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Attitudes about Aging: A Global Perspective

In a Rapidly Graying World, Japanese Are Worried, Americans Aren't

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About the Report

This report examines global public opinion on the challenges posed by aging populations for countries and for respondents personally. The Pew Research Center surveys were conducted in 21 countries from March 3 to April 21, 2013, and totaled 22,425 respondents. People were asked for their opinions on whether aging posed a problem for their country, whether they anticipated having an adequate standard of living in their old age, and who among themselves, their families, or their governments should bear the greatest responsibility for the well-being of the elderly. The margin of error varies across countries. For more details, see survey methods and topline results.

The report also analyzes trends in the aging of the global population, the U.S. population, and the populations in 22 other selected countries. The focus is on changes from 2010 to 2050, as projected by the United Nations (UN) in its latest World Population Prospects, the 2012 revision, released in June 2013 (http://esa.un.org/unpd/wpp/index.htm). The UN reports four variants for population growth: high, medium, low, and constant-fertility. All estimates in this report are from the UN's medium variant.

The report is a collaborative effort based on the input and analysis of the following individuals:

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OVERVIEW

At a time when the global population of people ages 65 and older is expected to triple to 1.5 billion by mid-century, public opinion on whether the growing number of older people is a problem varies dramatically around the world, according to a Pew Research Center survey.

Concern peaks in East Asia, where nearly nine-in-ten Japanese, eight-in-ten South Koreans and seven-in-ten Chinese describe aging as a major problem for their country. Europeans also display a relatively high level of concern with aging, with more than half of the public in Germany and Spain saying that it is a major problem. Americans are among the least concerned, with only one-in-four expressing this opinion.

These attitudes track the pattern of aging itself around the world. In Japan and South Korea, the majorities of the populations are projected to be older than 50 by 2050. China is one of most rapidly aging countries in the world. Germany and Spain, along with their European neighbors, are already among the countries with the oldest populations today, and their populations will only get older in the future. The U.S. population is also expected to get older, but at a slower rate than in most other countries.

Public concern with the growing number of older people is lower outside of East Asia and

Is Aging a Problem in Your Country?

% saying the growing number of older people is a "major problem"

Country	%
Japan	87
S. Korea	79
China	67
Germany	55
Spain	52
Kenya	47
France	45
Israel	43
Britain	43
Russia	42
Italy	41
Argentina	40
S. Africa	39
Pakistan	35
Turkey	34
Brazil	31
Mexico	30
Nigeria	28
U.S.	26
Indonesia	25
Egypt	23

Note: Question asked, "How much of a problem, if at all, is the growing number of older people in (survey country)...." Responses of "Minor problem," "Not a problem" and "Don't know/Refused" are not shown.

Source: 2013 Pew Research Center Global Attitudes Project survey. Q128

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Europe. In most of these countries, such as Indonesia and Egypt, the proportion of older people in the population is relatively moderate and is expected to remain so in the future.

Pakistan, Nigeria and other countries potentially stand to benefit from future demographic trends. These are countries that currently have large shares of children in their populations, and these children will age into the prime of their work lives in the future.
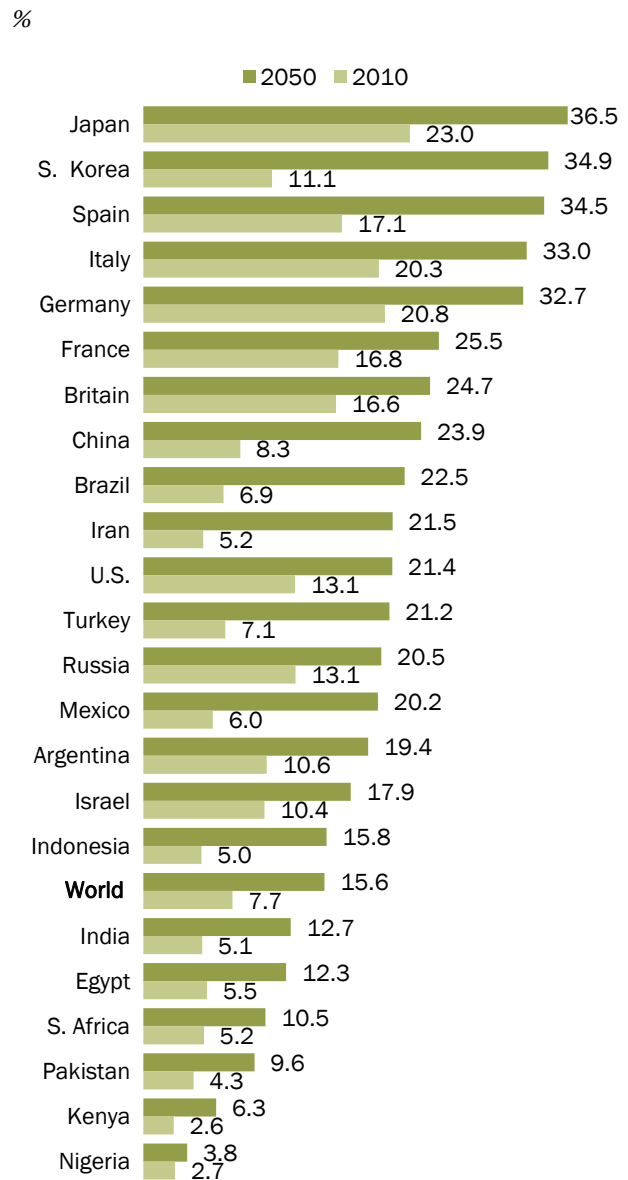
The Pew Research survey also finds a wide divergence in people's confidence that they will have an adequate standard of living in their old age. Confidence in one's standard of living in old age appears to be related to the rate at which a country is aging and its economic vitality. Confidence is lowest in Japan, Italy and Russia, countries that are aging and where economic growth has been anemic in recent years. In these three countries, less than one-third of people are confident about their old-age standard of living. Meanwhile, there is considerable optimism about the old-age standard of living among the public in countries whose populations are projected to be relatively young in the future or that have done well economically in recent years, such as in Nigeria, Kenya, South Africa and China.

When asked who should bear the greatest responsibility for the economic well-being of the elderly—their families, the government or the elderly themselves—the government tops the list in 13 of the 21 countries that were surveyed. However, many who name the government are less confident in their own standard of living in old age compared with those who name themselves or their families.

Rarely do people see retirement expenses as mainly a personal obligation. In only four countries—South Korea, the U.S., Germany and

Proportion of People 65 and Older in a Country's Population, Estimates for 2010 and 2050

%

Country	2050	2010
Japan	36.5	23.0
S. Korea	34.9	11.1
Spain	34.5	17.1
Italy	33.0	20.3
Germany	32.7	20.8
France	25.5	16.8
Britain	24.7	16.6
China	23.9	8.3
Brazil	22.5	6.9
Iran	21.5	5.2
U.S.	21.4	13.1
Turkey	21.2	7.1
Russia	20.5	13.1
Mexico	20.2	6.0
Argentina	19.4	10.6
Israel	17.9	10.4
Indonesia	15.8	5.0
World	15.6	7.7
India	12.7	5.1
Egypt	12.3	5.5
S. Africa	10.5	5.2
Pakistan	9.6	4.3
Kenya	6.3	2.6
Nigeria	3.8	2.7

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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Britain—do more than one-third of the public say that the primary responsibility for the economic well-being of people in their old age rests with the elderly themselves.

American public opinion on aging differs dramatically from the views of the nation's major economic and political partners. Americans are less likely than most of the global public to view the growing number of older people as a major problem. They are more confident than Europeans that they will have an adequate standard of living in their old age. And the U.S. is one of very few countries where a large plurality of the public believes individuals are primarily responsible for their own well-being in old age.

This is not because the U.S. is perennially young. American baby boomers are aging, and one-in-five U.S. residents are expected to be 65 and older by mid-century, greater than the share of seniors in the population of Florida today.[1] It is also projected that the share of people 65 and older in the U.S. will eclipse the share of children younger than 15 by 2050.

But the U.S. is aging less rapidly than most of the other countries. In 2010, the global median age (29) was eight years lower than the U.S. median age (37).[2] By 2050, the difference in age is projected to narrow to only five years. Also, driven by immigration, the U.S. population is expected to increase by 89 million by mid-century even as the populations of Japan, China, South Korea, Germany, Russia, Italy and Spain are either at a standstill or decreasing. For these reasons, perhaps, the American public is more sanguine than most about aging.

The aging of populations does raise concerns at many levels for governments around the world. There is concern over the possibility that a shrinking proportion of working-age people (ages 15 to 64) in the population may lead to an economic slowdown. The smaller working-age populations must also support growing numbers of older dependents, possibly creating financial stress for social insurance systems and dimming the economic outlook for the elderly.

Graying populations will also fuel demands for changes in public investments, such as the reallocation of resources from the needs of children to the needs of seniors. At the more personal level, longer life spans may strain household finances, cause people to extend their working lives or rearrange family structures.[3] Perhaps not surprisingly, an aging China announced a relaxation of its one-child policy in November 2013.

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[1] The term "baby boomers" refers to the large cohort born in the U.S. from 1946 to 1964. The oldest members of this cohort started to turn 65 in 2011.

[2] The median age divides the population into two equal parts, with 50% of the population older than the median age and 50% of the population younger than the median age.

[3] See, for example, National Research Council (2012), OECD (2012), UNFPA and HelpAge International (2012), Clements et al. (2012), Gordon (2012), Bloom, Canning and Fink (2011), CIA (2001), Eberstadt (2011), Peterson (1999), and Beard et al. (2011).

This study reports on the findings from a Pew Research Center survey of publics in 21 countries. The surveys, conducted from March 3 to April 21, 2013, and totaling 22,425 respondents,[4] gauged public opinion on the challenges posed by aging for the country and for the respondents personally. The report also examines trends in the aging of the global population, the U.S. population, and the populations in 22 other selected countries.[5] The focus is on changes from 2010 to 2050, as projected by the United Nations (UN) in its latest World Population Prospects, the 2012 revision, released in June 2013.[6]

Countries Included in the Report

■ Survey data
■ No survey data

AMERICAS	EUROPE	MIDDLE EAST	AFRICA	ASIA
Argentina	Britain	Egypt	Kenya	China
Brazil	France	Iran	Nigeria	India
Mexico	Germany	Israel	South Africa	Indonesia
United States	Italy	Turkey		Japan
	Russia			Pakistan
	Spain			South Korea

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[4] See the Survey Methods section for more details on the surveys.

[5] The two countries included in the demographic analysis but for which survey data are not presented are India, because of concerns about the survey's administration in the field, and Iran, where no survey was conducted.

[6] Data from the 2012 revision are available at http://esa.un.org/unpd/wpp/index.htm. The UN reports four variants for population growth: high, medium, low, and constant-fertility. All estimates in this report are from the UN's medium variant.

Global Trends in Aging

The global population is on the brink of a remarkable transformation. Thanks to the aging of today's middle-aged demographic bulge and ongoing improvements in life expectancy, the population of seniors is projected to surge, increasing from 530.5 million in 2010 to 1.5 billion in 2050. The result will be a much older world, a future in which roughly one-in-six people is expected to be 65 and older by 2050, double the proportion today.

The population of children, meanwhile, will be at a virtual standstill due to long-term declines in birth rates around the world. The number of children younger than 15 is expected to increase by only 10%, from 1.8 billion in 2010 to 2 billion in 2050.[7] Consequently, the global share of the population that is 65 and older will double, from 8% in 2010 to 16% in 2050. And, more countries will find that they have more adults ages 65 and older than they have children younger than 15.

The graying of the world's population in the aggregate conceals some important variations. Japan, China, South Korea and many countries in Europe are expected to have greater numbers of people dependent on shrinking workforces, a potentially significant demographic challenge for economic growth. However, aging elsewhere, such as India and several African countries, mostly means the aging of children into the workforce. That is a potentially favorable demographic trend for economic growth. Thus, the coming changes in world demography conceivably could alter the distribution of global economic power over the coming decades.

For the United States, population trends may lead to greater opportunities in the global economy of the future. Although the U.S. population is anticipated to turn older and grow at a slower rate in the future, it is projected to increase at a faster pace and age less than the populations of most of the rest of the developed world. Thus, to the extent that demography is destiny, the U.S. may be in a position to experience a more robust economic future in comparison with other developed nations.

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[7] Percentage changes are computed before numbers are rounded.

Aging in Major Regions of the World

In the future, aging and slower rates of growth are expected to characterize the populations of all major regions in the world. Ranked by median age, Europe is currently the oldest region in the world and should retain that distinction in 2050. However, Latin America and Asia are projected to age the most rapidly through 2050. It is expected that the median age in Latin America, currently 10 years lower than the median age in North America, will match North America's age level by 2050. Africa will continue to have the youngest population in the world.

Africa is expected to be home to a greater share of the world's population in the future, 25% in 2050, up from 15% in 2010. The UN estimates that Africa's population should more than double from 2010 to 2050 with the addition of 1.4 billion people, greater than the increase of 1 billion expected in Asia & Oceania and the gain of just 0.3 billion expected for the Americas. In sharp contrast, Europe's population is expected to shrink by more than 30 million by the middle of the century.

Aging in the U.S. and Other Countries

Across the countries examined in this report, projections show that the U.S. population will grow at a faster rate than the populations of European and several East Asian and Latin American countries. Countries whose populations should grow at rates slower than in the U.S. include Brazil, Argentina, Britain, France, Spain, China, South Korea and South Africa. Some countries—Russia, Germany, Italy and Japan—are projected to experience reductions in their populations.

Nations expected to experience relatively rapid population growth are located mostly in Africa. Most notably, Nigeria's population is projected to nearly triple and to overtake the U.S. population by 2050. Kenya is expected to more than double its population from 2010 to 2050. Pakistan, Egypt and Israel are expected to grow at much faster rates than the U.S. The populations of Mexico, India, Indonesia and Iran should increase at rates that are slightly higher than in the U.S.

Regardless of their initial size or the rate of growth in their population, the countries covered by this study are all expected to turn grayer between now and 2050. The median age in the U.S. is projected to increase from 37 in 2010 to 41 in 2050. That will be less of an increase than in the rest of the world as the global median age is projected to increase from 29 in 2010 to 36 in 2050.

The median age and the share of the population ages 65 and older also is projected to increase in other countries, sharply in China, South Korea, Mexico and Brazil, among others. Also, the total dependency ratio—the size of the "dependent" population (those younger than 15 or older than 64) relative to the "working age" population (ages 15 to 64)—is projected to rise in most countries. This

means that future demographic conditions may not support the same rates of economic growth experienced in those countries in the past.

A handful of countries, even as their populations age, are poised to experience a potential demographic boost to their economies. The total dependency ratios in Egypt, India, Pakistan, Nigeria, Kenya and South Africa should decrease in the future, a consequence of their currently large youth populations aging into the workforce. This demographic transition is potentially a boon for economic growth. But, because these countries will also experience rising proportions of seniors in their populations, they will not be entirely immune to the social and economic challenges posed by an aging citizenry.

Pension and Health Care Expenditures

With aging, it is not surprising that public expenditures on pensions and health care are generally projected to increase as a share of gross domestic product (GDP). Increases in pension expenditures are principally driven by aging. In response, many countries have implemented reforms, such as a rise in the retirement age, designed to decelerate the rate of increase. Nonetheless, public pension expenditures are expected to consume about 15% of GDP by 2050 in several European countries. Pension expenditures in the U.S. are projected to increase by less, from 6.8% of GDP in 2010 to 8.5% in 2050.

Larger concerns revolve around public health care expenditures, which are rising faster than pension expenditures in most countries. The reason is that health care expenditures are pushed up not just by aging but also by cost inflation. In the U.S., public health expenditures are projected to more than double, from 6.7% of GDP in 2010 to 14.9% in 2050. Similarly, large increases are expected in Japan and several countries in Europe, if current rates of cost inflation persist.[8]

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[8] Projections of pension and health expenditures are subject to a great degree of uncertainty. That is because they depend not only on population projections but also on macroeconomic projections for GDP, assumptions about the labor force, policy parameters relating to eligibility ages and replacement rates, inflation in the cost of health care services, consumption of health care services and other factors.

1. GLOBAL PUBLIC OPINION ON AGING

Public awareness of aging and its potential economic pitfalls varies across countries, but the view that aging is a major problem is more prevalent in countries whose populations are projected to be among the oldest in 2050, such as Japan, South Korea and Germany. People's confidence in their ability to maintain an adequate standard of living in old age is related to how much the country's population is expected to age and also to the country's economic potential. Publics in countries with relatively young populations or emerging economies—Nigeria, Kenya, South Africa, China and Brazil—are among the most confident. The Japanese, meanwhile, are among the least confident, along with the Italians and Russians.

When asked who bears the greatest responsibility for the economic well-being of the elderly, people are more likely to place the obligation on the family or the government than on the elderly themselves. South Koreans, Americans, Germans and the British are the only publics in which more than one-third say the elderly should bear the greatest responsibility for their own well-being. The government is the most common response in the majority of the countries that were surveyed.

The Pew Research Center survey of publics in 21 countries asked people's opinions on whether aging posed a problem for their countries, whether they anticipated having an adequate standard of living in old age, and who among themselves, their families, or their governments should bear the greatest responsibility for the well-being of the elderly. Additional details are presented in the section on survey methods.[9]

Aging as a Problem

Of the 21 countries surveyed, at least half of the public in five countries says that aging is a *major* problem for their country. The populations in three of these countries—Japan, Germany and Spain—are already relatively old *and* continuing to age rapidly and, in the other two—South Korea and China–the populations are aging at a rate that will make them among the oldest by 2050. There is broad agreement on this question in Japan, where 87% of the public responded that aging is a major problem. The level of concern is also very high in South Korea (where 79% say aging is a major problem) and China (67%). This concern is expressed by 55% of Germans and 52% of the Spanish public as well.

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[9] Later sections in the report present populations trends and projections for the world, for major regions and 23 countries. The list of countries includes two, India and Iran, for which survey data are not available.

In seven countries, 40% to 50% of the public says that the growing numbers of older people is a major problem. The populations in these countries are mostly middle-aged to elderly, including in France, Britain, Russia, Italy, Israel and Argentina. The presence of Kenya in this company, where 47% say that aging is a major problem, is perhaps contrary to expectation—Kenya is among the countries with the youngest populations today and is projected to age little between now and 2050. The pessimism among Kenyans may be grounded more in current economic conditions than in future demographic realities.
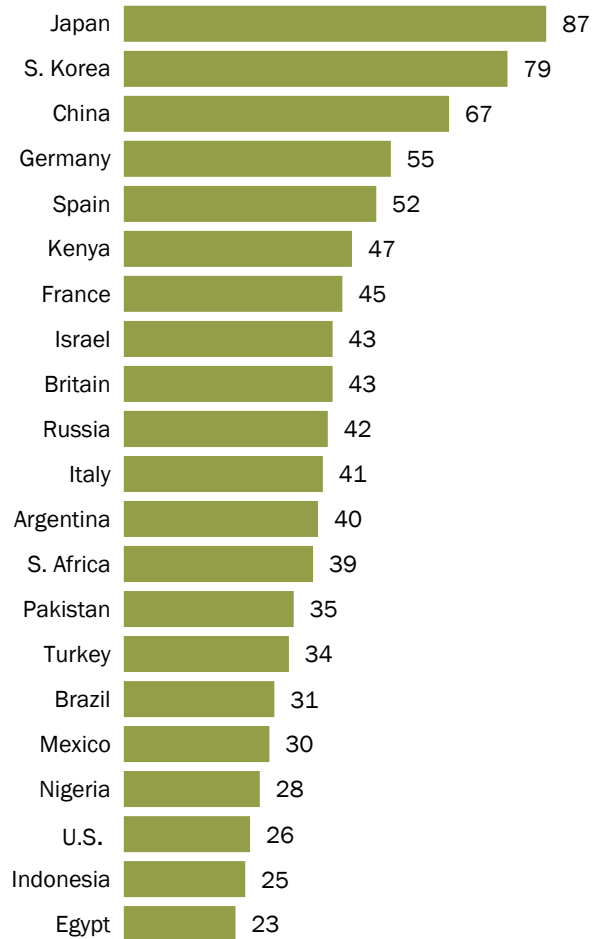
Americans, by and large, do not think that aging is a major problem for the U.S.—only 26% think that is the case. Likewise, only about one-in-four people in Nigeria, Indonesia and Egypt express the opinion that aging is a major problem.

Generally, public anxiety over aging is higher in countries that are projected to have among the older populations in 2050. In Japan, South Korea, Germany and Spain, where concern about aging is among the most heightened, about one-third or more of the population is expected to be 65 and older by 2050. In China, the share of seniors is expected to nearly triple, from 8.3% in 2010 to 23.9% in 2050.

Is Aging a Problem in Your Country?

% saying aging is a "major problem"

Country	%
Japan	87
S. Korea	79
China	67
Germany	55
Spain	52
Kenya	47
France	45
Israel	43
Britain	43
Russia	42
Italy	41
Argentina	40
S. Africa	39
Pakistan	35
Turkey	34
Brazil	31
Mexico	30
Nigeria	28
U.S.	26
Indonesia	25
Egypt	23

Note: Question asked, "How much of a problem, if at all, is the growing number of older people in (survey country)…." Responses of "Minor problem," "Not a problem" and "Don't know/Refused" are not shown.

Source: 2013 Pew Research Center Global Attitudes Project survey. Q128.

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At the other end of the scale, Egypt, Indonesia and Nigeria are projected to be among the countries with relatively young populations in 2050. In Nigeria, for example, only 3.8% of the population is expected to be 65 and older in 2050. The U.S. median age is increasing less rapidly than in most of the rest of the world and, by mid-century, its median age should look younger than that of several major European and Asian nations.

Older People Are More Concerned

In several countries, older people are more likely to think of aging as a major problem. The generational divide is most evident in countries where moderate proportions of the overall population think of aging as a major problem. In Israel, for example, 43% of the public overall says aging is a major problem. But older adults (50 and older) are much gloomier: 54% of them say aging is a major problem, compared with 26% of adults ages 18 to 29. In the U.S., older adults are about twice as likely as young adults—34% vs. 18%—to say that aging is a major problem.

Aging a Greater Concern for Older People

% saying aging is a "major problem," by age

	18-29	30-49	50+	*Oldest-youngest gap*
	%	%	%	
Israel	26	44	54	*+28*
Britain	31	40	51	*+20*
Brazil	24	28	42	*+18*
U.S.	18	21	34	*+16*
France	35	45	50	*+15*
Russia	36	40	48	*+12*

Note: Only statistically significant differences shown. Kenya excluded due to sample size.

Source: 2013 Pew Research Center Global Attitudes Project survey. Q128.

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Confidence in Retirement

A vast gap is evident in the degree of confidence people in different countries have in their ability to maintain an adequate standard of living in their old age. About 70% or more of the publics in China, Brazil, Nigeria, South Africa and Kenya are either very confident or somewhat confident of an adequate standard of living in old age. In this group, at least 40% of Nigerians and South Africans are very confident about their futures.

Meanwhile, only about one-in-five Italians and Russians are confident about an adequate standard of living in their old age. The proportion climbs to one-in-three or a bit higher in Argentina, Egypt, France, Turkey and Japan. Americans (63%) are among the more confident, with 24% saying they are very confident regarding the adequacy of their living standards in old age and 39% saying they are somewhat confident.

The level of confidence expressed by the public correlates with how much the country's population is projected to age and with the health of the country's economy. Generally, the older a country's population is projected to be in mid-century, the less confident the public is about its standard of living in retirement. In Japan, where it is expected that 37% of the population will be 65 and older in 2050, 68% of people are not confident of the standard of living in their old age. At the other extreme, 6% of Kenyans are projected to be 65 and older in 2050, and only 28% of the people lack confidence in the standard of living they may have in their old age.
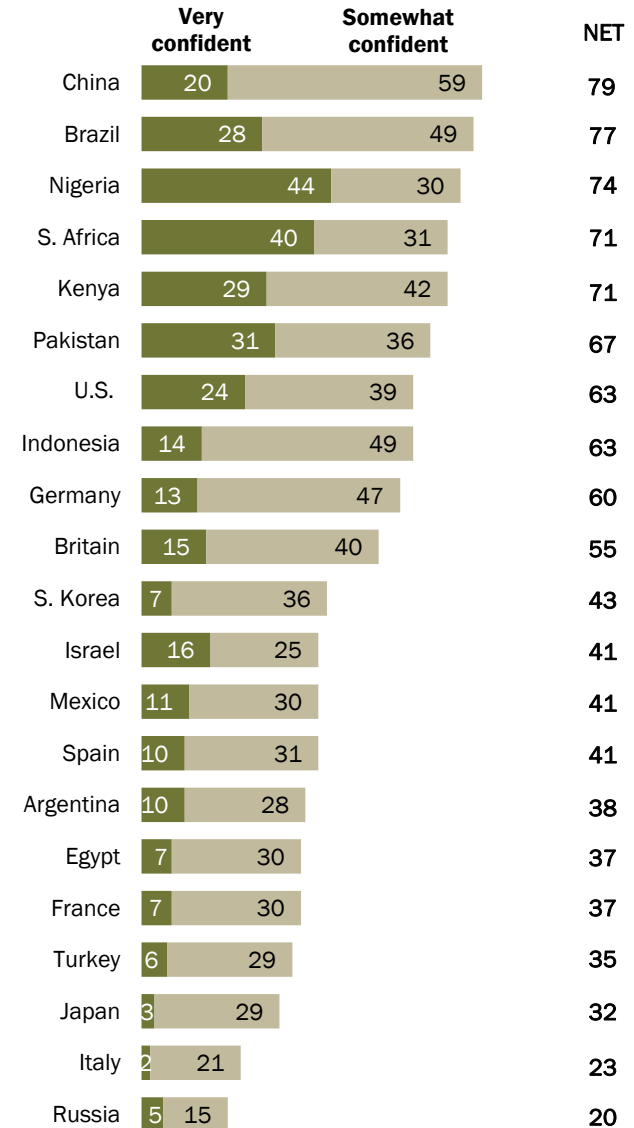
Economic growth also appears to boost the confidence people have in their standard of living in old age. For example, real gross domestic product (GDP) in China increased at an annual average rate of 9.3% from 2008 to 2012. This track record and its future economic potential are quite likely one reason that people in China are relatively confident in their future standard of living even though the population there is aging very rapidly. At the other extreme, the Italian economy has floundered, contracting 1.4% annually in recent years. These economic struggles and ongoing aging no doubt are part of the explanation for the very low confidence among Italians about their old age.[10]

It is worth noting that economic growth in recent years has slowed around the globe due to the Great Recession, which started in 2007. In the sample of countries included in this study, all but Indonesia and Argentina experienced slower annual growth from 2008 to 2012 compared with the growth they experienced from 2000 to 2007. Thus, the level of confidence people currently express about the standard of living in their old age may be lower than the long-term norm, and this confidence may rise in the future.

Evidence for the U.S. shows that people had greater confidence about their retirement before the onset of the Great Recession. The Employee Benefit Research Institute has fielded its Retirement Confidence Survey since 1993. From inception through 2007, the survey

Will You Have an Adequate Standard of Living in Old Age?

% saying they are "very" or "somewhat" confident they will have an adequate standard of living in old age

	Very confident	Somewhat confident	NET
China	20	59	79
Brazil	28	49	77
Nigeria	44	30	74
S. Africa	40	31	71
Kenya	29	42	71
Pakistan	31	36	67
U.S.	24	39	63
Indonesia	14	49	63
Germany	13	47	60
Britain	15	40	55
S. Korea	7	36	43
Israel	16	25	41
Mexico	11	30	41
Spain	10	31	41
Argentina	10	28	38
Egypt	7	30	37
France	7	30	37
Turkey	6	29	35
Japan	3	29	32
Italy	2	21	23
Russia	5	15	20

Note: Question asked, "Thinking about yourself, how confident are you that you will have an adequate standard of living in your old age…" Responses of "Not too confident," "Not at all confident" and "Don't know/Refused" are not shown.

Source: 2013 Pew Research Center Global Attitudes Project survey. Q129.

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[10] Estimates of GDP growth are from the International Monetary Fund.

typically found that about 70% of American workers were very or somewhat confident in having enough money for a comfortable retirement. However, since 2007, the share has dropped by about 20 percentage points. Pew Research Center surveys conducted in 2009 and 2012 found an 11 percentage point drop in the share of Americans saying they were very or somewhat confident that they will have enough income and assets to last through their retirement years.[11] If past is prelude, Americans are likely to become more confident of their future in retirement as the economy rebounds.

A Generation Gap in Confidence in Retirement

In several countries, younger adults, ages 18-29, and adults 50 and older express different levels of confidence about their standards of living in old age. In countries with older populations, notably Japan, Germany, Italy and Britain, the younger adults are much less confident. In Japan, 42% of people ages 50 and older are confident of their standard of living in old age, but only 22% of people ages 18 to 29 say they are confident of the same. The opposite holds true in countries with younger populations, such as in Nigeria, Indonesia and South Africa. In Nigeria, the high level of confidence overall is driven by young adults. Some 76% of Nigerians ages 18 to 29 are confident of their future, compared with 60% of those ages 50 and older.

Age Gap in Retirement Confidence

% confident in old-age standard of living, by age

	18-29	30-49	50+	*Oldest-youngest gap*
	%	%	%	
Nigeria	76	77	60	*-16*
Indonesia	73	60	58	*-15*
S. Africa	72	74	62	*-10*
Britain	50	47	62	*+12*
Italy	17	16	31	*+14*
Germany	54	53	68	*+14*
Japan	22	18	42	*+20*

Note: Only statistically significant differences shown. Kenya excluded due to sample size.

Source: 2013 Pew Research Center Global Attitudes Project survey. Q129.

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Confidence Begets Confidence

A rosy outlook in general is related to confidence in one's future economic well-being. The Pew Research survey included questions on how people view the current economic situation for themselves and for the country, and whether they are positive about their children's futures.[12] Is confidence in these matters related to the confidence people have about the standard of living they may enjoy in their own old age? The answer, not surprisingly, is yes—people who are more positive

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[11] Morin and Fry (2012).

[12] Drawing from the same survey, a recent report from the Pew Research Center examined the state of economic confidence in 39 countries, including the 21 countries covered in this report (Pew Research Center, 2013, "Economies of Emerging Markets Better Rated During Difficult Times").

about present-day economic circumstances or future economic circumstances for their children are also more confident about their own futures.

Personal Economic Situation

People who say their personal economic situation today is good are more likely to say that they are confident of their old-age standard of living. In Germany, for example, 70% of those who say their personal economic situation today is good are also confident of their future standard of living. However, only 25% of Germans who say their personal economic situation today is bad are confident of their future standard of living, a differential of 45 percentage points.

A similar differential exists in the U.S. Some 77% of Americans who say their personal economic situation is good are confident in their economic future. In contrast, only 36% of Americans who say their personal economic situation is bad are confident of their future standard of living, a differential of 41 percentage points.[13] In most of the countries that were polled, the differential is 20 percentage points or higher.

Confidence Linked to Personal Finances

% confident in old age standard of living	*Personal economic situation is …*		
	Good	**Bad**	*Diff.*
	%	%	
Germany	70	25	+45
Britain	69	26	+43
U.S.	77	36	+41
Japan	53	17	+36
Israel	54	21	+33
Argentina	50	23	+27
Indonesia	75	49	+26
France	48	22	+26
S. Korea	57	32	+25
Mexico	54	30	+24
S. Africa	82	59	+23
Spain	52	29	+23
Turkey	46	24	+22
China	86	65	+21
Brazil	82	62	+20
Russia	29	11	+18
Kenya	79	62	+17
Italy	33	16	+17
Nigeria	80	69	+11

Note: Only statistically significant differences shown.

Source: 2013 Pew Research Center Global Attitudes Project survey. Q129 & Q6.

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[13] In the U.S., 67% of the public say their personal economic situation is good, and 31% say it is bad. In Germany, 77% of the public say their personal economic situation is good and 22% say it is bad. See Pew Research Center (2013).

The Country's Economic Situation

There is also an association between positive views of the country's economic situation today and faith in one's own future. In Israel, 57% of those who say the country's economic situation is good are also confident of their standard of living in the retirement years.[14] But this level of confidence drops to 30% among Israelis who say the country's present economic situation is bad, a differential of 27 percentage points.

A differential of 20 percentage points or more also exists in Mexico, South Africa, Germany, South Korea, Japan and Britain. In the U.S., only 33% of the public say the country's economic situation is good.[15] In this group of people, 75% say they are confident of their standard of living in their old age. Among Americans who say the country's economic situation is bad, only 58% are confident of their economic future, a differential of 17 percentage points.

Confidence Linked to Country's Economy

% confident in old age standard of living	National economic situation is …		
	Good	**Bad**	*Diff.*
	%	%	
Mexico	58	31	+27
Israel	57	30	+27
S. Africa	83	57	+26
Germany	66	42	+24
S. Korea	61	38	+23
Japan	47	25	+22
Britain	71	51	+20
Argentina	49	30	+19
Russia	31	13	+18
Kenya	79	62	+17
U.S.	75	58	+17
China	81	65	+16
Turkey	43	27	+16
Pakistan	80	65	+15
Brazil	82	69	+13
Indonesia	71	59	+12

Note: Only statistically significant differences shown. France, Spain and Italy excluded due to sample size.

Source: 2013 Pew Research Center Global Attitudes Project survey. Q129 & Q4.

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[14] Some 43% of Israelis say that the country's economic situation is good (Pew Research Center, 2013).
[15] Pew Research Center (2013).

The Future for Children

People who are confident of what the future holds for the country's children are also more confident about their own future standard of living. In Israel, 41% of people overall are confident that they will have an adequate standard of living in their old age. But among Israelis who believe the country's children will be better off than their parents when they grow up, 58% are also confident of their own future. In contrast, only 25% of Israelis who believe the country's children will be worse off than their parents when they grow up are confident of their future well-being.[16] This 33 percentage point differential is the largest among the countries that were polled.

Likewise, sizable differences exist in Argentina, South Africa and Indonesia (between 26 and 27 percentage points) in the confidence people express in their own economic future depending on whether they say the country's children will be better off than their parents. A differential of about 20 percentage points or higher exists in Spain, Britain, Kenya and Turkey.

Confidence Linked to Optimism in Children's Future

| % confident in old age standard of living | Children will be __ than parents | | |
	Better off	Worse off	Diff.
	%	%	
Israel	58	25	+33
Argentina	51	24	+27
S. Africa	84	58	+26
Indonesia	73	47	+26
Spain	56	33	+23
Kenya	80	58	+22
Britain	71	49	+22
Turkey	49	28	+21
Pakistan	78	59	+19
Nigeria	80	64	+16
Italy	32	21	+11
Brazil	78	68	+10
Mexico	46	36	+10
S. Korea	46	37	+9
U.S.	68	60	+8
Russia	22	14	+8

Note: Only statistically significant differences shown. France excluded due to sample size.

Source: 2013 Pew Research Center Global Attitudes Project survey. Q129 & Q8.

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[16] Some 41% of people in Israel respond that children will be better off than their parents, and 27% respond that children will be worse off (Pew Research Center, 2013).
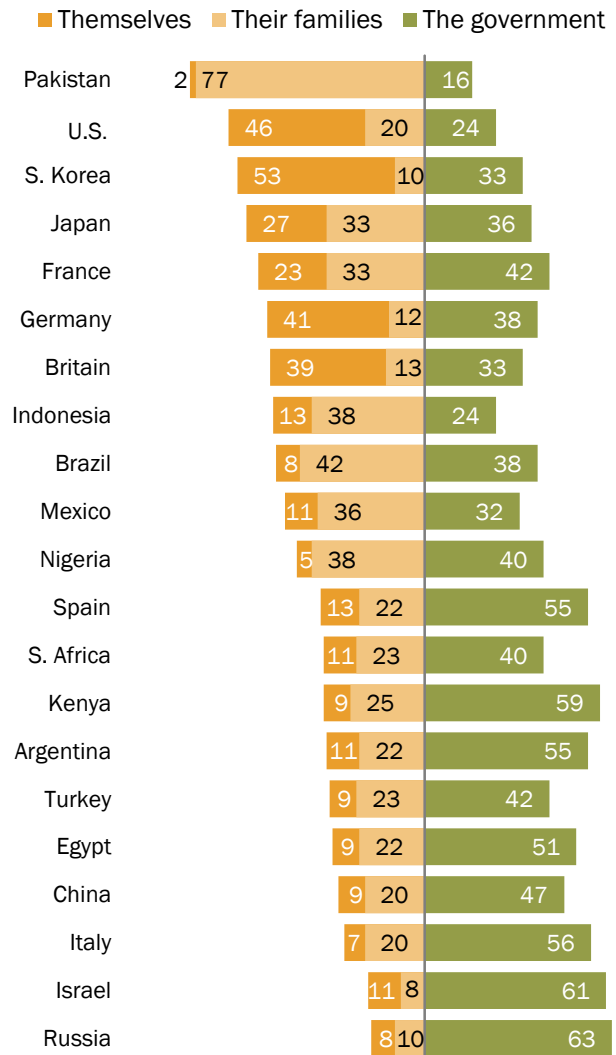
Who Should Take Care of the Elderly?

In only a handful of countries does a sizable share of the public feel that the elderly bear the greatest responsibility for their own economic well-being. South Korea is the only country in which more than half (53%) assigns principal responsibility to the elderly. The U.S. (46%), Germany (41%) and Britain (39%) are the other countries in which more than one-third of the public points to the elderly. In most countries, only about one-in-ten people respond that the primary responsibility rests with the elderly.

People are somewhat more likely to say that elderly care is a family responsibility. In seven countries, more than one-third of the public says such care is up to the family. Pakistan, where 77% respond that the family bears primary responsibility, is an outlier. About 30% to 40% of people in Brazil, Nigeria, Indonesia, Mexico, Japan and France name the family. In the remaining 14 countries, including the U.S., one-in-four or less of the public responds that the family is primarily responsible for taking care of its elderly.

In most countries, the public is inclined to point to the government as the responsible party for the well-being of the elderly. That is the most popular response in 13 of the 21 countries, ranging as high as 63% in Russia. Clear majorities in Israel (61%), Kenya (59%), Italy (56%), Spain (55%) and Argentina (55%) also say that it is the government's responsibility to take care of older people.

Who Should Bear the Greatest Responsibility for the Elderly?

% saying _____ should bear the greatest responsibility for people's economic well-being in their old age

■ Themselves ■ Their families ■ The government

Country	Themselves	Their families	The government
Pakistan	2	77	16
U.S.	46	20	24
S. Korea	53	10	33
Japan	27	33	36
France	23	33	42
Germany	41	12	38
Britain	39	13	33
Indonesia	13	38	24
Brazil	8	42	38
Mexico	11	36	32
Nigeria	5	38	40
Spain	13	22	55
S. Africa	11	23	40
Kenya	9	25	59
Argentina	11	22	55
Turkey	9	23	42
Egypt	9	22	51
China	9	20	47
Italy	7	20	56
Israel	11	8	61
Russia	8	10	63

Note: Volunteered responses of "All equally," "Other" and "Don't know/Refused" are not shown.

Source: 2013 Pew Research Center Global Attitudes Project survey. Q130.

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People who name the government as the most responsible agent for the economic well-being of the elderly differ from those who name themselves or their families in at least one respect—they are apt to be less confident about their own standard of living in the future. This gap is most pronounced in Israel. Some 73% of Israelis who say they themselves or their families are responsible for the well-being of the elderly are confident they will have an adequate standard of living in their old age. However, among Israelis who believe the government has the greatest responsibility for the well-being of the elderly, only 29% are confident of their future well-being—a 44 percentage point differential. The confidence gap in the U.S. is also large—those who cite the government are 28 percentage points less likely than those who cite themselves or their families to say that they are confident of their standard of living in their old age.

Confidence Linked to Responsibility for the Elderly

	Who should bear greatest responsibility for people's economic well-being in old age?		
% confident in old age standard of living	**Family/ Themselves**	**Government**	*Diff.*
	%	%	
Israel	73	29	*-44*
Germany	75	43	*-32*
Pakistan	73	45	*-28*
U.S.	72	44	*-28*
Britain	65	39	*-26*
Russia	41	15	*-26*
Italy	38	19	*-19*
Brazil	84	66	*-18*
S. Korea	49	31	*-18*
France	44	28	*-16*
Japan	37	22	*-15*
Argentina	46	32	*-14*
Kenya	80	66	*-14*
China	87	75	*-12*
S. Africa	81	69	*-12*
Spain	48	36	*-12*
Egypt	45	35	*-10*
Nigeria	79	71	*-8*

Note: Only statistically significant differences shown.

Source: 2013 Pew Research Center Global Attitudes Project survey. Q129 & Q130.

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2. AGING IN THE U.S. AND OTHER COUNTRIES, 2010 TO 2050

Although the population in the U.S. is getting older and growing more slowly than in the past, the demographic future for the U.S. is robust in comparison with other countries. In particular, the U.S. population is projected to grow faster and age slower than the populations of its major economic partners in Europe and Asia. These demographic trends may enhance future opportunities for the U.S. in the global economy.[17]
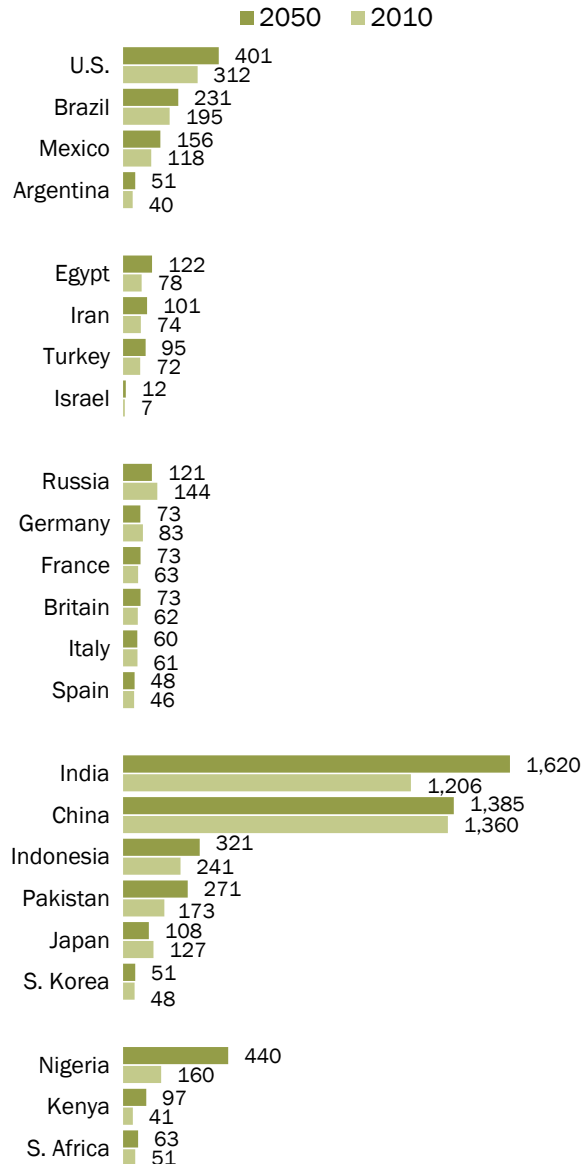
Population Change: India and Nigeria Lead the Way

The U.S., with 312 million residents, was the third most populous country in the world in 2010. China was the leader with 1.4 billion residents, and India was close behind with 1.2 billion. Only one other country—Indonesia— had more than 200 million residents in 2010. Six countries—Brazil, Mexico, Russia, Pakistan, Japan and Nigeria—had populations of 100 million to 200 million in 2010.

India, it is projected, will secure global demographic primacy by 2050. The population of India is expected to increase by more than 400 million from 2010 to 2050, to 1.6 billion. Meanwhile, the population of China may

Population Estimates, 2010 and 2050

Millions

■ 2050 ■ 2010

U.S.	401 / 312
Brazil	231 / 195
Mexico	156 / 118
Argentina	51 / 40
Egypt	122 / 78
Iran	101 / 74
Turkey	95 / 72
Israel	12 / 7
Russia	121 / 144
Germany	73 / 83
France	73 / 63
Britain	73 / 62
Italy	60 / 61
Spain	48 / 46
India	1,620 / 1,206
China	1,385 / 1,360
Indonesia	321 / 241
Pakistan	271 / 173
Japan	108 / 127
S. Korea	51 / 48
Nigeria	440 / 160
Kenya	97 / 41
S. Africa	63 / 51

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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[17] The 23 countries covered in this chapter include nine of the 10 most populous countries in the world in 2010. In order of population, they are China, India, U.S., Indonesia, Brazil, Pakistan, Nigeria, Russia and Japan (Bangladesh, which ranks eighth, is not included). The other countries, except for Israel, were among the 35 most populous countries in 2010.
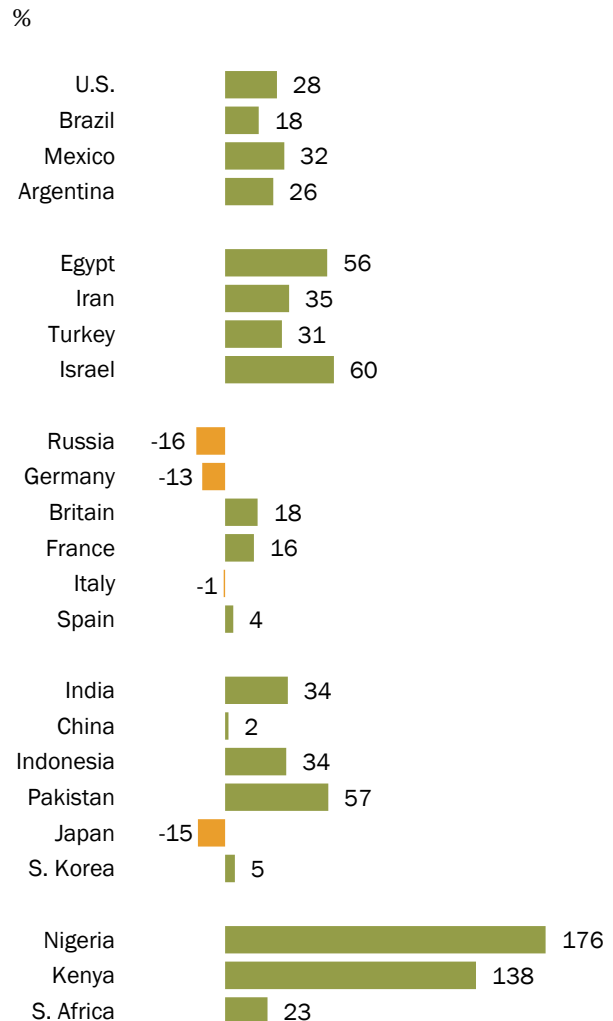
increase by only 25 million, remaining at about 1.4 billion. The U.S. is projected to add 89 million residents by 2050. However, the U.S. is likely to be displaced by Nigeria as the third most populous country. In 2050, India alone may be home to nearly as many people as China and the U.S. combined.

Four other countries—Indonesia, Pakistan, Nigeria and Kenya—are expected to add at least 50 million people each to their populations from 2010 to 2050. Nigeria stands out in this list because the increase in its population—280 million—is exceeded only by India, a country with a much larger base.[18] The populations of several major countries—Russia, Germany, Italy and Japan—are expected to shrink.

In percentage terms, the growth in the U.S. population (28%) should exceed the growth in two of its major Latin American partners—Argentina (26%) and Brazil (18%). Among other countries where populations are on the rise, the U.S. is likely to outpace Britain, France, Spain, China, South Korea and South Africa. With populations in Russia, Germany, Italy and Japan on the decline, the U.S. population is expected to increase in size relative to several of its major economic partners.

Estimated Change in Population, 2010 to 2050

%

Country	Value
U.S.	28
Brazil	18
Mexico	32
Argentina	26
Egypt	56
Iran	35
Turkey	31
Israel	60
Russia	-16
Germany	-13
Britain	18
France	16
Italy	-1
Spain	4
India	34
China	2
Indonesia	34
Pakistan	57
Japan	-15
S. Korea	5
Nigeria	176
Kenya	138
S. Africa	23

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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The most dramatic growth in population is projected to be in Nigeria (176%) and Kenya (138%). Nigeria is likely to move from being the seventh most populous country in 2010 to the third most populous by 2050. The populations of several other countries also are expected to grow at a faster rate than the U.S. population: Pakistan

[18] Other countries whose populations are expected to increase by more than 50 million but that are not a part of the analysis in this report are Ethiopia, Democratic Republic of the Congo, Tanzania, Uganda, Philippines, Niger and Bangladesh.

(57%), India (34%), Indonesia (34%), Israel (60%), Egypt (56%), Iran (35%), Turkey (31%), and Mexico (32%).

Immigration and Population Change

Population growth in the U.S. is robust in comparison with European countries and also in comparison with other economic powers such as Brazil, Japan, China and South Korea. The principal driver of U.S. population growth is immigration. The U.S. is home to more immigrants than any other country—42.8 million in 2010, compared with 12.3 million in Russia, the second largest. The share of immigrants in the U.S. population (13.8%) is the third highest of all countries featured in this report, behind only Israel and Spain.[19]

Immigrants have added to the U.S. population generally and to the population of women in their childbearing ages. They also have brought relatively higher fertility rates with them.[20] The importance of these factors has increased over time as fertility rates for native-born women in the U.S. have fallen steadily. The Pew Research Center estimates that, from 1960 to 2005, immigrants and their descendants accounted for 51% of the increase in the U.S. population. Looking ahead, from 2005 to 2050, immigrants and their descendants are projected to contribute 82% of the total increase in the U.S. population.[21] Without immigration, U.S. population growth from 2005 to 2050 would be only 8.5%, more on par with that of European nations.[22]

Given the role immigration can play in sustaining growing populations, the question that arises is whether aging countries could offset the process through immigration. The realistic answer, it turns out, is no. A UN report that examined the issue finds that Japan, South Korea and countries in Europe would have to raise their immigration levels multiple times beyond current levels just to maintain a constant total population.[23] For example, to prevent their populations from decreasing, Germany would have to roughly double its annual intake of immigrants between now and 2050 and Russia would have to quadruple its annual inflow.

Because immigrants are not immune to getting older, preventing population aging is even harder. The UN report also finds that immigration rates would have to increase by a factor of 46 in Russia and by a factor of 18 in Germany to prevent old-age dependency ratios from rising through 2050.

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[19] Immigration estimates are from the World Bank (http://data.worldbank.org/indicator/SM.POP.TOTL.ZS and World Bank, 2011).

[20] In 2010, there were 87.8 births per 1,000 immigrant women ages 15 to 44 in the U.S. compared with 58.9 births per 1,000 native-born women of the same age group (Livingston and Cohn, 2012).

[21] Immigrants and their descendants are projected to account for all of the growth in the populations of children (17 and younger) and working-age adults (ages 18 to 64) in the U.S. from 2005 to 2050 (Passel and Cohn, 2008).

[22] See Passel and Cohn (2008). Australia and Canada are notable examples of developed economies that have immigration policies designed to sustain population growth. Immigrants accounted for 21% of the population in each country in 2010. According to the UN projections, Australia's population will increase by 51% from 2010 to 2050 and Canada's by 33%.

[23] United Nations (2001).

Even in the U.S., keeping the old-age dependency ratio constant through 2050 would call for immigration inflows that are 15 times the present rate.
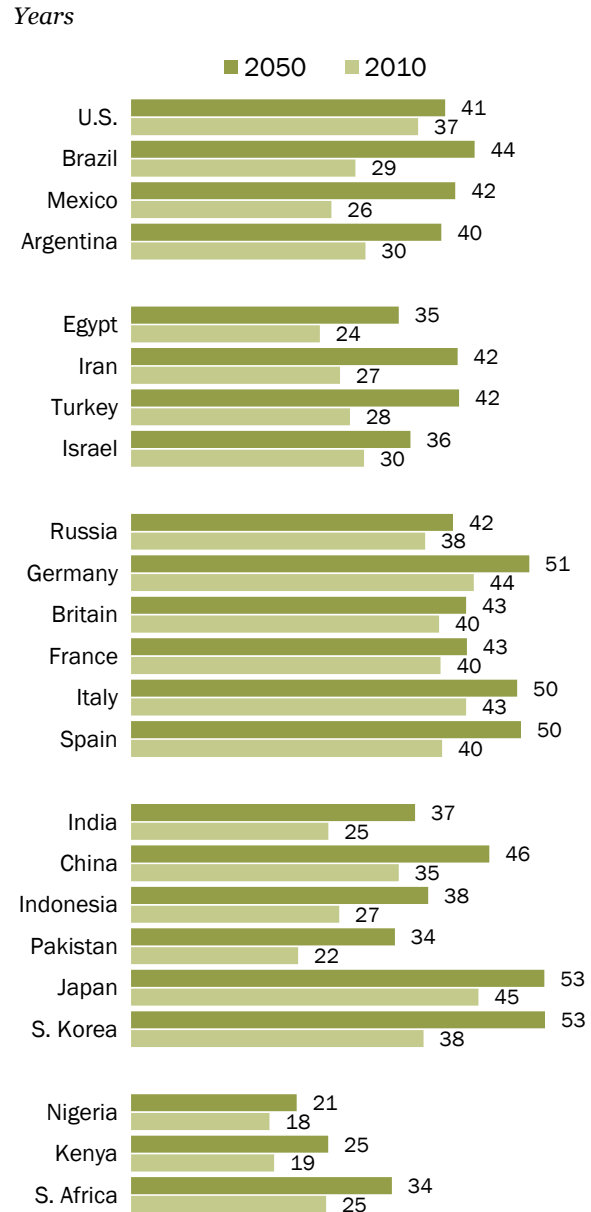
The Graying of Countries

Aging of societies seems inevitable. Regardless of their initial size or the rate of growth in their populations, all countries included in this study are projected to experience a rise in median age from 2010 to 2050. Also, the share of the population ages 65 and older is expected to increase in all countries.

Median Age: South Korea and Japan Projected to be the Oldest by 2050

Amid this "epidemic" of aging, the U.S. is projected to get *relatively* younger by virtue of being among those countries that are aging the slowest. The projected increase in the median age in the U.S., from 37 in 2010 to 41 in 2050, is matched in its moderation only by Britain, France, Russia and Nigeria. The other countries in Europe are likely to age faster than the U.S. Spain leads the way, with its median age increasing from 40 in 2010 to 50 in 2050. Generally speaking, European populations are older than the U.S. today, and that gap should stretch further between 2010 and 2050.

Sharp increases are expected in the median age in Latin American countries. Mexico, Brazil and Argentina populations are currently seven to 11 years younger than the U.S. However, in 2050, the median age in Brazil should be 44, three years older than in the U.S. Mexico may also turn older than the U.S. with a median age of 42, and Argentina will nearly catch up to the U.S.

Median Age, Estimates for 2010 and 2050

Years

■ 2050   ■ 2010

Country	2010	2050
U.S.	37	41
Brazil	29	44
Mexico	26	42
Argentina	30	40
Egypt	24	35
Iran	27	42
Turkey	28	42
Israel	30	36
Russia	38	42
Germany	44	51
Britain	40	43
France	40	43
Italy	43	50
Spain	40	50
India	25	37
China	35	46
Indonesia	27	38
Pakistan	22	34
Japan	45	53
S. Korea	38	53
Nigeria	18	21
Kenya	19	25
S. Africa	25	34

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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Countries in Asia and the Middle East are also turning gray rapidly. The median age should increase by 16 years in South Korea, from 38 in 2010 to 53 in 2050.[24] Double-digit increases are also expected in India, China, Indonesia, Pakistan, Iran, Egypt and Turkey. The median age in China, Iran and Turkey is younger than the U.S. at the moment but should become older by 2050.
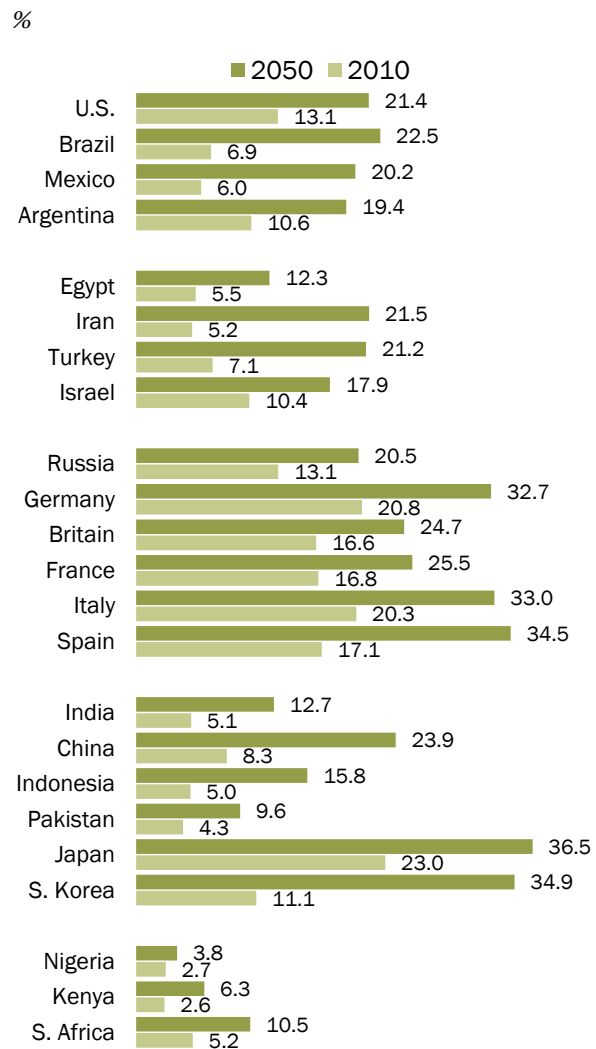
Japan currently has the oldest population in the world, and the median age there is projected to increase from 45 in 2010 to 53 in 2050. South Korea is expected to catch up to Japan by 2050 as its median age also increases to 53 by mid-century. By then, the median age in Germany (51), Italy (50) and Spain (50) will not be far behind. China's population, with a median age of 46 in 2050, is expected to be older than those in Russia, France and Britain by that date.

There are only a few instances of moderate aging. Israel is expected to remain relatively young, with its median age rising from 30 in 2010 to 36 in 2050. Nigeria and Kenya will remain even younger. The median age in these countries in 2010 was only 18 and 19, respectively. By 2050, it should increase to 21 in Nigeria and 25 in Kenya. Thus, people in these two populous countries in Africa will remain half the age as those in the oldest countries included in this study.

Proportion of People Ages 65 and Older Increases in All Countries

The rapid increases in median age are a reflection of the rising proportions of seniors (65 and older) in the populations of all countries. In the U.S., the share of seniors is expected to increase from 13.1% in 2010 to 21.4% in 2050. But it may triple in Mexico,

Proportion of People 65 and Older in a Country's Population, Estimates for 2010 and 2050

%

■ 2050 ■ 2010

Country	2050	2010
U.S.	21.4	13.1
Brazil	22.5	6.9
Mexico	20.2	6.0
Argentina	19.4	10.6
Egypt	12.3	5.5
Iran	21.5	5.2
Turkey	21.2	7.1
Israel	17.9	10.4
Russia	20.5	13.1
Germany	32.7	20.8
Britain	24.7	16.6
France	25.5	16.8
Italy	33.0	20.3
Spain	34.5	17.1
India	12.7	5.1
China	23.9	8.3
Indonesia	15.8	5.0
Pakistan	9.6	4.3
Japan	36.5	23.0
S. Korea	34.9	11.1
Nigeria	3.8	2.7
Kenya	6.3	2.6
S. Africa	10.5	5.2

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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[24] The difference of 16 years is computed from unrounded figures for the median age.

from 6.0% to 20.2%, and in Brazil, from 6.9% to 22.5%. The share almost doubles in Argentina, rising to 19.4% in 2050.

A doubling to tripling of the share of seniors is also expected in the Middle East and Asia. The most notable gains are in China, from 8.3% in 2010 to 23.9% in 2050, Iran (5.2% to 21.5%), and South Korea (11.1% to 34.9%). Japan, where the share is already quite high, is projected to experience an increase from 23.0% in 2010 to 36.5% in 2050.
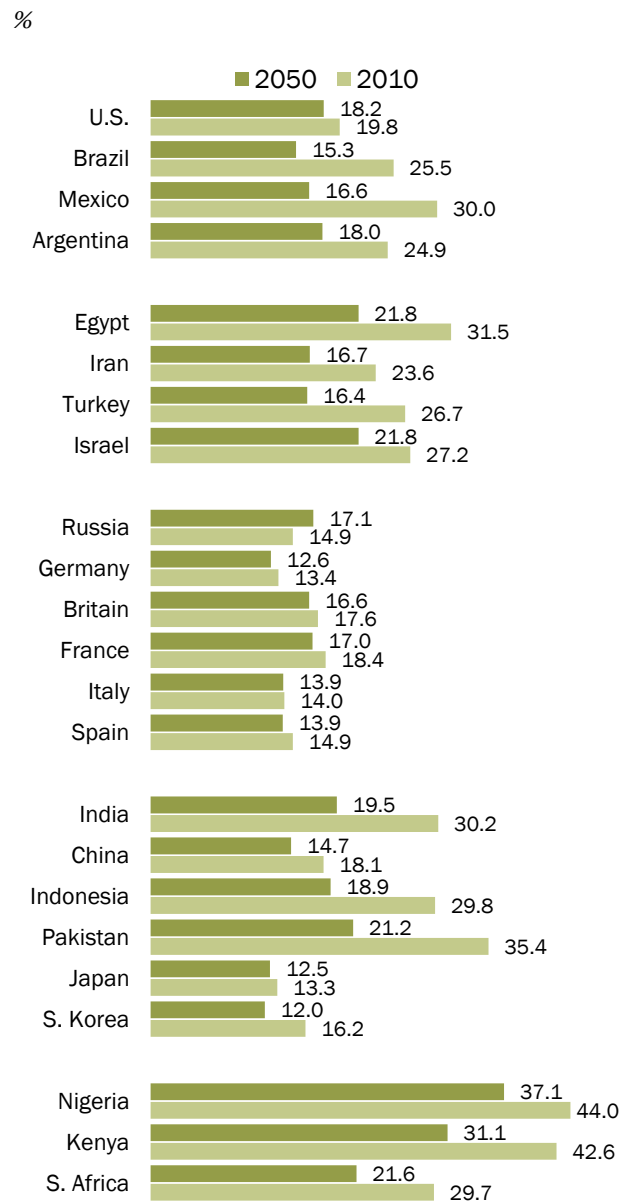
European countries that are likely to track the Japanese experience include Germany, Italy and Spain. They, too, will likely find that about one-third of their population is ages 65 and older in 2050.

Nigeria, Kenya and South Africa are expected to retain the distinction of having the lowest proportions of people 65 and older in their populations. In 2050, only 3.8% of the population in Nigeria, 6.3% of the population in Kenya and 10.5% of the population in South Africa should be ages 65 and older.

Proportion of Children Younger than 15 Decreases in Most Countries

The population segments of children younger than 15 are projected to decrease in almost all countries. Indeed, most countries should experience a crossover between the share of their population that is 65 and older and the share that is younger than 15. In the U.S., for example, 13.1% of the population was 65 and older in 2010, and that was less than the 19.8% share that was younger than 15. In 2050,

Proportion of People Younger than 15 in a Country's Population, Estimates for 2010 and 2050

%

Bar chart legend: ■ 2050 ■ 2010

Country	2050	2010
U.S.	18.2	19.8
Brazil	15.3	25.5
Mexico	16.6	30.0
Argentina	18.0	24.9
Egypt	21.8	31.5
Iran	16.7	23.6
Turkey	16.4	26.7
Israel	21.8	27.2
Russia	17.1	14.9
Germany	12.6	13.4
Britain	16.6	17.6
France	17.0	18.4
Italy	13.9	14.0
Spain	13.9	14.9
India	19.5	30.2
China	14.7	18.1
Indonesia	18.9	29.8
Pakistan	21.2	35.4
Japan	12.5	13.3
S. Korea	12.0	16.2
Nigeria	37.1	44.0
Kenya	31.1	42.6
S. Africa	21.6	29.7

however, 21.4% of the U.S. population is projected to be 65 and older, greater than the 18.2% of the population that will be younger than 15.
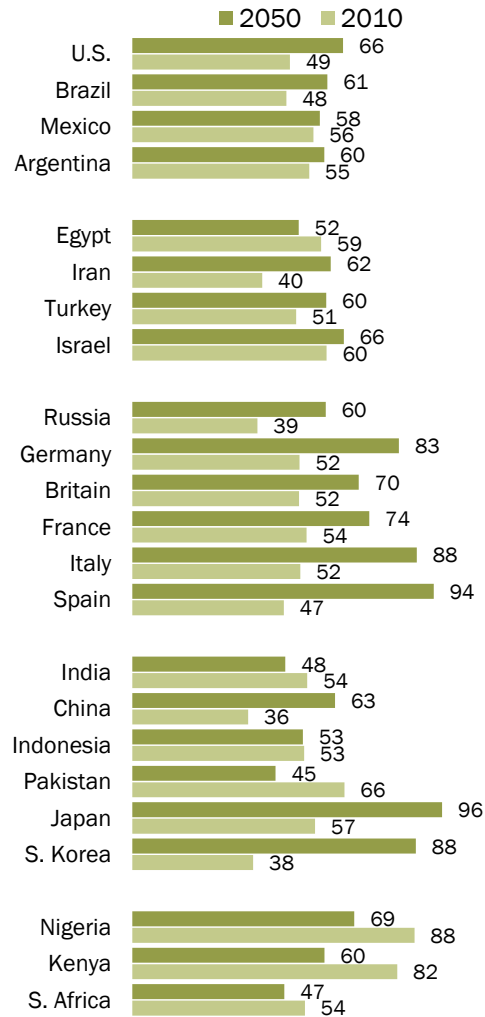
Other countries that are projected to have more seniors than young children in their populations in 2050 include Brazil, Mexico, Argentina, Iran, Turkey, Russia, Britain, France, China and South Korea. Germany, Italy, Spain and Japan have already reached this milestone, while Egypt, Israel and India may be approaching the tipping point by 2050. However, the population of children younger than 15 is expected to continue to outnumber the population of seniors by large magnitudes in Pakistan, South Africa, Kenya and Nigeria.

Most Countries Projected to Have Relatively More Dependents in the Future

The principal economic implication of an aging population is that it potentially reduces the share of the population that is in the prime of its working life. This can slow overall economic growth, absent a compensating rise in productivity.[25] At the same time, the share of the population that depends on those at work may increase. The "dependent" population includes most seniors who, in addition to their savings, depend on family transfers, private pensions and social insurance. Children younger than 15, are, of course, principally dependent on their parents.

Total Dependency Ratios, 2010 and 2050

Number of dependents (younger than 15 or older than 64) per 100 people of working age (ages 15 to 64)

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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[25] Gordon (2012), Bloom, Canning and Fink (2011), and Freeman (2006) are among those who examine this issue. Although overall economic growth may slow, per capita output may not be affected. Freeman (2006) argues that per capita output, not total output, is the more appropriate metric for economic policy.
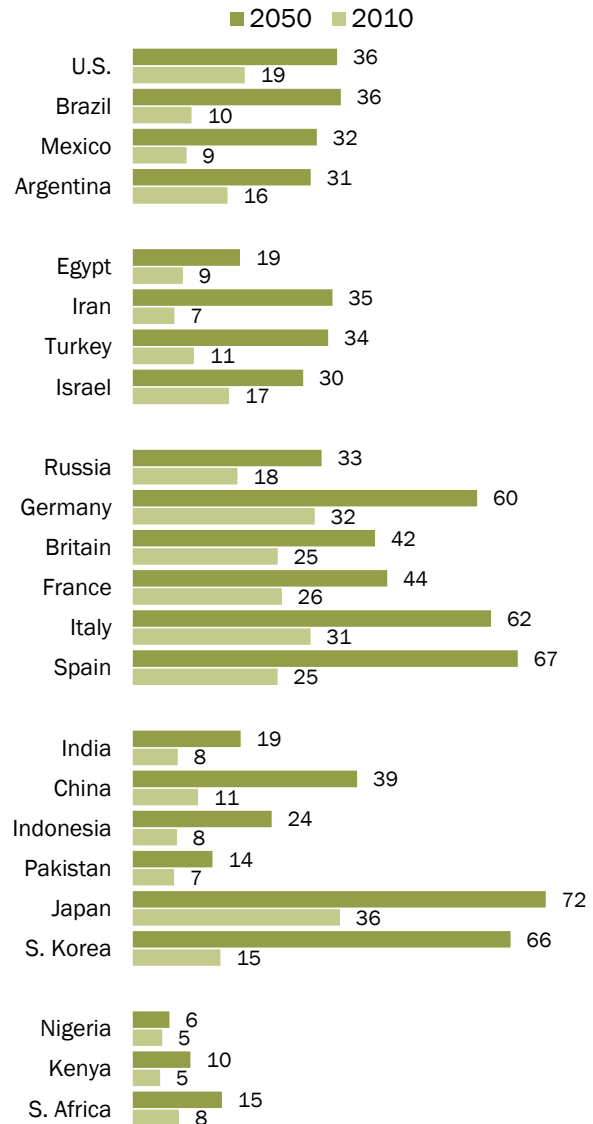
The potential burden on the working-age population to provide for the dependent population is measured by the dependency ratio. The old-age dependency ratio is defined as the number of people ages 65 and older per 100 people of working age (ages 15 to 64). The child dependency ratio is the number of children younger than 15 per 100 people of working age. Finally, the total dependency ratio is the overall number of dependents (people younger than 15 or older than 64) per 100 people of working age.[26]

The total dependency ratio is expected to increase in most countries in the years ahead. This transformation will be felt most strongly in Germany, Italy, Spain, Japan and South Korea. In 2050, the dependency ratio in these countries is expected to range from 83 in Germany to 96 in Japan. This means that these countries will have almost as many dependents as working-age people in 2050.

Countries poised to experience potentially more favorable demographic change include Egypt, India, Pakistan, Nigeria, Kenya and South Africa. In these countries the working-age population is projected to increase in size relative to the youth and senior populations combined by 2050. Thus, relatively more resources may be freed up for economic development.

Old-age Dependency Ratios, 2010 and 2050

Number of people older than 64 per 100 people of working age (ages 15 to 64)

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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[26] Alternative measures of dependency ratios define the working-age population to be ages 20 to either 64 or 69.

The most significant declines in the dependency ratio are expected to be in Pakistan, Nigeria and Kenya. These three countries currently have high levels of dependency ratios because of their significantly large populations of children. In the future, those children will stream into the labor markets in these countries in large numbers.
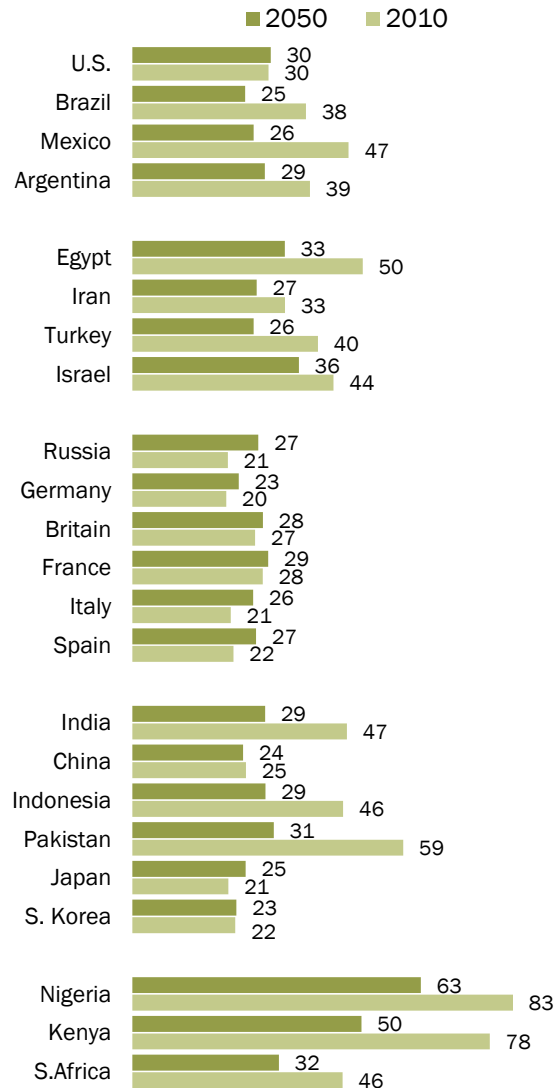
Increases in old-age dependency ratios, or aging, explain why total dependency ratios are generally on the rise. In the U.S., for example, the total number of dependents per 100 working-age people is expected to increase by 17 from 2010 to 2050, and this is entirely due to the increase in the number of seniors.

With the exception of Nigeria and Kenya, all countries in this study are set to experience large, proportional increases in the old-age dependency ratio. For example, the number of seniors per 100 working-age people in Mexico and Brazil are projected to more than triple from 2010 to 2050. Growth of this magnitude or more is also expected in Iran, Turkey, China, Indonesia and South Korea. Some countries that are already among the oldest in the world—Germany, Italy, Spain and Japan—may find that their old-age dependency ratio has doubled by 2050.

In several countries, expected decreases in the child dependency ratios will more than compensate for increases in the old-age dependency ratios. In India, for example, the number of seniors per 100 working-age people

Child Dependency Ratios, 2010 and 2050

Number of children younger than 15 per 100 people of working age (ages 15 to 64)

	2050	2010
U.S.	30	30
Brazil	25	38
Mexico	26	47
Argentina	29	39
Egypt	33	50
Iran	27	33
Turkey	26	40
Israel	36	44
Russia	27	21
Germany	23	20
Britain	28	27
France	29	28
Italy	26	21
Spain	27	22
India	29	47
China	24	25
Indonesia	29	46
Pakistan	31	59
Japan	25	21
S. Korea	23	22
Nigeria	63	83
Kenya	50	78
S.Africa	32	46

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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is projected to increase from 8 in 2010 to 19 in 2050, but the total dependency ratio will fall from 54 to 48. That is because the number of children younger than 15 per 100 working-age people in

India is expected to fall from 47 to 29. Similar patterns are projected for Egypt, Pakistan, Nigeria, Kenya and South Africa.

Is Demography Economic Destiny?

The growth in a country's population and changes in its age composition are often linked to the economic prospects for that country. A workforce that is growing in size relative to the youth and elderly populations sets the stage for more rapid economic growth. However, that demographic dividend, as it is generally described, dissipates with time because people age up and out of the workforce. That in turn sets the stage for slower economic growth.

Are these economic outcomes inevitable? Research demonstrates, for example, that the demographic dividend played a significant role in the emergence of Asia's economic tigers in the latter half of the 20th century.[27] But the dividend does not appear to be automatic because historically not all countries are observed to benefit in like fashion from demographic transitions.

It has been noted by researchers that countries that benefited the most from demographic transitions also had complementary forces at work. These include good governance; high saving rates; investments in infrastructure, schooling and public health; policies promoting gender equity; and openness to trade and foreign investments.[28] The implication is that countries currently on the cusp of the demographic dividend—India, Pakistan, Egypt, Nigeria and Kenya—perhaps cannot assume that economic benefits will automatically flow to them. India, for example, ranks very low on indicators of nutrition, health and education for its youth population and has regressed on these fronts in recent years.[29]

By the same token, it is not inevitable that the aging of a country's population portends gloom for its economic prospects. Several potential antidotes can address a shrinking workforce. One is to raise productivity, and that may happen with more investment in capital and with innovations that emerge in response to the growing scarcity of labor. It is also possible to boost the size of the workforce through immigration.

People may also choose to work longer in aging countries, especially since life expectancy is increasing and health outcomes for older people are improving.[30] In the U.S., for example, labor force participation among those 65 and older has risen from a low of 10.8% in 1985 to 18.7% in

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[27] Mason (2005).

[28] Bloom, Canning and Sevilla (2003) and Gribble and Bremner (December 2012 and September 2012).

[29] Kundu (2012).

[30] Freeman (2006), Gordon (2012), Bloom, Canning and Fink (2011) and Sanderson and Scherbov (2008).

2013. In 1948, the first year for which data are available, the labor force participation rate for people 65 and older was 27.0%.[31]

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[31] U.S. Bureau of Labor Statistics.

3. AGING IN MAJOR REGIONS OF THE WORLD, 2010 TO 2050

The trends in population growth and aging in the countries included in this report reflect the trends for the regions in which they are located. In all major regions of the world, the population of seniors is growing faster than the populations of other age groups and the median age is on the rise. But the aging process is expected to vary across regions, and there should be a significant shift in the distribution of the world population. The share of Africa in the global population is expected to increase at the expense of Asia and Europe, especially among children and working-age people.

Populations of Major Global Regions: A Shift to Africa

The most populous region in the world, by far, is Asia & Oceania. Home to 4.2 billion people, it accounted for 61% of the global population in 2010. The populations of Africa and the Americas (North and South America) were roughly identical in 2010, 1 billion and 0.9 billion, respectively. Europe was not too far behind with 0.7 billion residents accounting for 11% of the global population.

There are large variations in how regional populations are expected to change in the future. The global population is projected to increase by 38% from 2010 to 2050. However, the population of Europe is expected to decline 4% from 2010 to 2050. At the other extreme is

Population Estimates, by Region, 2010 and 2050

Thousands

	2010	2050	*Change*
Total	6,916,183	9,550,944	*+2,634,761*
Asia & Oceania	4,202,099	5,220,935	*+1,018,836*
Africa	1,031,084	2,393,175	*+1,362,091*
Americas	942,692	1,227,767	*+285,075*
Europe	740,308	709,067	*-31,241*

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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Estimated Change in Population, by Region, 2010 to 2050

%

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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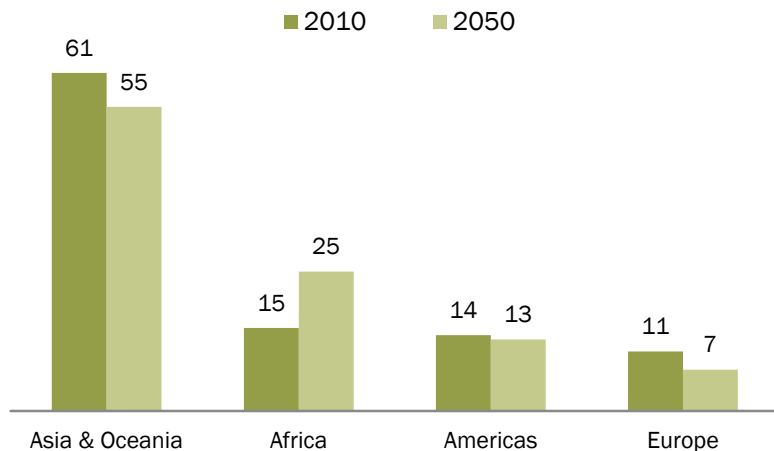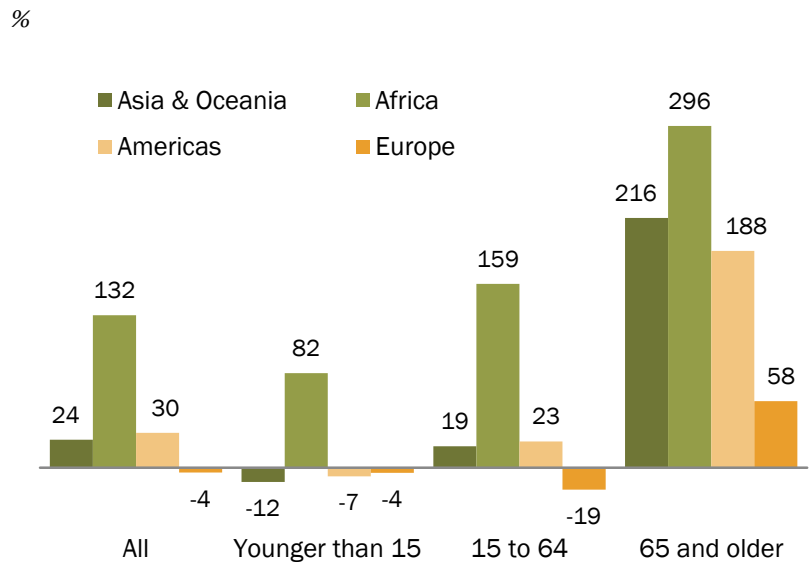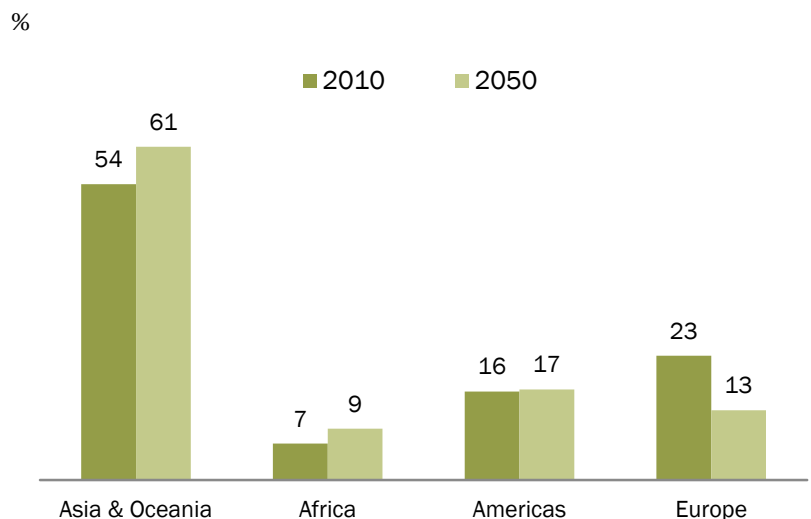Africa, whose population is projected to more than double, increasing 132% from 2010 to 2050.

Population growth in the Americas and Asia & Oceania is expected to be moderate. The population in the Americas should increase by 30% from 2010 to 2050, just a bit higher than the 28% growth expected in the U.S. The population in Asia & Oceania is expected to increase by 24%, less than in the U.S.

Africa, it is anticipated, will also have the distinction of adding the greatest number of people from 2010 to 2050. The African population is expected to increase by 1.4 billion, more than the increase of 1 billion projected for Asia & Oceania and nearly five times the increase of 0.3 billion expected for the Americas.

The rapid growth in Africa's population should increase the share of the world's population that lives there from 15% in 2010 to 25% in 2050. The share of the global population that lives in Asia & Oceania is projected to decrease from 61% to 55%, and the share that lives in Europe should decrease from 11% to 7%. The stature of the Americas, as measured by relative population, remains more or less unchanged through 2050.

Regional Distribution of the Global Population, 2010 and 2050

%

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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Population Change by Region and Age Group

Aging has a firm foothold in all regions of the world. Only the population of seniors, ages 65 and older, is projected to increase in all regions from 2010 to 2050. Once again, growth is expected to be the fastest in Africa (296%). But it should also be rapid in Asia & Oceania (216%) and the Americas (188%). The projected increase in the population of seniors in Europe is a comparatively modest 58%. However, that growth builds on what is already a large base of older residents.

The population of children younger than 15 is expected to increase only in Africa, by 82% from 2010 to 2050. In sharp contrast, the population of young children is projected to fall by 12% in Asia & Oceania, 7% in the Americas, and 4% in Europe. Africa is also the only major region where notable growth is projected for the primary working-age population. From 2010 to 2050, the population ages 15 to 64 should increase by 159% in Africa, 19% in Asia & Oceania, and 23% in the Americas. In

Population Change, by Region and Age, 2010 to 2050

%

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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Regional Distribution of the Global Population of People 65 and Older, 2010 and 2050

%

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm
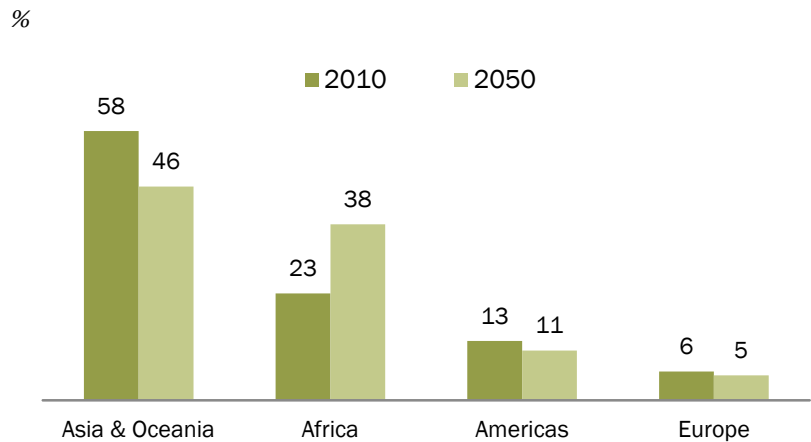
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Europe, this population may decrease by 19%.

Overall, the projected changes in population are most sharply tilted toward the oldest age group in Asia & Oceania. In part, this is driven by the rapid aging of China. Thus, the share of the global population of people ages 65 and older living in Asia should rise from 54% in 2010 to 61% in 2050. Europe, where population is generally on the decline, is likely to find that its share of the global population of seniors has also declined, from 23% in 2010 to 13% in 2050.

At the other end of the age spectrum, the share of young children living in Africa is expected to rise sharply, from 23% in 2010 to 38% in 2050. The youth share in Asia & Oceania is projected to decline from 58% to 46%. The global labor force will also shift in the direction of Africa. The share of prime working-age people (ages 15 to 64) living in Africa is expected to increase from 13% to 25%. Asia & Oceania will likely experience erosion in its share of the working-age population, from 63% in 2010 to 56% in 2050.
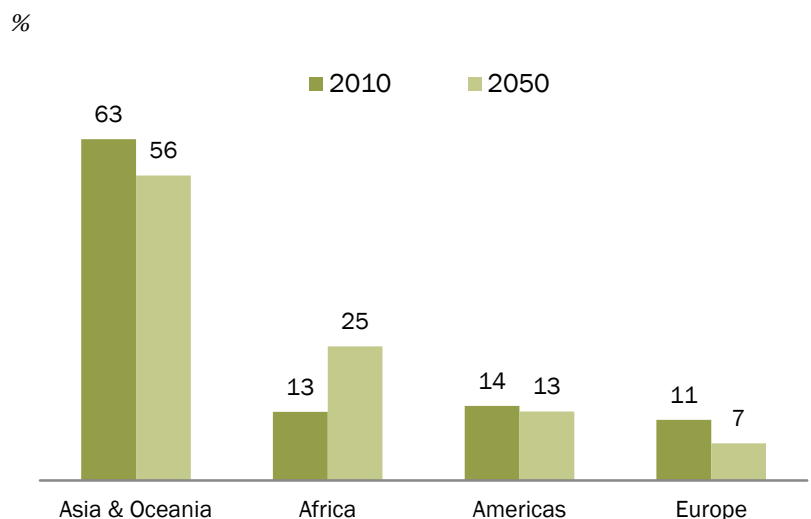
Regional Distribution of the Global Population of People Younger than 15, 2010 and 2050

%

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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Regional Distribution of the Global Population of People Ages 15 to 64, 2010 and 2050

%

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm
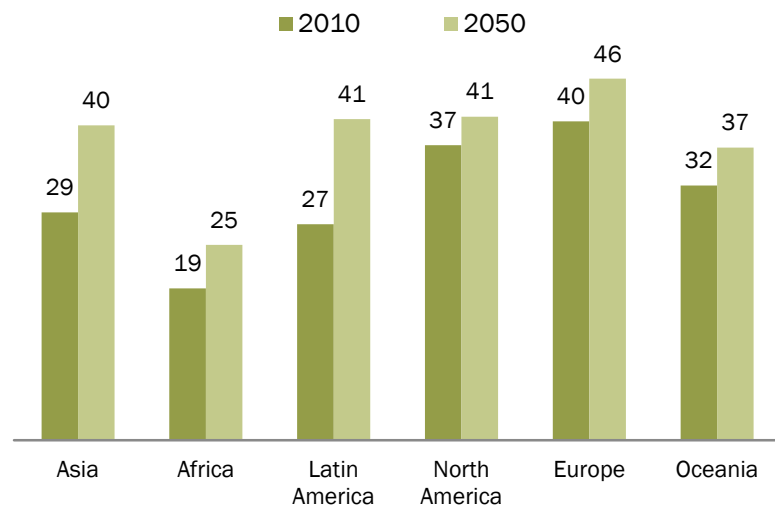
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Median Age by Region

Europe's population is the oldest in the world, and the region should retain that distinction in 2050. In 2010, Europe was the only region with a median age of 40. It is projected to age up to 46 in 2050. Africa, with a median age of 19, is currently half as young as Europe. Africa's median is likely to rise to 25 by 2050, but even then it will be younger than any other region is *today*.

Latin America and Asia are expected to experience double-digit increases in their median ages. The median age in Latin America should increase from 27 in 2010 to 41 in 2050, and the median age in Asia should rise from 29 in 2010 to 40 in 2050. Thus, these two regions are likely to catch up with North America by 2050 and also close much of the age gap with Europe.[32] North America may age up the least, adding only four years between 2010 and 2050.

Median Age, Estimates for 2010 and 2050

Years

	2010	2050
Asia	29	40
Africa	19	25
Latin America	27	41
North America	37	41
Europe	40	46
Oceania	32	37

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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[32] Asia & Oceania and the Americas are divided into their component regions in the median age chart because an aggregate median age cannot be computed from the median age of each subregion.
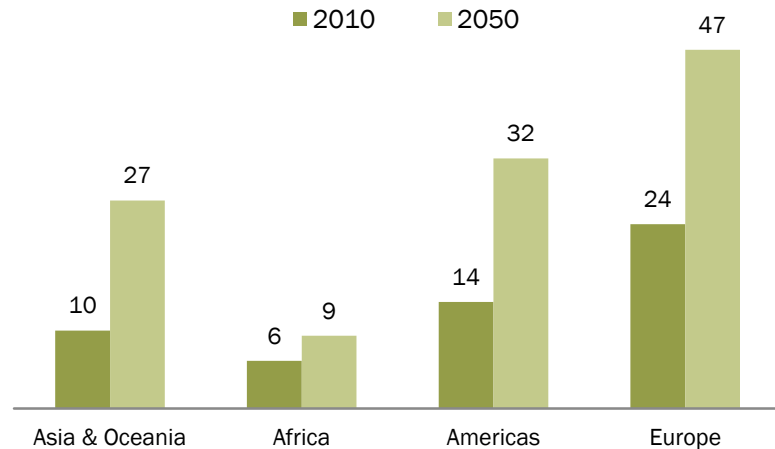
Dependency Ratios by Region

Because the population of seniors is projected to grow faster than the working-age population in all regions, old-age dependency ratios are also expected to rise all over the world. In Asia, the old-age dependency ratio is expected to nearly triple, from 10 seniors per 100 working-age people in 2010 to 27 in 2050. The ratio should more than double in the Americas, rising from 14 to 32, and it may nearly double in Europe, from 24 to 47. The current old-age dependency ratio in Africa is only 6, and it is expected to remain relatively low in the future, reaching 9 in 2050.

As old-age dependency ratios increase, countervailing decreases in the child dependency ratios are expected in all regions except Europe. The sharpest decline may be in Africa, where the number of children younger than 15 per 100 working-age people is expected to decrease from 74 in 2010 to 52 in 2050. The ratio falls from 38 to 28 in Asia & Oceania and from 38 to 29 in the Americas. In Europe, where

Old-age Dependency Ratios, by Region, 2010 and 2050

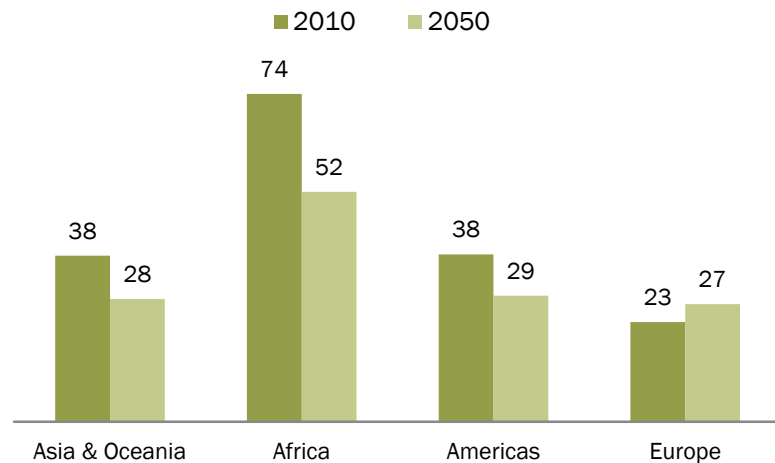*Number of people older than 64 per 100 people of working age (ages 15 to 64)*

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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Child Dependency Ratios, by Region, 2010 and 2050

Number of children younger than 15 per 100 people of working age (ages 15 to 64)

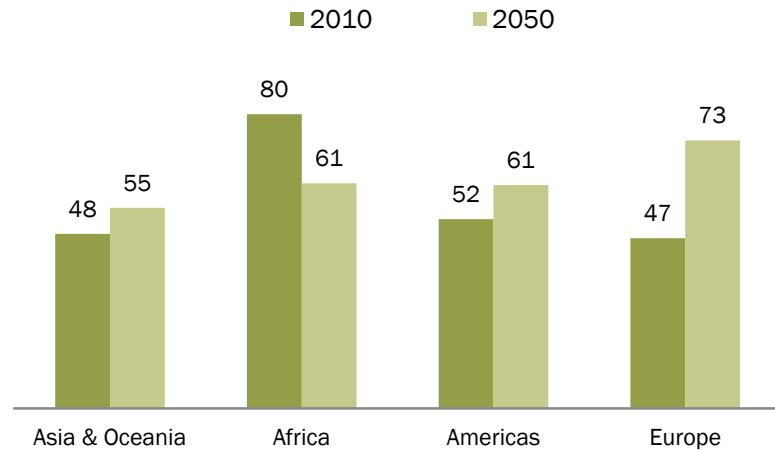Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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the size of the working-age population is shrinking, the child dependency ratio is projected to increase from 23 in 2010 to 27 in 2050.

In Asia & Oceania and the Americas, the expected reductions in child dependency are not sufficiently large to make up for the growing numbers of seniors. The result is an expected increase in the total number of dependents per 100 working-age people—from 48 in 2010 to 55 in 2050 in Asia & Oceania and from 52 to 61 over the same period in the Americas. Europe, where the only growing population is seniors, is projected to experience the sharpest increase in the total dependency ratio, from 47 to 73. Thus, for every 100 people of working age, Europe may have nearly three-quarters the number of dependents in 2050.

Total Dependency Ratios, by Region, 2010 and 2050

Number of dependents (people younger than 15 or older than 64) per 100 people of working age (ages 15 to 64)

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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Africa is the only region where dependency ratios are projected to decline. With the prime working-age population growing rapidly, the total dependency ratio in Africa is expected to decrease from 80 in 2010 to 61 in 2050. Thus, by 2050, there should be almost 20 fewer dependents per 100 working-age people in Africa. That is potentially a very favorable demographic outcome that could spur economic growth on the continent.

4. POPULATION CHANGE IN THE U.S. AND THE WORLD FROM 1950 TO 2050

The demographic future for the U.S. and the world looks very different than the recent past in key respects. Growth from 1950 to 2010 was rapid—the global population nearly tripled, and the U.S. population doubled. However, population growth from 2010 to 2050 is projected to be significantly slower and is expected to tilt strongly to the oldest age groups, both globally and in the U.S.
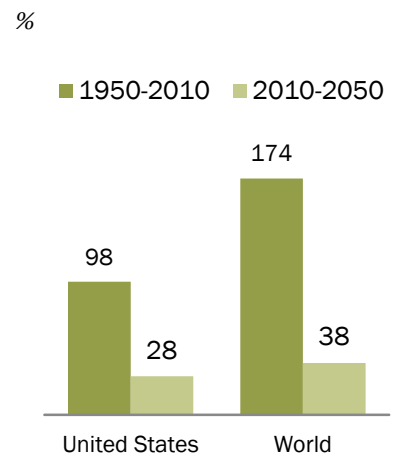
Aging is not exactly news—the U.S. and global populations also turned older from 1950 to 2010. But future prospects for aging have garnered more attention because, unlike in the past, younger populations, those of children and those of middle-age adults, are at near standstill. Thus, the social and economic effects of aging are likely to be felt more acutely in the future.

Population Change

The U.S. population is projected to increase from 312.2 million in 2010 to 400.9 million in 2050.[33] For this four-decade period, that is an increase of 28% at an average annual rate of 0.6%. The anticipated annual rate of growth in the U.S. population is significantly slower than in the past. In the six decades from 1950 to 2010, the U.S. population had increased from 157.8 million to 312.2 million, a total gain of 98% at an average annual rate of 1.1%. Thus, the projected annual rate of growth in the U.S. population is only about half the rate of growth experienced in the recent past.

The projected slowdown in population growth is even sharper in the world overall. From 1950 to 2010, the world population increased from 2.5 billion to 6.9 billion, or by 174%. The average annual rate of growth—1.7%—was much higher than in the U.S. In the future, the global population is expected to increase from 6.9 billion in 2010 to 9.6 billion in 2050, or by 38%. The average annual rate of growth—0.8%—is only slightly higher than the rate projected for the U.S.

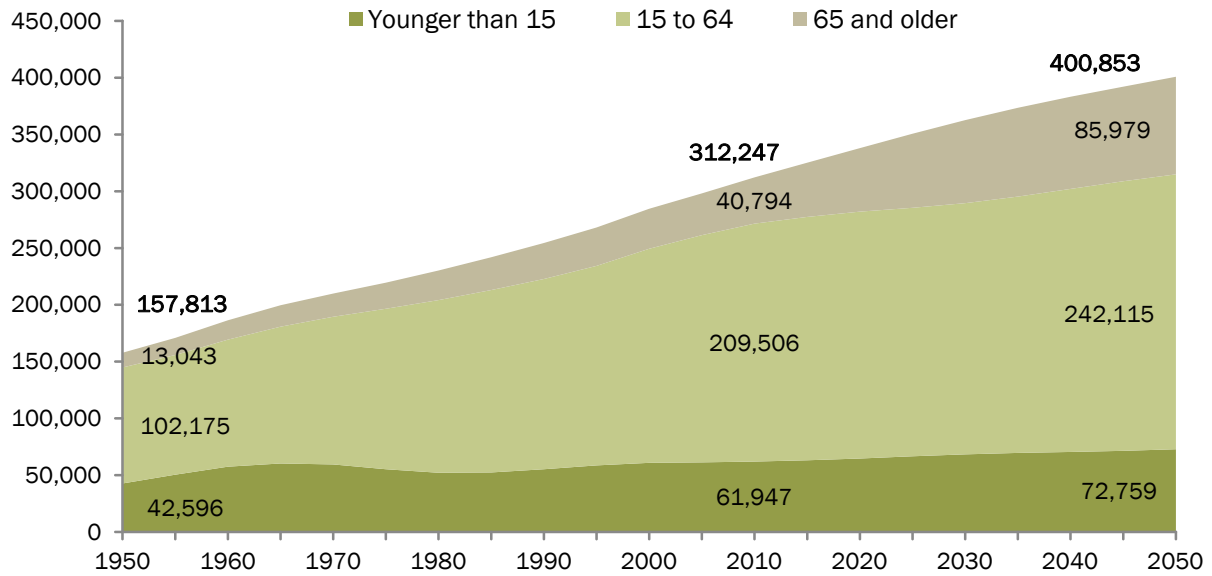**Estimated Change in the U.S. and Global Populations, 1950 to 2050**

%

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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[33] The UN estimate of 312.2 million exceeds the count of 308.7 million recorded in the 2010 Decennial Census of the U.S.

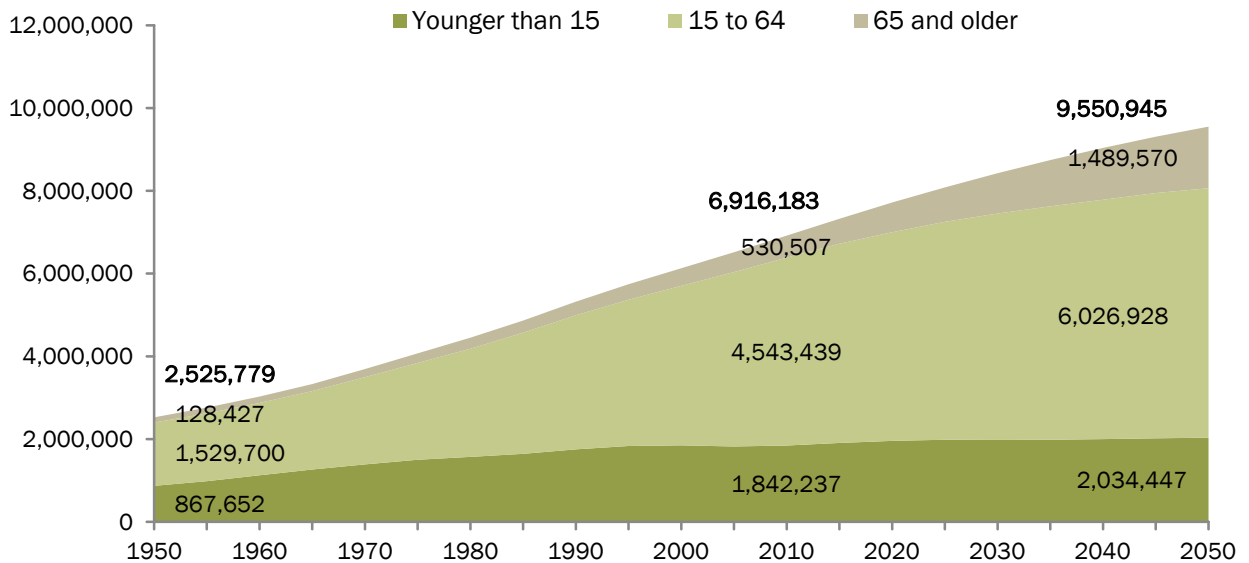## Estimates of the U.S. Population, by Age, 1950 to 2050

Thousands

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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Estimates of the Global Population, by Age, 1950 to 2050

Thousands

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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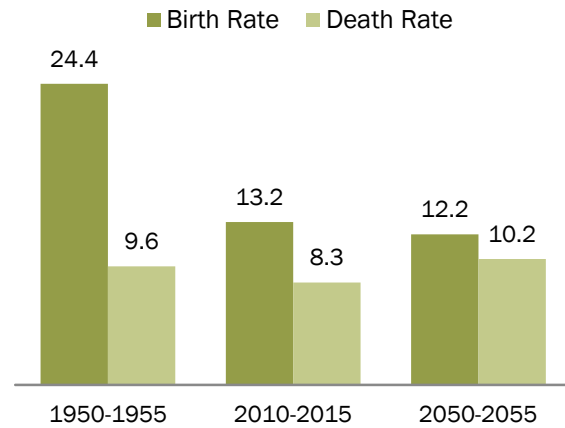
Birth Rates, Death Rates, and Life Expectancy

The growth of a population and changes in its age structure are closely related to trends in birth and death rates and changes in life expectancy. Both in the U.S. and in the world, birth rates have trended down since 1950, and the gap with respect to death rates has narrowed sharply, leading to a slowdown in population growth. At the same time, life expectancy has improved significantly and has contributed to the aging of populations. Both trends—falling birth rates and rising life expectancy—have been more pronounced globally than in the U.S.

From 1950 to 1955, the crude birth rate in the U.S. averaged 24.4 per 1,000 people. That was more than double the crude death rate of 9.6 per 1,000 people.[34] Thus, population growth was more robust in the past. By 2010-2015, the crude birth rate in the U.S. had fallen to 13.2, much closer to the crude death rate of 8.3. By mid-century, from 2050 to 2055, the birth rate is projected to drop further to 12.2 and the death rate to rise to 10.2. Consequently, population growth from 2010 to 2050 should be much slower than it was from 1950 to 2010.

A similar convergence in birth rates and death rates is underway globally. The birth rate worldwide from 1950 to 1955—37.0 per 1,000 people—was almost twice as high as the death rate of 19.1 per 1,000 people. This led to robust gains in population. However, it is expected

Birth Rates and Death Rates in the U.S., 1950 to 2055
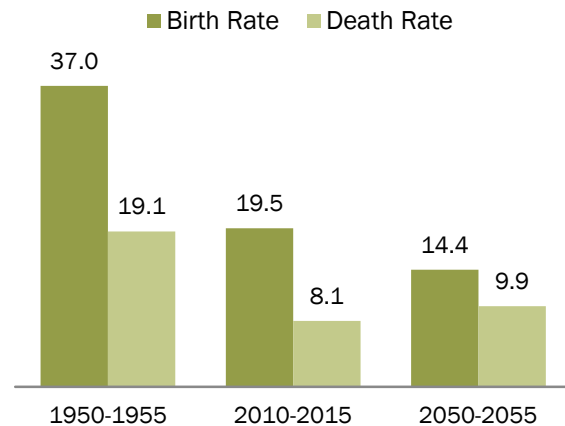
Per 1,000 people

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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Global Birth Rates and Death Rates, 1950 to 2055

Per 1,000 people

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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[34] The crude birth (death) rate is the number of births (deaths) over a given period divided by the person-years lived by the population over that period.
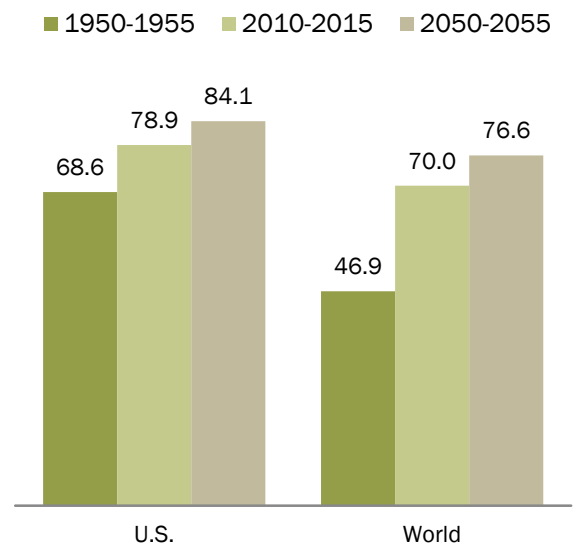
that from 2050 to 2055, the global birth rate—14.4—will be nearer the projected global death rate of 9.9. Thus, as in the U.S., the global population should increase more slowly in the future.

The decrease in birth rates around the world is linked to a number of factors. These include social trends, such as the decline in marriage rates and the movement away from the family as a core living arrangement, and economic forces, such as the rising cost of raising children, the growing number of women in college and in the labor force, urbanization and, with the emergence of social insurance, the reduced need for children as a support mechanism in old age. Development of the contraceptive pill and its widespread adoption starting in the 1960s is also a factor. Government policies, such as China's imposition of a one-child policy in 1979, also may have played a role.[35]

Large gains in life expectancy accompanied the decline in birth rates in the U.S. and around the world. The average U.S. resident could expect to live for 79 years during 2010 to 2015, up from 69 years during 1950 to 1955. The improvement is even more striking for the world, with longevity rising from 47 years during 1950-1955 to 70 years during 2010-2015. These gains provided the foundation for an increasingly older population. Future gains in life expectancy are not expected to be nearly as sharp, either in the U.S. or the world, but it is anticipated that the aging phenomenon will persist because of steep drop-offs in birth rates.

The gains in longevity were initially due to reductions in infant mortality. Those, in turn, were driven by better sanitation, improvements in public health, and advances in overcoming childhood diseases, such as smallpox, polio and measles. General improvements in living standards and nutrition and changes in health-related behaviors have also been factors. In more recent decades, gains in life expectancy are increasingly being realized at older ages. That is the

Years of Life Expectancy at Birth in the U.S. and Globally, 1950 to 2055

■ 1950-1955   ■ 2010-2015   ■ 2050-2055

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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[35] Kotkin, Shroff, Modarres and Cox (2012), Hesketh, Lu and Xing (2005), Fischer and Hout (2006), and Social Trends Institute. In November 2013, China announced a relaxation of the one-child policy.

consequence of medical advances against heart disease, cancer and other adult afflictions. This phenomenon has been dubbed the "longevity transition."[36]
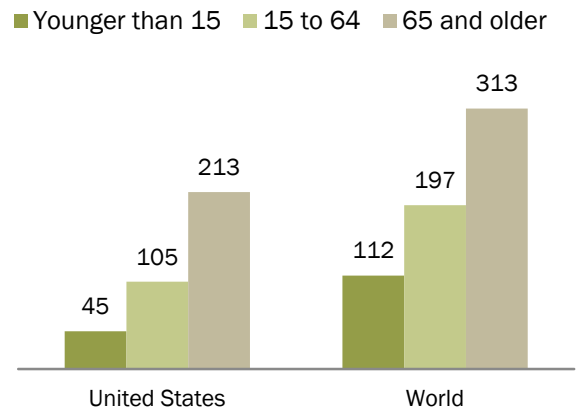
Population Change by Age Group

The aging of populations is not a new phenomenon—the U.S. and global populations have both turned older since 1950. However, future prospects for aging have garnered more attention because population growth is likely to be concentrated in the older age groups. The number of children and the number of middle-age adults are expected to increase only slightly, and the social and economic effects of aging may be felt more acutely in the future.

Even in the past, the rate of growth in the population of seniors (ages 65 and older) exceeded the rate of growth in the populations of younger cohorts. In the U.S., the population of seniors more than tripled, from 13 million in 1950 to 40.8 million in 2010, a total gain of 213%. The percentage increase was greater than the increase in the population of 15- to 64-year-olds (105%) and the increase in the population of children younger than 15 (45%).

A similar trend characterized changes in the global population by age groups. The global population of those 65 years and older more than quadrupled, from 128.4 million in 1950 to 530.5 million in 2010. That was a gain of 313%, significantly greater than the increase of 197% among 15- to 64-year-olds and 112% among children younger than 15.

Estimated Change in the U.S. and Global Populations, by Age, 1950 to 2010
%

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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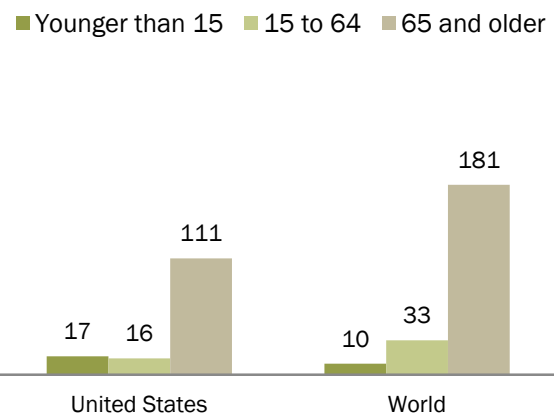### Estimated Change in the U.S. and Global Populations, by Age, 2010 to 2050
%

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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[36] Fischer and Hout (2006), Eggleston and Fuchs (2012) and Population Reference Bureau (2006).

The population of seniors in the U.S. and in the world should continue to increase at a fast pace from 2010 to 2050. In the U.S., the population ages 65 and older is projected to increase by 111% (to 86 million in 2050), and globally it may increase by 181% (to 1.5 billion in 2050).
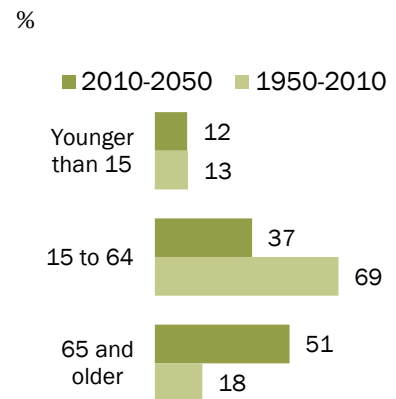
Notably, the annual rate of growth in the population of seniors in the future is expected to be much as it has been in the past. In the U.S., the projected rate of increase from 2010 to 2050 is 1.9% annually, about the same as the rate that prevailed from 1950 to 2010. A temporary surge in the growth rate of this population will occur from 2010 to 2030 as the baby boomers turn 65 and older. However, the rate of growth in the population of seniors is expected to slow sharply from 2030 to 2050.[37] Globally, the population of seniors is projected to grow at 2.6% per year from 2010 to 2050. That is only slightly higher than the annual rate of growth of 2.4% from 1950 to 2010.

The key distinction between the past and the future is that the growth in the population of young children virtually grinds to a halt through the middle of the century. Estimates indicate that the global population of children younger than 15 will increase by only 10% from 2010 to 2050. The U.S. will likely experience more growth—17% in total from 2010 to 2050—but at the modest rate of 0.4% annually.

The future may also feature steep drop-offs in the rates of growth of 15- to 64-year-olds. From 1950 to 2010, this age cohort grew at an annual rate of 1.2% in the U.S. and at an annual rate of 1.8% in the world overall. The annual rates of growth are projected to be only one-third as high from 2010 to 2050—0.4% in the U.S. and 0.7% globally.

Because of the lack of change in the size of younger age cohorts, seniors are expected to account for much higher proportions of overall population growth in the future than they did in the past. In the U.S., the senior population is projected to increase by 45.2 million and account for 51% of the overall increase of 88.6 million people. In sharp contrast, the change in the populations

Proportion of U.S. Population Growth Accounted for by Age Groups, 1950 to 2050

%

■ 2010-2050　■ 1950-2010

	2010-2050	1950-2010
Younger than 15	12	13
15 to 64	37	69
65 and older	51	18

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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[37] The large cohort of baby boomers started turning 65 in 2011. Between 2010 and 2030 the population of seniors in the U.S. is expected to increase at an annual average rate of 3%. However, the last of the boomers will have turned 65 by 2030, and from 2030 to 2050 the U.S. population of seniors is expected to increase at a rate of only 0.8% per year. Thus, the average rate of growth in this population from 2010 to 2050 turns out to be no faster than from the average rate of growth from 1950 to 2010.

ages 65 and older accounted for only 18% of the increase in the overall population from 1950 to 2010.

Similar to the projections for the U.S., the global increase in the population ages 65 and older is expected to account for 36% of the overall increase of 2.6 billion from 2010 to 2050. This, too, stands in sharp relief with the past, when this age cohort accounted for only 9% of the increase in the global population from 1950 to 2010.

Proportion of Global Population Growth Accounted for by Age Groups, 1950 to 2050

%

■ 2010-2050   ■ 1950-2010

Age group	2010-2050	1950-2010
Younger than 15	7	22
15 to 64	56	69
65 and older	36	9

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm
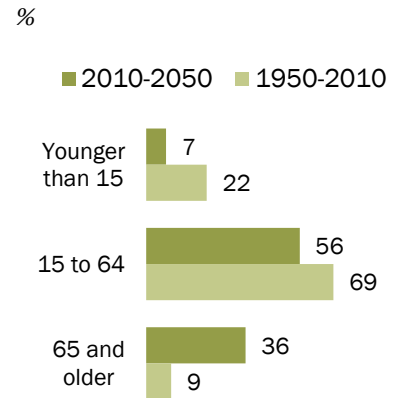
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Changes in the Age Structures of the U.S. and Global Populations

The aging of the U.S. and global populations is encapsulated in the steady rise in their median ages since 1950. In the U.S., the median age increased from 30 in 1950 to 37 in 2010. Globally, the median age rose from 24 in 1950 to 29 in 2010. In the past, therefore, the U.S. aged faster than the world overall.

In the future, however, the world is projected to age more rapidly than the U.S. The median age in the U.S. should rise moderately, from 37 in 2010 to 41 in 2050. The increase in the global median age likely will be sharper, from 29 in 2010 to 36 in 2050.

Median Age, 1950, 2010 and 2050

Years

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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As the world population turns older at a faster clip, the U.S. share in the global population of seniors should diminish. In 1950, the U.S. was home to 10.2% of the world's seniors. That share had slipped to 7.7% by 2010 and is projected to drop further to 5.8% by 2050.

The U.S. Share in the Global Population, by Age, 1950, 2010 and 2050

%

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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In a reversal of past trends, the share of children younger than 15 who live in the U.S. may nudge up, from 3.4% to 3.6%.

It is projected that the U.S. will attain a significant milestone in aging by 2050. By then, the U.S. population ages 65 and older will be larger than the population of children younger than 15. More specifically, one-in-five U.S. residents (21.4%) is expected to be 65 and older in 2050 compared with less than one-in-five residents (18.2%) who are younger than 15. In 2010, the youngest age cohort accounted for 19.8% of the U.S. population, significantly higher than the share of the oldest age cohort (13.1%).

The age structure of the global population is headed in the same direction as the U.S. The share of children younger than 15 in the global population is expected to drop from 26.6% in 2010 to 21.3% in 2050. The share of people 65 and older is expected to double, from 7.7% in 2010 15.6% in 2050. Overall, the age structures of the U.S. and the world population will resemble each other more closely in the future.

Distribution of the U.S. Population, by Age, 1950, 2010 and 2050

%

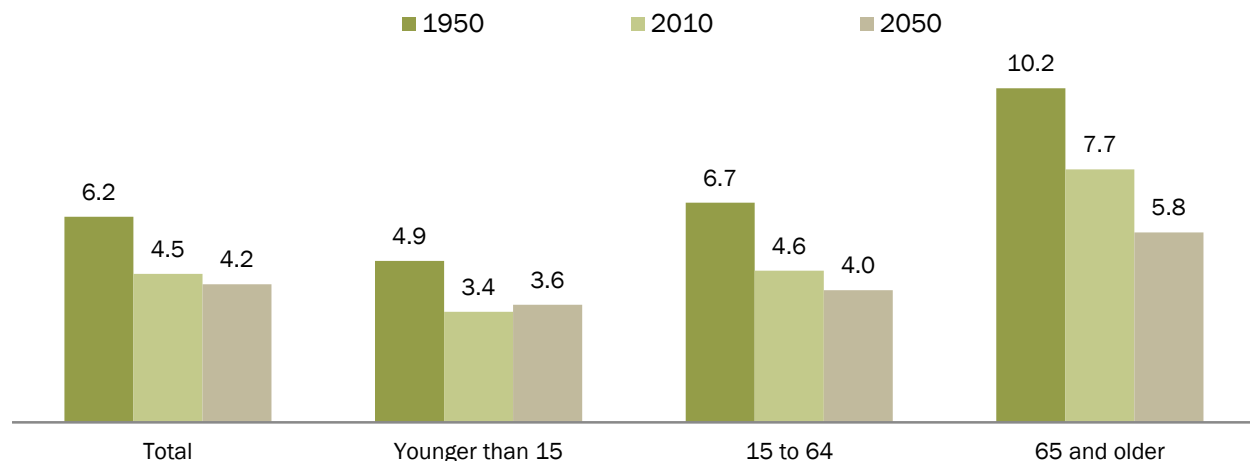Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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Distribution of the Global Population, by Age, 1950, 2010 and 2050

%

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm
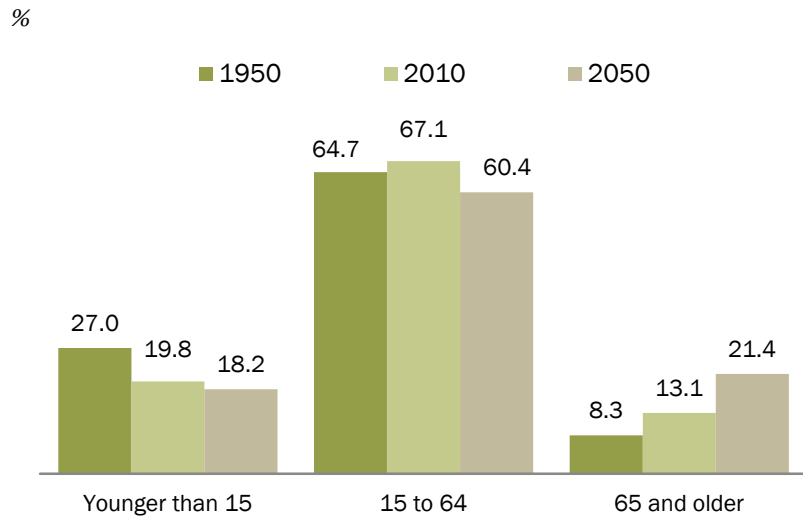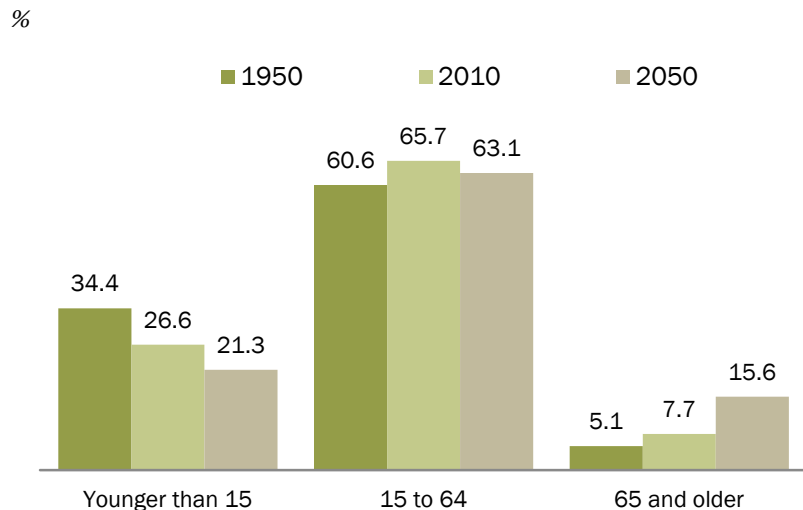
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Dependency Ratios in the U.S. and Globally

The old-age dependency ratio in the U.S. is projected to nearly double. The number of people ages 65 and older per 100 working-age people in the U.S. is expected to increase from 19 in 2010 to 36 in 2050.

That is partly due to the aging of baby boomers and partly due to the drop-off in population growth. However, because the child and middle-age populations in the U.S. are expected to increase at about the same pace, the child dependency ratio in the U.S. will be unchanged at 30 from 2010 to 2050. Thus, the future increase in the total dependency ratio in the U.S.—from 49 dependents per 100 working-age people in 2010 to 66 in 2050—is driven by aging.

Dependency Ratios in the U.S., 1950, 2010 and 2050

■ 1950 ■ 2010 ■ 2050

Note: Total dependency is the number of dependents (people younger than 15 or older than 64) per 100 people of the working age (ages 15 to 64). Child dependency is the number of children younger than 15 per 100 people of working age. Old-age dependency is the number of people older than 64 per 100 people of working age.

Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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The increase in the old-age dependency ratio in the U.S. is not a new phenomenon. The ratio previously rose from 13 in 1950 to 19 in 2010. However, the child dependency ratio fell sharply in the past, from 42 in 1950 to 30 in 2010. That was the consequence of tumbling birth rates in the wake of a baby boom-fueled bulge in the middle of the U.S. age distribution. Thus, despite an overall aging of the population, the number of dependents per 100 working-age people in the U.S. fell from 54 in 1950 to 49 in 2010.

Old-age dependency ratios in the world overall are less than in the U.S. but they are projected to rise slightly faster. The number of people ages 65 and older per 100 working-age people in the world is expected to more than double in the future, from 12 in 2010 to 25 in 2050. However, global increases in old-age dependency may be balanced by steep declines in the child dependency ratio, from 41 in 2010 to a near U.S.-like level of 34 in 2050. This means that the total dependency ratio in the world is expected to increase from 52 in 2010 to 58 in 2050, a much smaller increase than in the U.S.

Global Dependency Ratios, 1950, 2010 and 2050

■ 1950　　■ 2010　　■ 2050

Note: Total dependency is the number of dependents (people younger than 15 or older than 64) per 100 people of the working age (ages 15 to 64). Child dependency is the number of children younger than 15 per 100 people of working age. Old-age dependency is the number of people older than 64 per 100 people of working age.

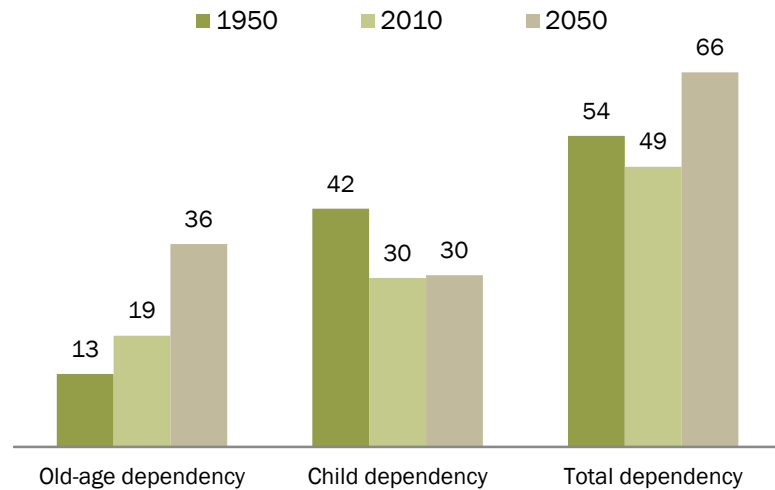Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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5. AGING AND SOCIAL INSURANCE SYSTEMS

The aging of populations raises concerns about the affordability of publicly funded pension and health care programs in the future. Many developed economies already expend a sizable share of their GDP on these programs. For example, public expenditures on pensions and health care currently consume about 13% of GDP in the U.S. and in excess of 20% in France. For these economies, the pressing question is whether population aging will push public pensions and health care programs to consume ever-rising proportions of national income.[38]

Emerging economies typically do not have expansive public pension and health care programs. India and Indonesia, for example, each spend only 2% of their GDP on these programs. The challenge for these economies is to build their social insurance programs to meet the needs of their increasingly older populations and to do so in a fiscally sound manner.

In addition to increased demand for old-age financial and medical support, aging raises the possibility that per capita output sags with relatively fewer people in the workforce. These trends are unfolding in a climate of health-cost inflation that has risen faster than general inflation for several decades in most countries. However, an increase in public expenditures on pensions and health care *as a share* of national income is not inevitable. Future improvements in technology and gains in productivity, containment of health-cost inflation and delayed retirements may generate sufficiently large countervailing forces to slow this growth in spending.

This section reviews evidence on what governments are currently spending on public pensions and health care and the degree to which those amounts are projected to rise by 2050. The focus is on the 18 countries for which data are available on current and projected public expenditures on pensions and health care. In these countries, public expenditures on pensions and health care are generally expected to rise as a share of GDP. By and large, health care expenditures are expected to increase at a faster pace than expenditures on pensions. However, aging is not the principal driver of growth in public health care expenditures in the long run. Other factors, such as cost inflation, loom larger in many countries.
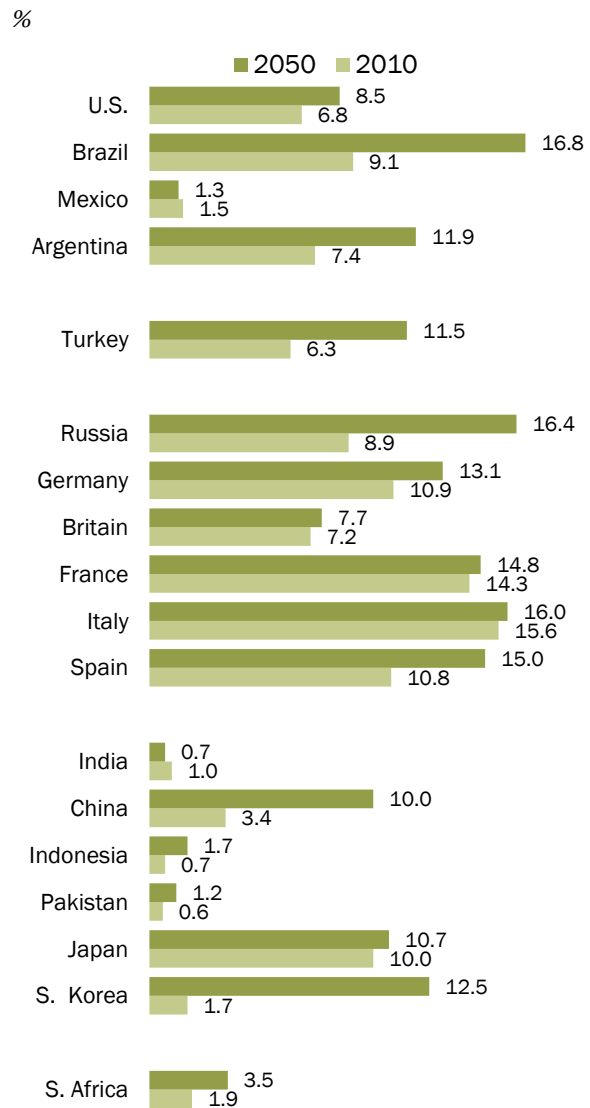
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[38] The terms GDP and national income are used interchangeably in this report.

Public Pension Expenditures

Public expenditures on pensions tend to be higher in developed economies. Italy leads the pack among the countries included in this report, spending 15.6% of its GDP in 2010 on public pensions. France spent 14.3% of its GDP on public pensions, followed by Germany (10.9%), Spain (10.8%) and Japan (10.0%). The U.S. spent 6.8% of its GDP on public pension schemes in 2010, less even than Brazil (9.1%) and Argentina (7.4%).[39] Government expenditures on pensions were in the order of 1% to 2% of GDP in Mexico, India, Indonesia, Pakistan, South Korea and South Africa.

Pension expenditures in developed economies are higher partly because they have older populations and partly because they provide more generous benefits. The share of the population ages 65 and older in 2010 was the highest in the U.S., Japan and European nations. Pension payments also generally replace a greater share of average wages in these countries. This "replacement rate" is about 40% in the U.S. and is higher still in France, Germany, Italy and Spain. Replacement rates in Russia, Argentina and Brazil, among the leading emerging economies, match or top the rates in the U.S. In India, Pakistan, China, Indonesia and Mexico, whose populations are relatively young, replacement rates are lower. South Korea also has a relatively low replacement rate, on par with India at about 10%.

Estimates of Public Pension Expenditures as a Share of GDP, 2010 and 2050

%

Country	2050	2010
U.S.	8.5	6.8
Brazil	16.8	9.1
Mexico	1.3	1.5
Argentina	11.9	7.4
Turkey	11.5	6.3
Russia	16.4	8.9
Germany	13.1	10.9
Britain	7.7	7.2
France	14.8	14.3
Italy	16.0	15.6
Spain	15.0	10.8
India	0.7	1.0
China	10.0	3.4
Indonesia	1.7	0.7
Pakistan	1.2	0.6
Japan	10.7	10.0
S. Korea	12.5	1.7
S. Africa	3.5	1.9

Source: Clements, B., D. Coady, F. Eich, S. Gupta, A. Kangur, B. Shang and M. Soto. "The Challenge of Public Pension Reform in Advanced and Emerging Market Economies," International Monetary Fund, Occasional Paper 275 (2012)

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[39] The estimates reported in this section are from the International Monetary Fund (IMF), the Organization for Economic Co-operation and Development (OECD) and the Congressional Budget Office (CBO). Estimates may vary across sources because of differences in definitions. For example, data on U.S. public pension expenditures from the IMF include not just Social Security but also state and local plans; the CBO includes only federal expenditures.

Public pension expenditures as a share of GDP are projected to rise from 2010 to 2050 in all countries except Mexico and India.[40] South Korea and China, among the countries with the most rapidly increasing median age, are expected to experience the sharpest increases in public pension expenditures—from 1.7% of GDP in 2010 to 12.5% in 2050 in South Korea and from 3.4% to 10.0% over the same period in China. Expenditures, as a share of GDP, are projected to nearly double and climb above 15% in Brazil and Russia. Turkey and Argentina are also likely to cross the double-digit threshold in pension expenditures by 2050.

However, projected increases in pension expenditures are modest in the U.S., Japan and European countries other than Russia. In the U.S., for example, public pension spending rises from 6.8% of GDP in 2010 to 8.5% in 2050. Projected increases in spending are comparably small in Germany, Britain, France, Italy, Spain and Japan.[41]

The expected rise in pension expenditures is lower among the developed economies because they are currently aging up at a less rapid pace and because many have implemented reforms that are expected to limit the growth in pension expenditures. In the U.S., for example, the original Social Security full retirement age of 65 has been gradually on the rise since 1983. It is scheduled to level off at 67 for people born after 1959.[42] The age for receiving a pension is also set to increase in France, Italy, Spain, Britain and Japan. Other reforms limiting pension spending include changes in replacement rates and indexation rules. Meanwhile, Argentina, Brazil and China are among countries adopting more generous pension policies. Reforms introduced in South Korea starting in 1988—expanding coverage and raising replacement rates—are expected to result in sharp increases in public pension expenditures in the future.[43]

Overall, future increases in pension spending, as projected by the International Monetary Fund (IMF), are driven mostly by the rate at which a country is aging. Countries that are currently older but in which the pace of aging has slowed—the U.S., Germany, Italy, Britain, France and Japan—should experience relatively smaller increases in public pension expenditures. Countries whose populations are currently young but are entering a more rapid phase of aging—China, Indonesia, Brazil, Turkey and Egypt—are expected to experience a faster rate of increase in public pension spending.

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[40] Projections of pension expenditures are subject to a great degree of uncertainty. That is because they depend not only on population projections but also on macroeconomic projections for GDP, assumptions about the labor force, and policy parameters relating to eligibility ages and replacement rates.

[41] These projections are from Clements et al. (2012). The CBO, in its extended baseline scenario, projects that Social Security expenditures will increase from 5% of GDP in 2012 to 6.2% of GDP in 2037 (CBO, June 2012).

[42] See CBO (January 2012) and http://www.socialsecurity.gov/retire2/agereduction.htm. The full retirement age is when Social Security participants are eligible to receive full benefits. Participants can begin collecting partial benefits at 62.

[43] Clements et al. (2012). Spending in Korea is expected to increase sharply despite recent increases in the pension-eligible age.

Public Health Expenditures

Governments in most countries currently spend about as much of their resources on health care as they do on pensions, or a bit less. Once again, the older, more developed economies lead the way. France committed 8.7% of GDP in 2010 to public health care expenditures, followed closely by Britain (8.0%) and Germany (7.9%). The U.S., Japan, Italy and Spain spent about 6% to 7% of their national incomes on public health care.

Public health expenditures in the other countries ranged from about 1% to 5% of GDP. Pakistan (0.3%), India (0.9%) and Indonesia (1.3%) spent the lowest share of their national incomes on public health care. Russia and Turkey (both at 3.6%) were topped by Argentina (4.8%) and Brazil (5.1%).

Expenditures on public health care are a function of the eligible population, the generosity of benefits and the cost of health care. As a rule of thumb, the more developed economies have older populations, provide more benefits and face higher cost of health care delivery. It is not surprising, therefore, that these countries also devote a greater share of their national incomes on public health care.

Projections of health care expenditures indicate significant increases in government outlays are in the cards for most countries. Spending in the U.S. is projected to more than double, from 6.7% of GDP in 2010 to 14.9% in 2050. That would put the U.S. at or above the spending share projected for France (14.6%), Germany

Estimates of Public Expenditures on Health as a Share of GDP, 2010 and 2050

%

■ 2050 ■ 2010

Country	2050	2010
U.S.	14.9	6.7
Brazil	10.1	5.1
Mexico	6.4	3.2
Argentina	8.5	4.8
Turkey	7.2	3.6
Russia	6.7	3.6
Germany	14.4	7.9
Britain	14.2	8.0
France	14.6	8.7
Italy	11.0	6.3
Spain	10.9	5.9
India	1.8	0.9
China	4.4	2.2
Indonesia	2.6	1.3
Pakistan	0.7	0.3
Japan	12.8	6.9
S. Korea	9.2	4.0
S. Africa	5.7	3.2

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(14.4%) and Britain (14.2%). Spending as a share of GDP may also cross into double digits in Japan (12.8%), Italy (11.0%), Spain (10.9%) and Brazil (10.1%).

Spending will remain relatively modest in other countries, but many of them are also likely to find that health care in 2050 is consuming at least twice as much as it did in 2010. In India, for example, expenditures are projected to double from 0.9% of GDP in 2010 to 1.8% in 2050. Equivalent growth is anticipated for Mexico, Turkey, China, Indonesia, Pakistan and South Korea.

Overall, the projected trends in public health expenditures point to sharp increases in all countries. The median age in European countries, for example, is not increasing nearly as fast as, say, in India or China, but European countries are not spared from significant growth in health care spending. That is because health-cost inflation is a significant driver of future increases in health care spending, perhaps even more so than aging.

For the U.S., the Congressional Budget Office (CBO) has estimated that aging is of concern in the mid-term but that health-cost inflation is the principal cause of long-term growth in health expenditures. More specifically, the CBO estimates that aging is responsible for 60% of the projected increase in health care spending between 2012 and 2037 and higher costs are responsible for 40%. However, beyond 2037, rising costs are expected to be the dominant factor.[44] Likewise, in its sample of advanced and emerging economies, the IMF has estimated that demographic factors account for less than half of the projected increase in health care spending through 2050.[45]

The upshot is that aging per se is less of a factor in increasing health expenditures than it is in raising pension expenditures. Although great variation exists in how much countries are aging, there is less variation in how much health care spending is projected to increase across countries. For example, the share of the population ages 65 and older is expected to increase by about 200% or more in China, Mexico, Brazil, Turkey and Indonesia, but it is projected to increase by about only 50% in Britain, Germany and France. However, health care spending is expected to increase within a narrower band across these countries—by about 100% in China, Mexico, Brazil, Turkey and Indonesia and by about 70% to 80% in Britain, Germany and France.

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[44] These projections are from CBO's extended baseline scenario in CBO (June 2012).

[45] IMF (2010). The IMF projections assume that relative prices for health care services will continue to increase at the same rate as in the recent past. The latest projections from the OECD note that "…pure demographic and income effects will play only a minor role in the projected increase of public health and long-term care expenditures." The reason is that the impact of aging is offset to a large extent by gains in the number of years spent in good health (OECD, 2013).

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Survey Methods

About the 2013 Spring Pew Global Attitudes Survey

Results for the survey are based on telephone and face-to-face interviews conducted under the direction of Princeton Survey Research Associates International. Survey results are based on national samples. For further details on sample designs, see below.

The descriptions below show the margin of sampling error based on all interviews conducted in that country. For results based on the full sample in a given country, one can say with 95% confidence that the error attributable to sampling and other random effects is plus or minus the margin of error. In addition to sampling error, one should bear in mind that question wording and practical difficulties in conducting surveys can introduce error or bias into the findings of opinion polls.

Country:	**Argentina**
Sample design:	Multi-stage cluster sample stratified by locality size
Mode:	Face-to-face adults 18 plus
Languages:	Spanish
Fieldwork dates:	March 6 – March 26, 2013
Sample size:	819
Margin of Error:	±4.7 percentage points
Representative:	Adult population (excluding dispersed rural population, or 8.8% of the population)

Country:	**Brazil**
Sample design:	Multi-stage cluster sample stratified by Brazil's five regions and size of municipality
Mode:	Face-to-face adults 18 plus
Languages:	Portuguese
Fieldwork dates:	March 4 – April 21, 2013
Sample size:	960
Margin of Error:	±4.1 percentage points
Representative:	Adult population

Country: **Britain**

Sample design: Random Digit Dial (RDD) probability sample of landline and cell phone
                     households

Mode: Telephone adults 18 plus

Languages: English

Fieldwork dates: March 4 – March 27, 2013

Sample size: 1,012

Margin of Error: ±3.3 percentage points

Representative: Telephone households (roughly 98% of all British households)

Country: **China**

Sample design: Multi-stage cluster sample stratified by China's three regional-economic
                     zones and urbanity. Twelve cities, 12 towns and 12 villages were sampled
                     covering central, east, and west China.

Mode: Face-to-face adults 18 plus

Languages: Chinese (Mandarin, Hebei, Shandong, Yunnan, Chongqing, Guangdong,
                     Hubei, Henan, Hunan, Jiangsu, Gandu, Sichuan, Shaanxi, Anhui, Shanghai,
                     Jilin, Jiangxi, Zhejiang, and Beijing dialects)

Fieldwork dates: March 4 – April 6, 2013

Sample size: 3,226

Margin of Error: ±3.5 percentage points

Representative: Adult population (excluding Tibet, Xinjiang, Hong Kong and Macau, or
                     roughly 2% of the population). Disproportionately urban. The data were
                     weighted to reflect the actual urbanity distribution in China.

Note: The results cited are from Horizonkey's self-sponsored survey.

Country: **Egypt**

Sample design: Multi-stage cluster sample stratified by governorates and urbanity

Mode: Face-to-face adults 18 plus

Languages: Arabic

Fieldwork dates: March 3 – March 23, 2013

Sample size: 1,000

Margin of Error: ±4.3 percentage points

Representative: Adult population (excluding Frontier governorates, or about 2% of
                     the population)

Country:	**France**
Sample design:	Random Digit Dial (RDD) sample of landline and cell phone-only households with quotas for gender, age and occupation and stratified by region and urbanity
Mode:	Telephone adults 18 plus
Languages:	French
Fieldwork dates:	March 4 – March 16, 2013
Sample size:	1,004
Margin of Error:	±3.6 percentage points
Representative:	Telephone households (roughly 99% of all French households)

Country:	**Germany**
Sample design:	Random Digit Dial (RL(2)D) probability sample of landline and cell phone households
Mode:	Telephone adults 18 plus
Languages:	German
Fieldwork dates:	March 4 – March 18, 2013
Sample size:	1,025
Margin of Error:	±4.1 percentage points
Representative:	Telephone households (roughly 99% of all German households)

Country:	**Indonesia**
Sample design:	Multi-stage cluster sample stratified by province and urbanity
Mode:	Face-to-face adults 18 plus
Languages:	Bahasa Indonesian
Fieldwork dates:	March 9 – March 27, 2013
Sample size:	1,000
Margin of Error:	±4.0 percentage points
Representative:	Adult population (excluding Papua and remote areas or provinces with small populations, or 12% of the population)

Country:	**Israel**
Sample design:	Multi-stage cluster sample stratified by Israel's six districts, urbanity, and socioeconomic status, with an oversample of Arabs
Mode:	Face-to-face adults 18 plus
Languages:	Hebrew, Arabic
Fieldwork dates:	March 29 – April 12, 2013
Sample size:	922 (504 Jews, 406 Arabs, 12 others)
Margin of Error:	±4.6 percentage points
Representative:	Adult population

Country:	**Italy**
Sample design:	Multi-stage cluster sample stratified by four regions and urbanity
Mode:	Face-to-face adults 18 plus
Languages:	Italian
Fieldwork dates:	March 4 – March 19, 2013
Sample size:	1,105
Margin of Error:	±4.1 percentage points
Representative:	Adult population

Country:	**Japan**
Sample design:	Random Digit Dial (RDD) probability sample of landline households stratified by region and population size
Mode:	Telephone adults 18 plus
Languages:	Japanese
Fieldwork dates:	March 5 – April 2, 2013
Sample size:	700
Margin of Error:	±4.3 percentage points
Representative:	Landline households (roughly 86% of all Japanese households)

Country:	**Kenya**
Sample design:	Multi-stage cluster sample stratified by province and settlement size
Mode:	Face-to-face adults 18 plus
Languages:	Kiswahili, English
Fieldwork dates:	March 13 – March 30, 2013
Sample size:	798
Margin of Error:	±4.3 percentage points
Representative:	Adult population

Country:	**Mexico**
Sample design:	Multi-stage cluster sample stratified by region and urbanity
Mode:	Face-to-face adults 18 plus
Languages:	Spanish
Fieldwork dates:	March 4 – March 17, 2013
Sample size:	1,000
Margin of Error:	±4.1 percentage points
Representative:	Adult population

Country:	**Nigeria**
Sample design:	Multi-stage cluster sample stratified by region and urbanity
Mode:	Face-to-face adults 18 plus
Languages:	English, Hausa, Yoruba, Igbo
Fieldwork dates:	March 6 – April 4, 2013
Sample size:	1,031
Margin of Error:	±4.0 percentage points
Representative:	Adult population (excluding Borno, Yobe and some areas in Taraba, or about 5% of the population)

Country:	**Pakistan**
Sample design:	Multi-stage cluster sample stratified by province and urbanity
Mode:	Face-to-face adults 18 plus
Languages:	Urdu, Pashto, Punjabi, Saraiki, Sindhi
Fieldwork dates:	March 11 – March 31, 2013
Sample size:	1,201
Margin of Error:	±4.3 percentage points
Representative:	Adult population (excluding the Federally Administered Tribal Areas, Gilgit-Baltistan, Azad Jammu and Kashmir for security reasons as well as areas of instability in Khyber Pakhtunkhwa [formerly the North-West Frontier Province] and Baluchistan, or roughly 18% of the population). Disproportionately urban. The data were weighted to reflect the actual urbanity distribution in Pakistan.

Country: **Russia**
Sample design: Multi-stage cluster sample stratified by Russia's eight regions plus Moscow
                    and St. Petersburg and urbanity
Mode: Face-to-face adults 18 plus
Languages: Russian
Fieldwork dates: March 5 – March 21, 2013
Sample size: 996
Margin of Error: ±3.6 percentage points
Representative: Adult population (excluding High North regions, the Chechen Republic, and
                    the Ingush Republic, or about 3% of the population)

Country: **South Africa**
Sample design: Multi-stage cluster sample stratified by metropolitan area, province and
                    urbanity
Mode: Face-to-face adults 18 plus
Languages: English, Zulu, Xhosa, South Sotho, Afrikaans
Fieldwork dates: March 18 – April 12, 2013
Sample size: 815
Margin of Error: ±4.1 percentage points
Representative: Adult population

Country: **South Korea**
Sample design: Random Digit Dial (RDD) probability sample of adults who own a cell
                    phone
Mode: Telephone adults 18 plus
Languages: Korean
Fieldwork dates: March 4 – March 18, 2013
Sample size: 809
Margin of Error: ±3.7 percentage points
Representative: Adults who own a cell phone (roughly 96% of adults age 18 and older)

Country: **Spain**
Sample design: Random Digit Dial (RDD) probability sample of landline and cell phone-
                     only households stratified by region
Mode: Telephone adults 18 plus
Languages: Spanish/Castilian
Fieldwork dates: March 4 – March 15, 2013
Sample size: 1,000
Margin of Error: ±3.1 percentage points
Representative: Telephone households (roughly 97% of Spanish households)

Country: **Turkey**
Sample design: Multi-stage cluster sample stratified by the 26 regions (based on
                     geographical location and level of development (NUTS 2)) and urbanity
Mode: Face-to-face adults 18 plus
Languages: Turkish
Fieldwork dates: March 5 – March 24, 2013
Sample size: 1,000
Margin of Error: ±7.7 percentage points
Representative: Adult population

Country: **United States**
Sample design: Random Digit Dial (RDD) probability sample of landline and cell phone
                     households stratified by county
Mode: Telephone adults 18 plus
Languages: English, Spanish
Fieldwork dates: March 4 – March 18, 2013
Sample size: 1,002
Margin of Error: ±3.5 percentage points
Representative: Telephone households with English or Spanish speakers (roughly 97% of
                     U.S. households)

Topline Results

Pew Research Center's Global Attitudes Project
2013 Spring Survey
January 30, 2014 Release

Methodological notes:

- Survey results are based on national samples. For further details on sample designs, see Survey Methods section.

- Due to rounding, percentages may not total 100%. The topline "total" columns show 100%, because they are based on unrounded numbers.

- Not all questions included in the Spring 2013 survey are presented in this topline. Omitted questions have either been previously released or will be released in future reports.

		Q128 How much of a problem, if at all, is the growing number of older people in (survey country) – is it a major problem, a minor problem, or not a problem for (survey country)?				
		Major problem	Minor problem	Not a problem	DK/Refused	Total
United States	Spring, 2013	26	30	42	2	100
Britain	Spring, 2013	43	30	25	2	100
France	Spring, 2013	45	27	28	0	100
Germany	Spring, 2013	55	29	14	1	100
Italy	Spring, 2013	41	24	32	3	100
Spain	Spring, 2013	52	26	20	1	100
Russia	Spring, 2013	42	25	27	6	100
Turkey	Spring, 2013	34	34	26	6	100
Egypt	Spring, 2013	23	45	28	4	100
Israel	Spring, 2013	43	30	22	5	100
China	Spring, 2013	67	25	6	3	100
Indonesia	Spring, 2013	25	30	42	2	100
Japan	Spring, 2013	87	5	6	1	100
Pakistan	Spring, 2013	35	16	46	3	100
South Korea	Spring, 2013	79	14	6	1	100
Argentina	Spring, 2013	40	20	37	3	100
Brazil	Spring, 2013	31	18	51	1	100
Mexico	Spring, 2013	30	26	40	5	100
Kenya	Spring, 2013	47	29	24	1	100
Nigeria	Spring, 2013	28	24	40	8	100
South Africa	Spring, 2013	39	25	32	4	100

		Q129 Thinking about yourself, how confident are you that you will have an adequate standard of living in your old age – very confident, somewhat confident, not too confident, not confident at all?					
		Very confident	Somewhat confident	Not too confident	Not confident at all	DK/Refused	Total
United States	Spring, 2013	24	39	22	13	2	100
Britain	Spring, 2013	15	40	28	16	2	100
France	Spring, 2013	7	30	28	35	0	100
Germany	Spring, 2013	13	47	29	11	1	100
Italy	Spring, 2013	2	21	42	32	3	100
Spain	Spring, 2013	10	31	37	22	1	100
Russia	Spring, 2013	5	15	32	46	3	100
Turkey	Spring, 2013	6	29	39	21	6	100
Egypt	Spring, 2013	7	30	34	26	4	100
Israel	Spring, 2013	16	25	32	21	6	100
China	Spring, 2013	20	59	16	2	3	100
Indonesia	Spring, 2013	14	49	29	5	3	100
Japan	Spring, 2013	3	29	45	23	0	100
Pakistan	Spring, 2013	31	36	12	10	11	100
South Korea	Spring, 2013	7	36	46	10	1	100
Argentina	Spring, 2013	10	28	34	25	3	100
Brazil	Spring, 2013	28	49	18	5	0	100
Mexico	Spring, 2013	11	30	30	24	5	100
Kenya	Spring, 2013	29	42	19	9	2	100
Nigeria	Spring, 2013	44	30	16	5	5	100
South Africa	Spring, 2013	40	31	13	12	5	100

		Q130 Who should bear the greatest responsibility for people's economic wellbeing in their old age – their families, the government or themselves?						
		Their families	The government	Themselves	All equally (Volunteered)	Other (Volunteered)	DK/Refused	Total
United States	Spring, 2013	20	24	46	5	1	3	100
Britain	Spring, 2013	13	33	39	11	1	2	100
France	Spring, 2013	33	42	23	2	0	0	100
Germany	Spring, 2013	12	38	41	6	1	2	100
Italy	Spring, 2013	20	56	7	17	0	1	100
Spain	Spring, 2013	22	55	13	8	1	0	100
Russia	Spring, 2013	10	63	8	19	0	1	100
Turkey	Spring, 2013	23	42	9	22	0	3	100
Egypt	Spring, 2013	22	51	9	15	0	2	100
Israel	Spring, 2013	8	61	11	18	0	2	100
China	Spring, 2013	20	47	9	22	0	2	100
Indonesia	Spring, 2013	38	24	13	24	0	0	100
Japan	Spring, 2013	33	36	27	2	0	2	100
Pakistan	Spring, 2013	77	16	2	3	0	1	100
South Korea	Spring, 2013	10	33	53	3	0	1	100
Argentina	Spring, 2013	22	55	11	12	0	1	100
Brazil	Spring, 2013	42	38	8	12	0	0	100
Mexico	Spring, 2013	36	32	11	19	0	2	100
Kenya	Spring, 2013	25	59	9	7	0	0	100
Nigeria	Spring, 2013	38	40	5	16	1	0	100
South Africa	Spring, 2013	23	40	11	23	0	2	100