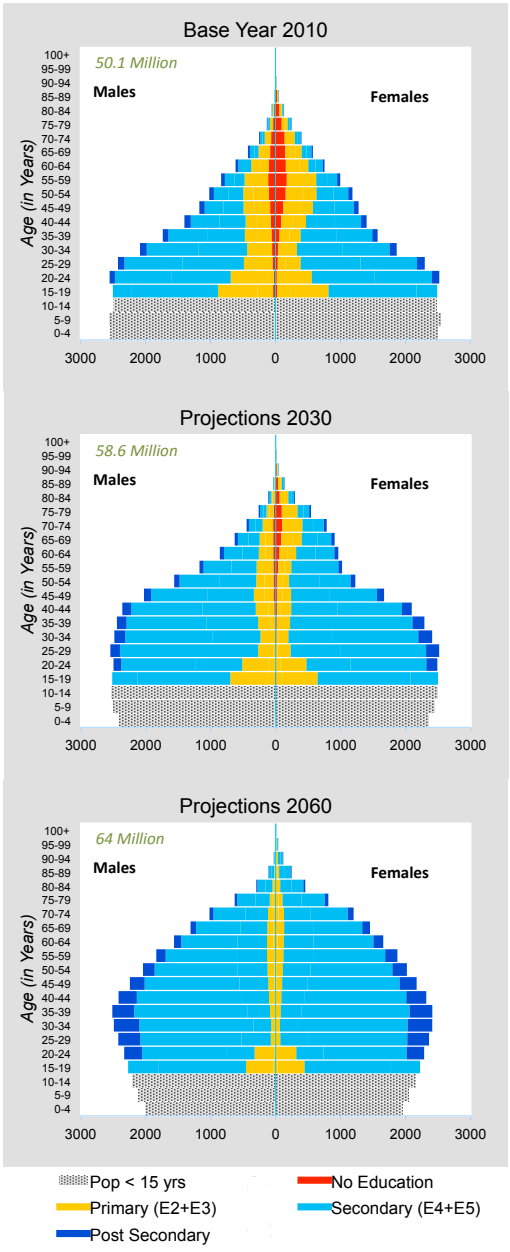
Education scenarios

GET : Global Education Trend Scenario (Medium assumption also used for SSP2)

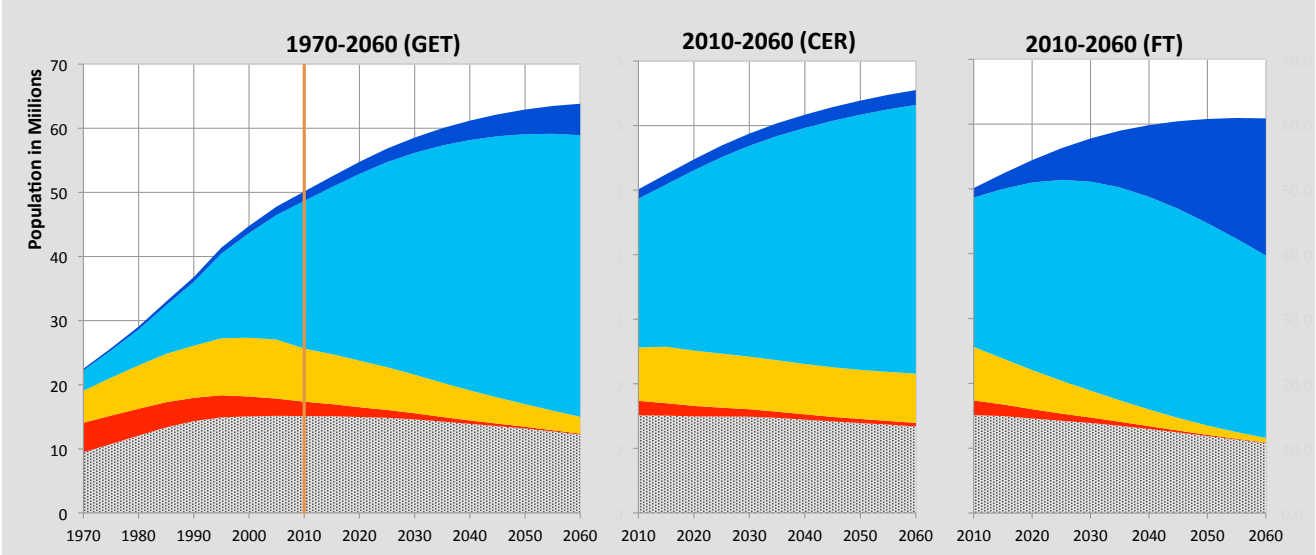
CER: Constant Enrollment Rates Scenario (assumption of no future improvements)

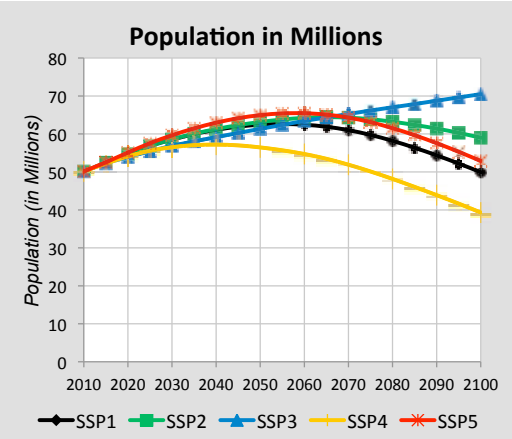
FT: Fast Track Scenario (assumption of education expansion according to fastest historical experience)

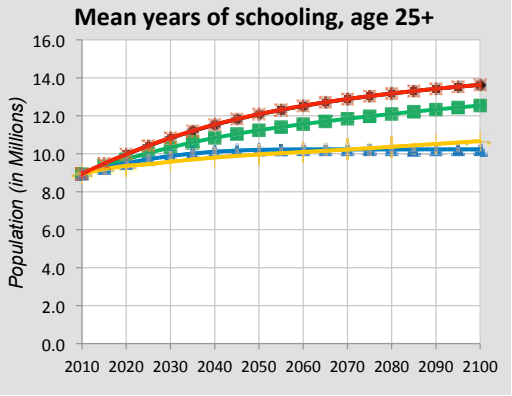
Pyramids by education, Medium Scenario

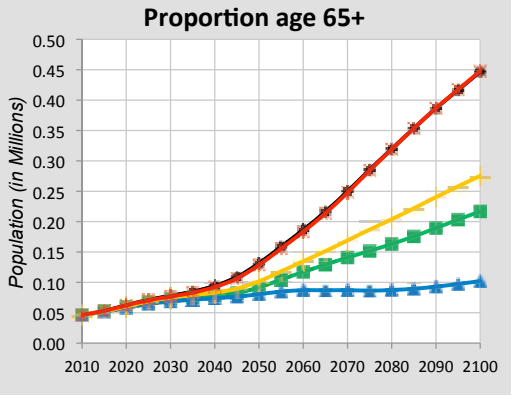


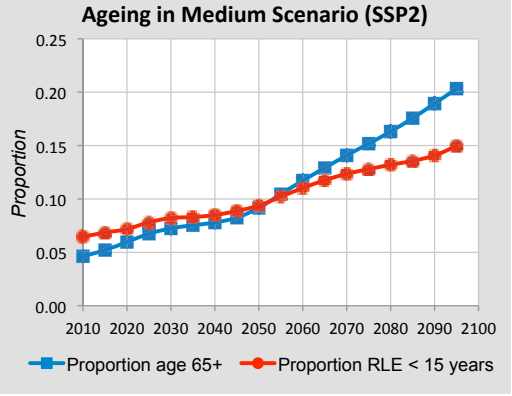
Population size by educational attainment according to three education scenarios: GET, CER, and FT











Alternative scenarios to 2100

Projection results by scenario (SSP 1-5)

	2010	2020	2030	2040	2050	2075	2100
Population (in millions)							
SSP1 - Rapid Development	50.13	54.74	58.51	61.08	62.44	59.75	49.94
SSP2 - Medium	50.13	54.73	58.58	61.29	63.15	63.88	58.99
SSP3 - Stalled Development	50.13	53.93	56.87	59.17	61.35	66.17	70.48
SSP4 - Inequality	50.13	54.09	56.51	57.19	56.45	50.12	39.31
SSP5 - Conventional Dev.	50.13	55.10	59.65	62.97	64.97	63.10	52.89
Proportion age 65+							
SSP1 - Rapid Development	0.05	0.06	0.08	0.09	0.13	0.29	0.45
SSP2 - Medium	0.05	0.06	0.07	0.08	0.09	0.15	0.22
SSP3 - Stalled Development	0.05	0.06	0.07	0.07	0.08	0.09	0.10
SSP4 - Inequality	0.05	0.06	0.07	0.08	0.10	0.19	0.28
SSP5 - Conventional Dev.	0.05	0.06	0.08	0.09	0.13	0.28	0.45
Proportion below age 20							
SSP1 - Rapid Development	0.40	0.35	0.30	0.25	0.21	0.14	0.10
SSP2 - Medium	0.40	0.37	0.34	0.31	0.29	0.24	0.20
SSP3 - Stalled Development	0.40	0.38	0.37	0.36	0.35	0.34	0.33
SSP4 - Inequality	0.40	0.36	0.32	0.28	0.24	0.19	0.15
SSP5 - Conventional Dev.	0.40	0.35	0.30	0.25	0.21	0.14	0.10
Proportion of Women age 20-39 with at least secondary education							
SSP1 - Rapid Development	0.83	0.92	0.95	0.97	0.98	0.99	1.00
SSP2 - Medium	0.83	0.88	0.92	0.94	0.96	0.98	0.99
SSP3 - Stalled Development	0.83	0.86	0.86	0.86	0.86	0.86	0.86
SSP4 - Inequality	0.83	0.80	0.78	0.78	0.78	0.78	0.78
SSP5 - Conventional Dev.	0.83	0.92	0.95	0.97	0.98	0.99	1.00
Mean years of schooling, age 25+							
SSP1 - Rapid Development	8.94	9.97	10.82	11.53	12.08	13.03	13.63
SSP2 - Medium	8.94	9.71	10.33	10.83	11.24	11.97	12.54
SSP3 - Stalled Development	8.94	9.50	9.88	10.10	10.20	10.23	10.23
SSP4 - Inequality	8.94	9.36	9.58	9.80	9.96	10.29	10.67
SSP5 - Conventional Dev.	8.94	9.97	10.84	11.54	12.09	13.04	13.63

Demographic assumptions underlying SSPs

	2010-2015	2020-2025	2030-2035	2040-2045	2050-2055	2075-2080	2095-2100
Total fertility rate							
SSP1 - Rapid Development	2.23	1.77	1.50	1.36	1.27	1.17	1.18
SSP2 - Medium	2.38	2.14	1.97	1.86	1.76	1.59	1.62
SSP3 - Stalled Development	2.51	2.53	2.50	2.43	2.35	2.21	2.26
SSP4 - Inequality	2.28	1.90	1.63	1.47	1.37	1.27	1.28
SSP5 - Conventional Dev.	2.23	1.77	1.50	1.36	1.27	1.17	1.18
Life expectancy at birth for females (in years)							
SSP1 - Rapid Development	57.5	64.4	69.0	73.5	77.6	86.6	93.8
SSP2 - Medium	54.1	57.2	59.8	62.3	65.0	71.9	77.3
SSP3 - Stalled Development	54.1	53.7	55.0	56.3	57.4	61.8	65.0
SSP4 - Inequality	55.9	58.6	61.0	63.3	65.9	72.6	77.7
SSP5 - Conventional Dev.	57.5	64.4	69.0	73.5	77.6	86.6	93.8
Migration – net flow over five years (in thousands)							
SSP1 - Rapid Development	653	700	711	674	611	199	0
SSP2 - Medium	688	720	742	749	742	313	0
SSP3 - Stalled Development	534	340	367	406	455	272	0
SSP4 - Inequality	647	687	701	694	668	267	0
SSP5 - Conventional Dev.	762	1040	1039	965	858	268	0

Ageing indicators, Medium Scenario (SSP2)

	2010	2020	2030	2040	2050	2075	2095
Median Age	24.90	27.21	29.27	31.26	33.21	38.54	42.99
Propspective Median Age	24.90	24.26	24.80	24.99	24.72	23.54	23.64
Proportion age 65+	0.05	0.06	0.07	0.08	0.09	0.15	0.20
Proportion RLE < 15 years	0.06	0.07	0.08	0.08	0.09	0.13	0.15

UNITED STATES OF AMERICA

Detailed Human Capital projections to 2060

Demographic indicators, Medium Scenario (SSP2)	2010	2020	2030	2040	2050	2060
Population (in millions)	310.4	334.0	358.8	381.4	400.4	419.9
Proportion age 65+	0.13	0.16	0.20	0.21	0.22	0.24
Proportion below age 20	0.27	0.25	0.24	0.24	0.23	0.22
	2005-2010	2015-2020	2025-2030	2035-2040	2045-2050	2055-2060
Total Fertility Rate	2.07	1.90	1.94	1.93	1.91	1.89
Life expectancy at birth (in years)						
Male	75.36	76.76	78.47	80.30	82.20	84.40
Female	80.51	81.89	83.59	85.39	87.31	89.51
Five-year immigration flow (in '000)	6385	6294	6541	6699	6700	6595
Five-year emigration flow (in '000)	1438	1067	1079	1077	1094	1119

Human Capital indicators, Medium Scenario (SSP2)	2010	2020	2030	2040	2050	2060
Population age 25+: highest educational attainment						
E1 - no education	0.01	0.01	0.00	0.00	0.00	0.00
E2 - incomplete primary	0.01	0.01	0.00	0.00	0.00	0.00
E3 - primary	0.04	0.03	0.02	0.02	0.02	0.01
E4 - lower secondary	0.07	0.06	0.06	0.05	0.05	0.04
E5 - upper secondary	0.52	0.50	0.49	0.47	0.45	0.43
E6 - post-secondary	0.36	0.39	0.42	0.46	0.49	0.52
Mean years of schooling (in years)	12.86	13.11	13.31	13.50	13.69	13.88
Gender gap (population age 25+): highest educational attainment (ratio male/female)						
E1 - no education	1.01	1.03	1.04	1.03	1.01	0.98
E2 - incomplete primary	1.15	1.19	1.21	1.22	1.19	1.14
E3 - primary	1.08	1.14	1.19	1.21	1.21	1.18
E4 - lower secondary	1.03	1.09	1.13	1.15	1.14	1.10
E5 - upper secondary	0.98	1.03	1.07	1.10	1.11	1.10
E6 - post-secondary	1.00	0.94	0.90	0.89	0.89	0.92
Mean years of schooling (male minus female)	-0.02	-0.14	-0.23	-0.27	-0.26	-0.20
Women age 20-39: highest educational attainment						
E1 - no education	0.00	0.00	0.00	0.00	0.00	0.00
E2 - incomplete primary	0.00	0.00	0.00	0.00	0.00	0.00
E3 - primary	0.02	0.02	0.01	0.01	0.01	0.00
E4 - lower secondary	0.07	0.06	0.04	0.03	0.03	0.02
E5 - upper secondary	0.52	0.50	0.49	0.47	0.47	0.46
E6 - post-secondary	0.38	0.43	0.45	0.48	0.50	0.51
Mean years of schooling (in years)	13.14	13.40	13.58	13.75	13.85	13.93

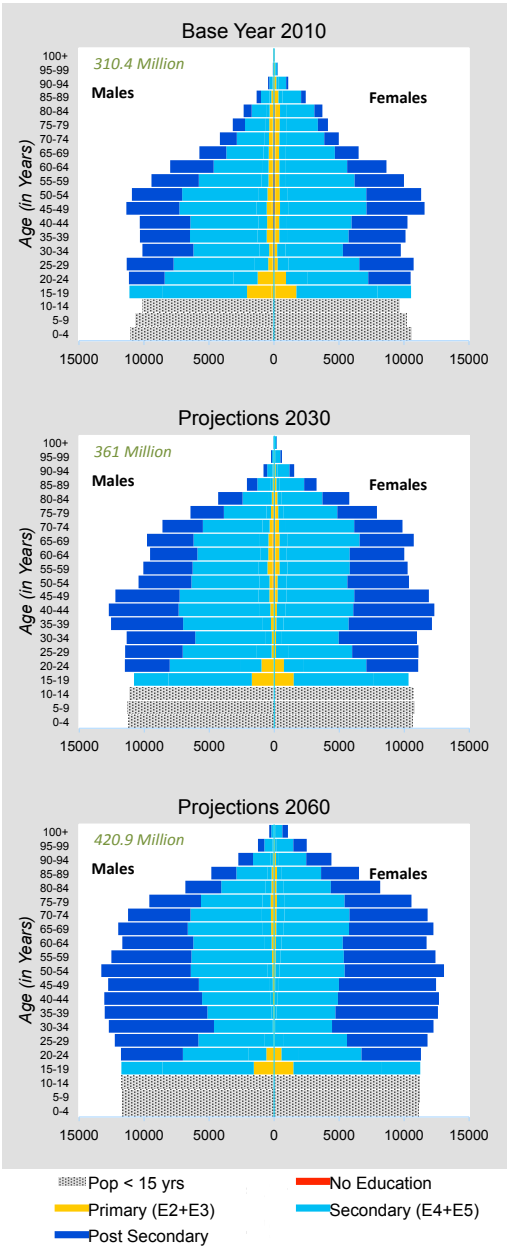
Education scenarios

GET : Global Education Trend Scenario (Medium assumption also used for SSP2)

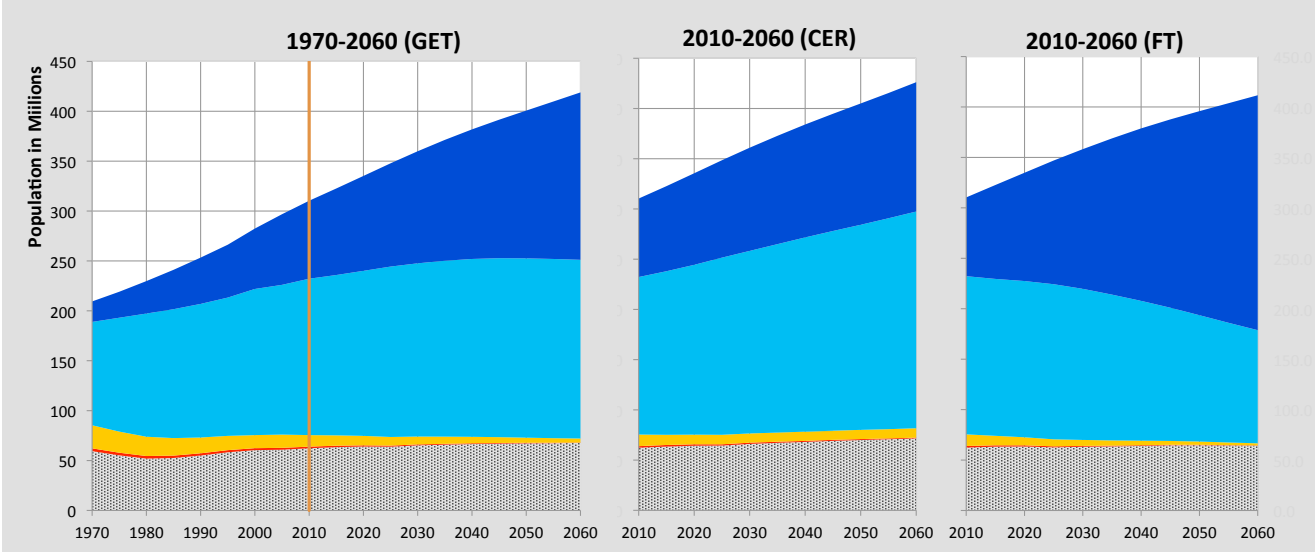
CER: Constant Enrollment Rates Scenario (assumption of no future improvements)

FT: Fast Track Scenario (assumption of education expansion according to fastest historical experience)

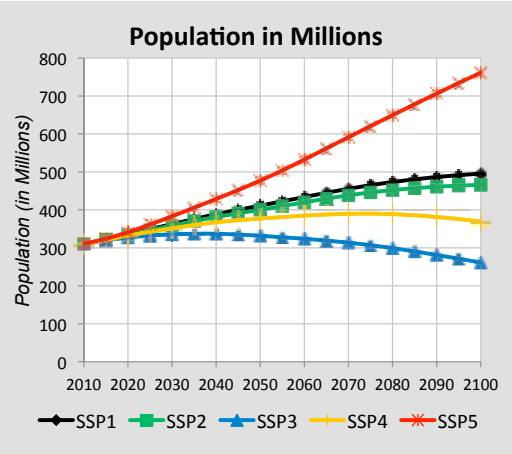
Pyramids by education, Medium Scenario

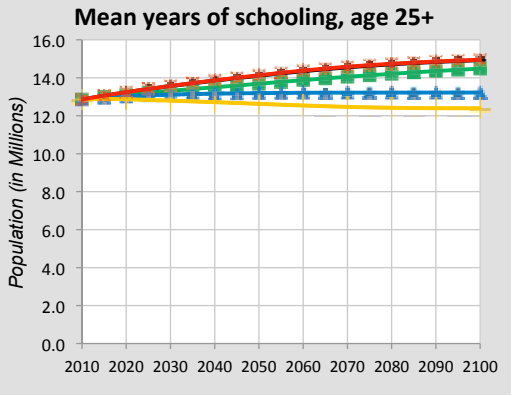


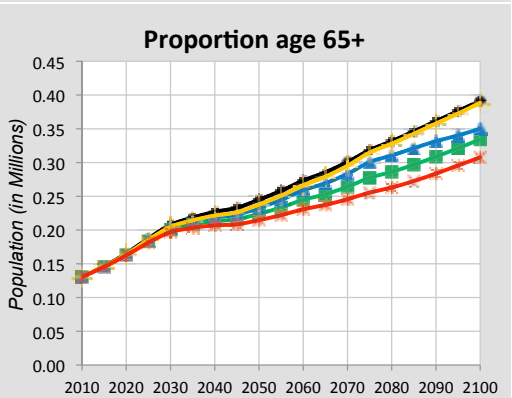
Population size by educational attainment according to three education scenarios: GET, CER, and FT

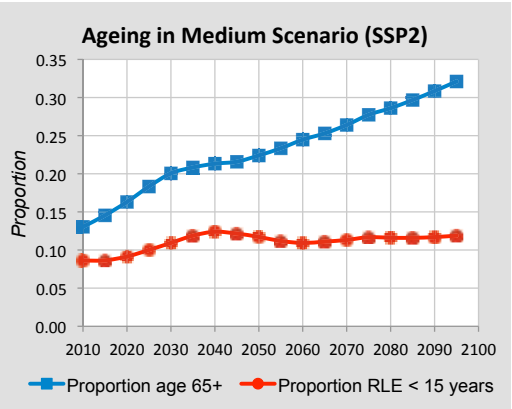


UNITED STATES OF AMERICA (CONTINUED)









Alternative scenarios to 2100

Projection results by scenario (SSP 1-5)

	2010	2020	2030	2040	2050	2075	2100
Population (in millions)							
SSP1 - Rapid Development	310.38	335.27	362.35	388.39	411.28	464.98	495.54
SSP2 - Medium	310.38	333.97	358.81	381.37	400.41	446.00	465.67
SSP3 - Stalled Development	310.38	327.18	335.46	337.00	331.78	306.99	261.29
SSP4 - Inequality	310.38	331.85	351.53	367.26	377.18	390.12	369.28
SSP5 - Conventional Dev.	310.38	341.23	383.18	428.76	477.14	620.56	761.36
Proportion age 65+							
SSP1 - Rapid Development	0.13	0.17	0.21	0.23	0.24	0.32	0.39
SSP2 - Medium	0.13	0.16	0.20	0.21	0.22	0.28	0.33
SSP3 - Stalled Development	0.13	0.16	0.20	0.22	0.23	0.30	0.35
SSP4 - Inequality	0.13	0.16	0.20	0.22	0.24	0.31	0.39
SSP5 - Conventional Dev.	0.13	0.16	0.20	0.21	0.21	0.26	0.31
Proportion below age 20							
SSP1 - Rapid Development	0.27	0.25	0.23	0.23	0.22	0.20	0.17
SSP2 - Medium	0.27	0.25	0.24	0.24	0.23	0.21	0.19
SSP3 - Stalled Development	0.27	0.25	0.22	0.21	0.20	0.17	0.16
SSP4 - Inequality	0.27	0.25	0.22	0.21	0.20	0.17	0.15
SSP5 - Conventional Dev.	0.27	0.26	0.26	0.26	0.26	0.25	0.23
Proportion of Women age 20-39 with at least secondary education							
SSP1 - Rapid Development	0.97	0.99	0.99	0.99	1.00	1.00	1.00
SSP2 - Medium	0.97	0.98	0.99	0.99	0.99	1.00	1.00
SSP3 - Stalled Development	0.97	0.97	0.97	0.97	0.97	0.97	0.97
SSP4 - Inequality	0.97	0.97	0.97	0.97	0.97	0.97	0.97
SSP5 - Conventional Dev.	0.97	0.99	0.99	0.99	1.00	1.00	1.00
Mean years of schooling, age 25+							
SSP1 - Rapid Development	12.86	13.24	13.56	13.85	14.11	14.63	14.93
SSP2 - Medium	12.86	13.11	13.31	13.50	13.69	14.13	14.48
SSP3 - Stalled Development	12.86	13.02	13.11	13.17	13.19	13.22	13.22
SSP4 - Inequality	12.86	12.87	12.80	12.72	12.63	12.44	12.39
SSP5 - Conventional Dev.	12.86	13.24	13.57	13.87	14.13	14.66	14.95

Demographic assumptions underlying SSPs

	2010-2015	2020-2025	2030-2035	2040-2045	2050-2055	2075-2080	2095-2100
Total fertility rate							
SSP1 - Rapid Development	1.88	1.89	1.90	1.89	1.87	1.85	1.84
SSP2 - Medium	1.88	1.92	1.95	1.92	1.90	1.87	1.85
SSP3 - Stalled Development	1.80	1.66	1.56	1.52	1.48	1.47	1.47
SSP4 - Inequality	1.81	1.73	1.67	1.61	1.57	1.56	1.55
SSP5 - Conventional Dev.	1.97	2.17	2.30	2.33	2.34	2.31	2.30
Life expectancy at birth for females (in years)							
SSP1 - Rapid Development	82.2	84.7	87.3	90.0	93.0	101.2	107.8
SSP2 - Medium	81.2	82.8	84.5	86.3	88.4	94.1	98.7
SSP3 - Stalled Development	81.2	81.7	82.4	83.1	84.2	87.3	89.7
SSP4 - Inequality	81.7	83.2	84.8	86.5	88.6	94.0	98.4
SSP5 - Conventional Dev.	82.2	84.7	87.3	90.0	93.0	101.2	107.8
Migration – net flow over five years (in thousands)							
SSP1 - Rapid Development	4918	5308	5462	5400	5149	2151	0
SSP2 - Medium	4939	5269	5449	5508	5412	2449	0
SSP3 - Stalled Development	4093	2649	2724	2708	2602	1139	0
SSP4 - Inequality	4914	5287	5436	5436	5291	2410	0
SSP5 - Conventional Dev.	5739	7985	8356	8607	8613	4121	0

Ageing indicators, Medium Scenario (SSP2)

	2010	2020	2030	2040	2050	2075	2095
Median Age	36.88	38.11	39.82	41.13	42.33	45.49	49.01
Propspective Median Age	36.88	36.61	36.75	36.40	35.59	33.48	32.66
Proportion age 65+	0.13	0.16	0.20	0.21	0.22	0.28	0.32
Proportion RLE < 15 years	0.09	0.09	0.11	0.12	0.12	0.12	0.12

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