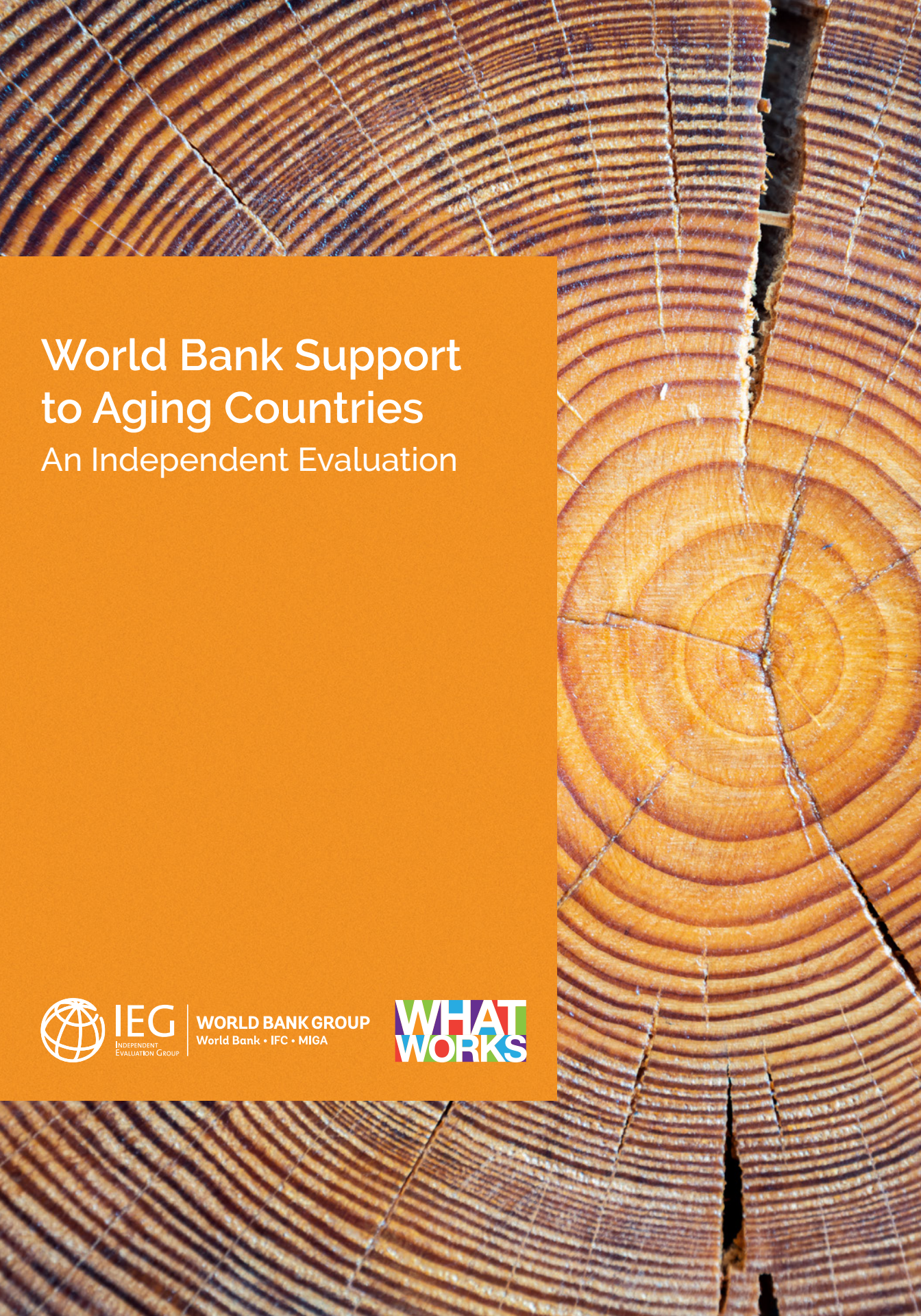

World Bank Support to Aging Countries

An Independent Evaluation

IEG
Independent Evaluation Group

WORLD BANK GROUP
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WHAT WORKS

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ATTRIBUTION
Please cite the report as: World Bank. 2021. *World Bank Support to Aging Countries: An Independent Evaluation*. Independent Evaluation Group. Washington, DC: World Bank.

COVER PHOTO
shutterstock/Ja Crispy

EDITING AND PRODUCTION
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An Independent Evaluation

July 20, 2021

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Abbreviations

ASA	advisory services and analytics
CMU	Country Management Unit
CPF	Country Policy Framework
EU	European Union
GMR	Global Monitoring Report
IADB	Inter-American Development Bank
IEG	Independent Evaluation Group
IMF	International Monetary Fund
NCD	noncommunicable disease
NTA	National Transfer Accounts
OECD	Organisation for Economic Co-operation and Development
PROST	Pension Reform Options Simulation Toolkit
RAS	reimbursable advisory services
SCD	Systematic Country Diagnostic
WHO	World Health Organization

All dollar amounts are US dollars unless otherwise indicated.

Acknowledgments

This evaluation was prepared by an Independent Evaluation Group team led by Elena Bardasi, senior economist, and Gisela Garcia, evaluation officer, under the overall direction of Alison Evans, Director-General, Evaluation, and with the guidance and supervision of Galina Sotirova, manager, Corporate and Human Development, and Oscar Calvo-Gonzalez, director, Human Development and Economic Management.

Case studies were conducted by Anahit Anna Aghumian, Elena Bardasi, Gisela Garcia, Eduardo Fernandez Maldonado, Jin Feng, and Judy Twigg, with support from Natalia Aranco, Javier Bronfman, and Lusine Yeremyan. Appendix G on the coronavirus pandemic (COVID-19) was prepared by Judy Twigg. Breda Griffith was responsible for the structured document review of analytical work. Shiva Sharma was responsible for the structured document review of Systematic Country Diagnostics and Country Partnership Frameworks, with inputs from Wouter van Acker and Lusine Yeremyan. Structured literature reviews were conducted by Natalia Aranco, Mariana Orloff, and Mariacristina Rossi. Shenghui Feng conducted the portfolio review and managed the data set under the guidance of Eduardo Fernandez Maldonado. Gaby Loibl and Yezena Yimer provided administrative support.

External reviewers for this evaluation were Ms. Louise Fox, former World Bank lead economist and currently nonresident senior fellow at Brookings Institution, Global Economy and Development, Africa Growth Initiative; Mr. Hervé Boulhol, senior economist, Pensions and Population Ageing, Directorate for Employment, Labour and Social Affairs at the Organisation for Economic Co-operation and Development; Prof. David Canning, professor of economics and international health at the Harvard T. H. Chan School of Public Health; and Prof. Ronald Lee, professor of demography and Jordan Family Professor of Economics, and director, Center on the Economics and Demography of Aging, University of California, Berkeley.

The team is grateful to all the staff who generously shared documents, insights, and experiences and engaged with us throughout the evaluation—including in two meetings to discuss the preliminary findings. Thanks are due to the country offices of Chile, China, Jamaica, Romania, Ukraine, and Uruguay for their support during the field visits.

Overview

Population aging—resulting from falling fertility rates, declining mortality, and increased longevity—shapes the profile and the needs of an increasing number of countries. How effective has the World Bank been in tailoring its support to provide an adequate response to this evolving challenge? This evaluation is the first report from the Independent Evaluation Group to assess the World Bank's contribution to diagnosing client countries' demographic issues related to population aging; understanding the variance in policy needs and context specificities; and providing vision, tools, and resources to respond to challenges in countries at different stages of aging.

This evaluation aims to inform the World Bank Group's Board of Executive Directors, management, and staff about the relevance, coherence, and operationalization of World Bank support to aging countries. The World Bank is increasingly called on to offer support to respond to the deep socioeconomic challenges its clients are facing because of population aging. Providing adequate responses to aging countries will become more of a priority as the phenomenon accelerates and becomes more prominent in World Bank client countries.

The analysis was conducted at two levels. First, for a group of 59 countries, the evaluation analyzed the main diagnostic work on aging (157 reports), a portfolio of age-sensitive operations, and Systematic Country Diagnostics (SCDs) and Country Partnership Frameworks (CPFs). The 59 countries were selected to include 47 post- and late-dividend countries, plus 12 early-dividend countries. The evaluation refers to this broad group of countries as the reference population. Second, a more in-depth review was undertaken for a subset of 15 countries, including 6 countries that were visited by the Independent Evaluation Group. The evaluation used semistructured key informant interviews at both levels to support portfolio reviews and analysis.

The evaluation found that the World Bank has made progress toward building a comprehensive approach to guide its support to aging countries. The World Bank's analytical work more regularly explores the interconnections among different sectors of the economy and calls for coordinated policy responses. This growing body of analytical work, however, is only partially

reflected in the SCDs and CPFs of countries that are aging. As a result, the country engagement model is not used to its potential to diagnose the challenges related to population aging and the consequences that these can have for economic growth and well-being. At the sectoral or operational level, progress has been slower than at the analytical level, and the World Bank has not been proactive, timely, or innovative in identifying solutions to help countries plan ahead to support a healthier and more productive population. The evaluation found that for the World Bank to better help its clients address their aging challenges, it needs to focus more on preparedness and improve its cross-sectoral thinking.

The World Bank does not have an explicit aging strategy, but many corporate documents refer to the urgency of addressing demographic issues related to aging. The *Global Monitoring Report 2015/2016: Development Goals in an Era of Demographic Change* by the World Bank and the International Monetary Fund and several regional aging reports have built a reference framework for thinking about the challenges of aging in the World Bank's client countries and how policies can help turn those challenges into opportunities.

The World Bank Perspective on Population Aging

The World Bank's understanding of aging has gone through several phases, from a narrow focus on the sustainability of pension systems to a broader perspective encompassing the whole economy.

The number of reports on population aging has increased over time, and the range of topics has become more diverse. These reports show that population aging is a complex phenomenon that touches on virtually all sectors of the economy and can affect growth and inequality. Pensions no longer represent the lion's share of the World Bank's work on aging. The adoption of new methodologies—for example, National Transfer Accounts—has allowed for the exploration of future scenarios based on different projections of population aging, labor force participation, education, and so on, to derive alternative impacts of aging on economic activity, productivity, and gross domestic product growth, and to define alternative policy options.

The evaluation found that this work has two main limitations: (i) it does not closely correspond to country needs, and (ii) it does not systematically analyze the impacts of population aging on different population groups. The evaluation found a disconnect between the country "needs"—measured by the demographic challenges faced by the country according to statistical data—and the issues examined in the World Bank's analytical work. This means, for example, that countries that acutely face specific challenges related to population aging (for example, strong outmigration or extremely low female labor force participation) are not more likely than others to receive good World Bank diagnostics on those issues (in some cases, they are actually less likely). This may be driven by data availability, but it also appears that work is decided somewhat opportunistically.

Population aging can produce profound distributional issues (gender gaps; intergenerational disparities; and spatial, rural versus urban, and socioeconomic inequalities), but these are seldom explored in analytical work. There are multiple sources of gender inequality in relation to aging, as a result of gender differences in life expectancy; employment patterns; accumulation of pension entitlements; care responsibilities (including toward older people); and other vulnerabilities related to old age. The relatively little attention paid to these issues is therefore puzzling, especially since gender and aging is included as an area of focus of the World Bank Group Gender Strategy. In general, access to the right type of data can explain some of these patterns. The World Bank tends to use macro statistics and cross-sectional data, like those provided by the Living Standards Measurement Study, and occasionally Demographic and Health Survey data. It less frequently uses longitudinal data and specialized surveys. The partnership that has invested in the China Health and Retirement Longitudinal Study, which studies the multiple dimensions of aging in China, is a welcome exception.

Engaging Countries on Population Aging

The country engagement model, which is the key channel for analyzing the main constraints and opportunities for growth, prosperity, and poverty reduction at the country level, is not regularly and systematically used to

assess the drivers and consequences of population aging, even if population aging can have substantial impacts on growth and prosperity.

SCDs and CPFs do not regularly discuss population aging, even in countries where aging is a relevant issue. The SCDs in aging countries seldom analyze the implications of population aging and do not make systematic use of existing analytical work in relation to aging. When they do, they do it very selectively. For example, they are much more likely to use existing fiscal sustainability analysis of pensions and health systems than to use existing poverty and migration analysis in relation to aging. Labor market issues in relation to aging are also more frequently analyzed than other topics.

CPFs in aging countries also seldom discuss the challenges of population aging and its consequences, even in cases where the SCD had a good focus on aging. CPFs that stand out are those that use demographic analysis to identify the challenges of population aging and propose policies for medium- and long-term solutions, for example those aimed at strengthening the human capital of the population.

The evaluation found good examples of the analytical work providing a solid and substantial empirical base and directly influencing the policy discussion. Country aging reports have been in some cases instrumental in stimulating the need to act to address the many challenges of population aging and have generated concrete responses by governments (Uruguay). In other cases, high-quality diagnostic work has helped countries to develop approaches to tackle specific issues, such as long-term care (China). At the same time, the SCD-CPF model has the advantage of adopting a cross-sectoral approach, bringing together diverse teams from various Global Practices and focusing on the challenges to growth, poverty, and shared prosperity. It therefore represents the natural vehicle to discuss the implications of population aging in a systematic way and to use an aging lens when prioritizing support in aging countries.

Several factors inhibit the ability of the World Bank to engage more regularly and systematically with client countries on aging. These factors include the lack of a natural counterpart in governments for a such a cross-sectoral topic, the absence of population aging from some of the World Bank agendas that could house it (the Human Capital Project, future of work agenda, inclusion

agenda, and gender strategy), and the insufficient use of partnerships to help advance the topic with the client.

Addressing Population Aging

Addressing and anticipating the consequences of population aging calls for creating the conditions for a healthier and more productive society. To support client countries in achieving that goal, the World Bank needs to *focus on preparedness* and *think cross-sectorally*.

Focusing on preparedness implies aiming at systemic solutions, for example promoting healthier behaviors for a healthy longevity, supporting productivity throughout the working life, and introducing incentives to save for retirement. The evaluation found that the World Bank has not been systematic and deliberate in helping countries *prepare* for population aging. Except for its work on reducing tobacco consumption, the World Bank has not extensively invested in programs to incentivize healthy behaviors. The World Bank is currently working toward building a lifelong learning framework but has not yet integrated it into the aging work. Another promising area is accessibility (smart cities, friendly environment), but this work is still tentative. The World Bank is also not active on changing negative attitudes toward older people.

The most innovative work that the World Bank has done over the past 10 years is supporting countries in piloting new approaches to long-term care. In 2011, the World Bank supported the Chinese government in its effort to build a comprehensive policy and institutional framework for long-term care and prepared its first two projects entirely focused on long-term care. Since then, the World Bank has provided technical assistance in this area, using different approaches to long-term care provision. The World Bank's expertise and reputation in this area is increasing.

Thinking cross-sectorally means recognizing the links across issues and that sectoral interventions can have broader impacts, some of them unintended. This is always the case for complex and systemic issues such as population aging. Thinking cross-sectorally, therefore, helps to avoid the risk that sectoral interventions will create negative consequences in other sectors, undermine other interventions, or miss the opportunity to use existing

synergies. The evaluation found that the World Bank suffers from a certain degree of fragmentation, partly due to lack of coordination and collaboration across Global Practices, so that issues and risks are often considered in isolation. The evaluation presents several examples.

The internal constraints that hinder working on preparedness and thinking cross-sectorally are, in addition to poor internal coordination, limited resources (especially in internal expertise) and difficulty in accessing knowledge, especially knowledge accumulated through reimbursable advisory services.

The Way Forward

In keeping with its formative intent, this evaluation does not offer recommendations but has two suggestions for helping the World Bank make progress.

Suggestion 1: **Better formulate the World Bank's position with respect to population aging. This should facilitate dialogue with clients and potential partners and improve the World Bank's capacity to provide support on this issue.** Concrete steps that the World Bank can consider to achieve this goal are the following:

- Identify a champion who can coordinate the efforts related to this agenda to facilitate cooperation across teams and promote the inclusion of aging in relevant institutional agendas: the Human Capital Project, future of work agenda, gender strategy, and inclusion agenda.
- Produce a high-level report or position paper on population aging, outlining the World Bank's framework and priorities for engagement. A World Development Report on population aging, for instance, could provide a framework for the World Bank.

Suggestion 2: **Improve the systematic production and use of diagnostic work to provide more regular analysis of the drivers and consequences of population aging to inform engagement with aging countries.** Concrete steps that the World Bank can consider to achieve this goal are the following:

- Make the existing wealth of analytical work more easily accessible (especially analysis developed for reimbursable advisory services).
- Invest in identifying and addressing key data gaps to better inform diagnostics, planning, and policy discussions.

Management Response

Management of the World Bank Group (the World Bank) thanks the Independent Evaluation Group (IEG) for the opportunity to provide comments on the IEG report, *World Bank Support to Aging Countries*. This evaluation is even more relevant in the context of the COVID19 pandemic that disproportionally affects the elderly. Management would like to provide the following specific comments.

Assessment

Management is pleased with the evaluation's assessment that the World Bank has made progress toward building a comprehensive framework to guide its support to aging countries, moving away "from a narrow focus on the sustainability of pension systems to a broader perspective encompassing the whole economy." Management notes that as a key milestone, the 2015/2016 Global Monitoring Report offers a "dynamic definition" of aging, which "provides the World Bank with a strong business case to advise its clients to maximize the benefits of the first demographic dividend… and create the conditions for a second demographic dividend."[1] Management also notes that this definition has been used in a growing body of analytical work that "has helped countries recognize that population aging is a challenge that requires swift action, in some cases generating concrete responses by governments." Management welcomes the suggestions of the evaluation to continue strengthening its engagement with clients.

Suggestions

Management notes that, although this report makes no recommendations (in the spirit of the Management Action Record reform), its analysis and suggestions are informing management's actions. The paragraphs below summarize "the directions of travel" through, which management is taking the report's two suggestions forward.

Suggestion 1: **Better formulate the World Bank's position with respect to population aging. This should facilitate dialogue with clients and potential partners and improve the World Bank's capacity to provide support on this issue.**

In response to this suggestion, the Human Development Vice Presidency (HDVP) is preparing a major analytical report to better formulate the World Bank's value proposition on aging. The objective of the upcoming Healthy Longevity, Noncommunicable Diseases and Human Capital report is to review all aspects of human capital formulation.[2] The world's population has been aging at a dramatic speed, and governments are now engaging vigorously in policy interventions to make the additional years healthy and optimally productive, in order "to develop and maintain the functional ability that enables well-being through middle and older ages." Older adults in good health make significant contributions to families, communities, and society as a whole. One significant positive aspect of longevity is that the productivity of older, knowledgeable, healthy adults enhances and increases the broader pool of human capital, thereby contributing to economic growth. This requires alignment with a wide range of Social Protection, Labor, and Pensions interventions to support productive inclusion during longer working careers. The HDVP is providing overall leadership and guidance to this work and would therefore be the natural champion to strengthen the aging agenda going forward.

Complementing this high-level report on population aging, management will continue ensuring that global knowledge informs country and regional policy making through dedicated analytical products. Experience shows that, although high-level reports can help shift global attention to a given topic, more focused reports are effective in stimulating country–level demand and prompting policy action. Although the above-mentioned flagship report will provide big-picture analysis, management will endeavor to translate the aging challenges into sectoral challenges that clients are (or soon will be) struggling with, such as the shifting disease burden brought about by the changing population structure, and that have clear government counterparts. Some of the most prominent sector challenges are in the areas of: (i) pension reform; (ii) rising prevalence of noncommunicable diseases (NCDs); (iii) increased demand for long-term care for the elderly, and improved delivery systems maximizing the use of technological solutions; and (iv) skills

development and employment opportunities to support longer careers for an aging labor force. Among others, good emerging examples of this include the Romania strategy for the elderly and active aging,[3] the *Protecting Peoples and Economies* publication, which provides guidance to prioritize integrated policy responses to COVID19 at the country level;[4,5] and the policy note for the elderly in Malaysia. [6,7]

Suggestion 2: **Improve the systematic production and use of diagnostic work to provide more regular analysis of the drivers and consequences of population aging to inform engagement with aging countries.**

Management acknowledges the suggestion to produce more regular analysis to inform engagement with aging countries and will do so based on selectivity and country demand. The Healthy Longevity, Noncommunicable Diseases and Human Capital advisory services and analytics (ASA) is being organized around three streams of work, which will facilitate more regular analytics and their usage in country strategies. These streams are organized under three working groups, which are focused on: (i) better economic analysis and sectoral knowledge; (ii) better interventions and strategies; and (iii) better data and measurement. Nineteen background research papers will inform future knowledge products and policy engagement. Country prioritization on aging, like prioritization for any other topic, will be determined by client demand, policy dialogue, the World Bank's comparative advantage, and the engagement of other development partners. Although doing more on aging and its impact on the economy and society may be a priority for some countries, given each country's limited resources, the determination of whether more is appropriate in each context depends on assessing and deciding among competing priorities. For some countries, other priorities may take precedence. Management notes that half of the Systematic Country Diagnostic (SCD) reviewed by this evaluation included a discussion on aging. This finding is consistent with management's view of the SCD as a diagnostic tool that by its nature is not expected to be exhaustive in its review of the development issues facing a country,, but rather selective of those issues that constitute the key development bottlenecks at the time that the SCD is prepared. Hence, there should be no expectation that every SCD and every Country Partnership Framework (CPF) will assess the drivers and consequences of aging. In this context, it is also worth noticing that interventions on aging—which is a cross-cutting mul-

tisectoral topic—may not be a principal focus of SCDs and/or CPFs, as appropriately-prioritized Bank-supported interventions may instead be embedded in other sectoral interventions that are prioritized in country engagements, such as access to affordable quality health care or to old-age income.

Management concurs with the evaluation's finding that data shortcomings impede progress on the aging agenda and agrees with the suggestion to continue supporting countries to invest in high-quality data. The evaluation rightly concludes that although the data requirements to "properly analyze the multiple implications of population aging are substantial," longitudinal data are "often unavailable or difficult to access." This is a significant limitation in International Development Association countries and countries affected by fragility, conflict, and violence, and it is in some cases a primary reason for deprioritizing aging in analytical work. As the evaluation notes, the World Bank, together with other development partners, has supported client countries to produce longitudinal, good-quality, and comparable information, for example on health, but these data are often incomplete or difficult to access, including in some countries in the OECD. The World Bank's recent publications on aging provide some examples where the World Bank has invested in longitudinal surveys and analytics for the aging population.[8] The World Bank is also looking for innovative solutions to fill data gaps. For example, the World Bank has accelerated the use of national longitudinal phone surveys collecting information to track responses to socioeconomic impacts of COVID-19, and this could be a useful tool in various contexts, including gathering information on the aging population.[9] Specific steps are also being taken under the Healthy Longevity, Noncommunicable Diseases and Human Capital ASA through the working group dedicated to better data and measurement, which is tasked to (i) focus on producing country-specific Healthy Longevity Dashboards including national burden estimates, country-specific economic burden of disease estimations, and data visualization, which would adopt top-line metrics derived from country data systems (for example, national cause of death data and United Nations/WHO demographic and disability data and educational outcomes to complement the Human Capital Index (HCI)), and (ii) document gaps in data sets for healthy longevity including data on functional dependency and distributional impacts of healthy longevity, and recommend priority investments to improve underlying data infrastructures in relevant countries.

[1] World Bank; International Monetary Fund. 2016. *Global Monitoring Report 2015/2016: Development Goals in an Era of Demographic Change*. Washington, DC: World Bank. https://openknowledge.worldbank.org/handle/10986/22547. A World Bank Group Flagship Report.

[2] The Concept Note was reviewed in April 2021, with an expected completion of 2023. At this time, the concept note is an "official document not for circulation."

[3] World Bank. 2017. *Results of the World Bank's RAS Program in Romania 2012–2015*. Washington, DC.

[4] World Bank. 2020. *Protecting People and Economies: Integrated Policy Responses to COVID-19*. Washington, DC. https://openknowledge.worldbank.org/bitstream/handle/10986/33770/Protecting-People-and-Economies-Integrated–Policy-Responses-to-COVID-19.pdf?sequence=7&isAllowed=y.

[5] World Bank. 2020. "3 ways to improve COVID-19 response to elderly care and persons with disabilities." Blog.

[6] World Bank. 2020. *A Silver Lining—Productive and Inclusive Aging for Malaysia*. The Malaysia Development Experience Series. Washington, DC: World Bank Group. http://documents1.worldbank.org/curated/en/287981606116408851/pdf/A-Silver-Lining-Productive-and-Inclusive-Aging-for-Malaysia.pdf

[7] World Bank. 2020. "The Elderly Care Response to COVID-19: A Review of International Measures to Protect the Elderly Living in Residential Facilities and Implications for Malaysia." Malaysia Covid-19 Social Protection and Jobs Note No. 2. https://openknowledge.worldbank.org/handle/10986/33861?show=full

[8] The World Bank jointly invested with the Government in China's Health and Retirement Longitudinal Study, which studies the multiple dimensions of aging in China; The World Bank also analyzed various surveys (longitudinal, time-use) in the context of aging, with findings reported in (i) *Where We're Sixty-four: Opportunities and Challenges for Public Policies in a Population-Aging Context in Latin America* (2020); (ii) *Options for Aged Care in China* (2018); and (iii) the *Golden Aging* (2015) in Europe and Central Asia (ECA).

[9] For example, the World Bank is leveraging the Living Standards Measurement Study—Integrated Survey on Agriculture (LSMS-ISA) program to support high-frequency phone surveys on COVID-19 in 5 African countries – Nigeria, Ethiopia, Uganda, Tanzania, and Malawi. https://microdata.worldbank.org/index.php/catalog/3712

1 | Introduction

Population aging shapes the demographic profile of an increasing number of countries. Thanks to dramatic improvements in nutrition, sanitation, health, education, and—more generally—economic well-being, longevity has increased everywhere in the world at the same time as fertility has decreased in most countries, especially in Asia.[1] As a result, population aging, which had previously seemed to be a phenomenon confined to Organisation for Economic Co-operation and Development (OECD) and Eastern European countries, is now defining societies in East Asia and Latin America (box 1.1). Even in regions where aging is a more distant concern overall (such as South Asia, Africa, and the Middle East), a few countries increasingly face aging-related challenges, and more countries are forecast to enter the aging phase of the demographic transition in the coming decades. The pace at which this phenomenon is unfolding in the developing world is striking.[2]

The World Bank is anticipating an increase in demand for support from countries that are facing challenges related to population aging. Although there is no explicit aging strategy, several corporate documents refer to the urgency of addressing demographic issues related to aging.[3] The *Global Monitoring Report 2015/2016* (GMR) discusses population aging as part of a broad, comprehensive framework that describes the impacts of demographic changes on development (World Bank and IMF 2016). The report argues that, for the world to stand a better chance of ending extreme poverty and improving the well-being of the bottom 40 percent, countries need to adapt their policies and institutions to a different demographic profile. This report—complemented by regional aging reports—represents the World Bank's reference framework to think about the aging challenges of its client countries and how policies can help turn those challenges into opportunities.

Population aging has critical implications for economic growth, inter- and intragenerational equity, and the inclusiveness of the development process. A large and increasing body of evidence has shown that population aging can slow down growth if it is not accompanied by an increase in labor force partici-

pation and productivity (appendix B). There is also clear evidence that different groups of the population are differently affected by population aging. Social norms regarding care, changes in family structures, and negative attitudes toward aging and older people (ageism), also have an impact on how countries may be affected by population aging. Policies that promote healthy and productive lives and positive perceptions about aging are therefore essential to improve the quality of life of the population, increase the productivity of a shrinking labor force, and reduce the future burden of long-term care needs.

Box 1.1. When Is a Country "Aging"?

A country is usually defined as *aging* when the share of people ages 65 and older is above 7 percent, *aged* when the share is 14 percent or more, and *superaged* when it exceeds 20 percent.[a] Other definitions are used, such as the median age or the old-age dependency ratio, which is the ratio of older dependents (people older than 64) to the working-age population (people ages 15–64). Cut-offs are arbitrary, however, because they do not consider how healthy and functional the so-defined older people are. The prospective old-age dependency ratio measures population aging based on remaining life expectancy instead of the number of years lived (Sanderson and Scherbov 2005, 2007, 2010). This measure reflects improvements in life expectancy over time, instead of anchoring old age to a fixed threshold, and suggests a slower increase in dependency than the traditional old-age dependency ratio.

The *Global Monitoring Report 2015/2016* proposes a definition that combines trends in fertility and in the size of the working-age population. Based on these trends, countries are classified into four stages of "demographic transition": predividend countries (where fertility is greater than 4 births per woman); early-dividend countries (where fertility is lower than 4 births per woman but the working-age population is still increasing); late-dividend countries (with a shrinking working-age population but where fertility fell only recently); and postdividend countries (with a shrinking working-age population and where fertility fell below replacement level, or 2.1 births per woman, three decades earlier). The last two stages characterize aging countries. This evaluation adopts the Global Monitoring Report definition to select aging countries, although it may refer to other definitions when appropriate.

Source: Independent Evaluation Group; World Bank and IMF 2016.

Note: a. The cut-off of age 65 is generally used because this is normally when people can claim social security.

The purpose of this evaluation is to assess how the World Bank has been able to support clients to confront the challenges deriving from population aging. This evaluation is the first report from the Independent Evaluation Group (IEG) to focus on how the World Bank has been helping countries adjust to and prepare for population aging and create the conditions for inclusive growth and prosperity during advanced stages of demographic change.[4] The evaluation aims to inform the World Bank Group's Board of Executive Directors and management on the relevance, coherence, and operationalization of World Bank support to aging countries and contribute to the future refinement of this line of work. Providing adequate responses to aging countries will become more of a priority as the phenomenon accelerates.

Evaluation Questions

The evaluation's overarching question is: How well is the World Bank supporting client countries in addressing and anticipating their aging challenges? This overarching question embeds two main subquestions:

1. How well does the World Bank diagnose aging-related challenges in client countries?
2. How comprehensive, timely, and coherent is the World Bank's operationalizing of its support to aging countries?

The first subquestion assesses the alignment of diagnostic work with the country's aging context and priorities and with the current evidence on the challenges and opportunities of aging countries. It also assesses how diagnostic work has informed the World Bank's strategy and policy dialogue with the country. The second subquestion assesses the comprehensiveness and timeliness of World Bank support to countries and its internal (in relation to instruments and Global Practices) and external (in relation to other partners' agendas) coherence. (See appendix A for a more detailed description of the evaluation questions and methodology.)

Conceptual Framework and World Bank Work on Aging

IEG derived a conceptual framework to guide the evaluation, based on three literature reviews covering the pensions and labor market, health and long-term care, and accessibility and friendly cities. This framework is used: (i) at the analytical level, to describe the channels (informed by the literature reviews) through which population aging can affect a country's development outcomes; define the sectors potentially involved; identify the World Bank's entry points; and guide the interpretation of the evaluation's findings; and (ii) at the methodological level, to delimit the topics and potential interventions that can be mapped to aging to identify the relevant World Bank portfolios of activities (figure 1.1).[5]

The framework summarizes the drivers of population aging and their immediate and medium- and long-term impacts on the economy, and highlights how country conditions, behaviors, and policies influence those impacts (see appendix B for a more extensive discussion). Population aging can put downward pressure on long-term economic growth when it means a reduction in employment and labor productivity, higher dependency, and lower savings and investments. However, these negative impacts do not materialize if longevity is achieved by adding healthy years, which allows individuals to stay productive and independent for longer, and if the economy uses opportunities to produce higher savings and investments during the first demographic dividend.

The impacts of population aging vary across countries and within countries. Evidence shows that the gap between life expectancy and healthy life expectancy is large among different socioeconomic groups and that there are important differences between developed and developing countries (Lancet 2017). There may also be differences between generations. Although older people are not necessarily poorer than younger ones, there is high variability across countries (Evans and Palacios 2015). In some cases, aging may be associated with illness, disability, social isolation, inability to be employed, and uncertainty about income or care-support sources. Vulnerabilities depend on the coverage of pension and health systems; the availability of care; the

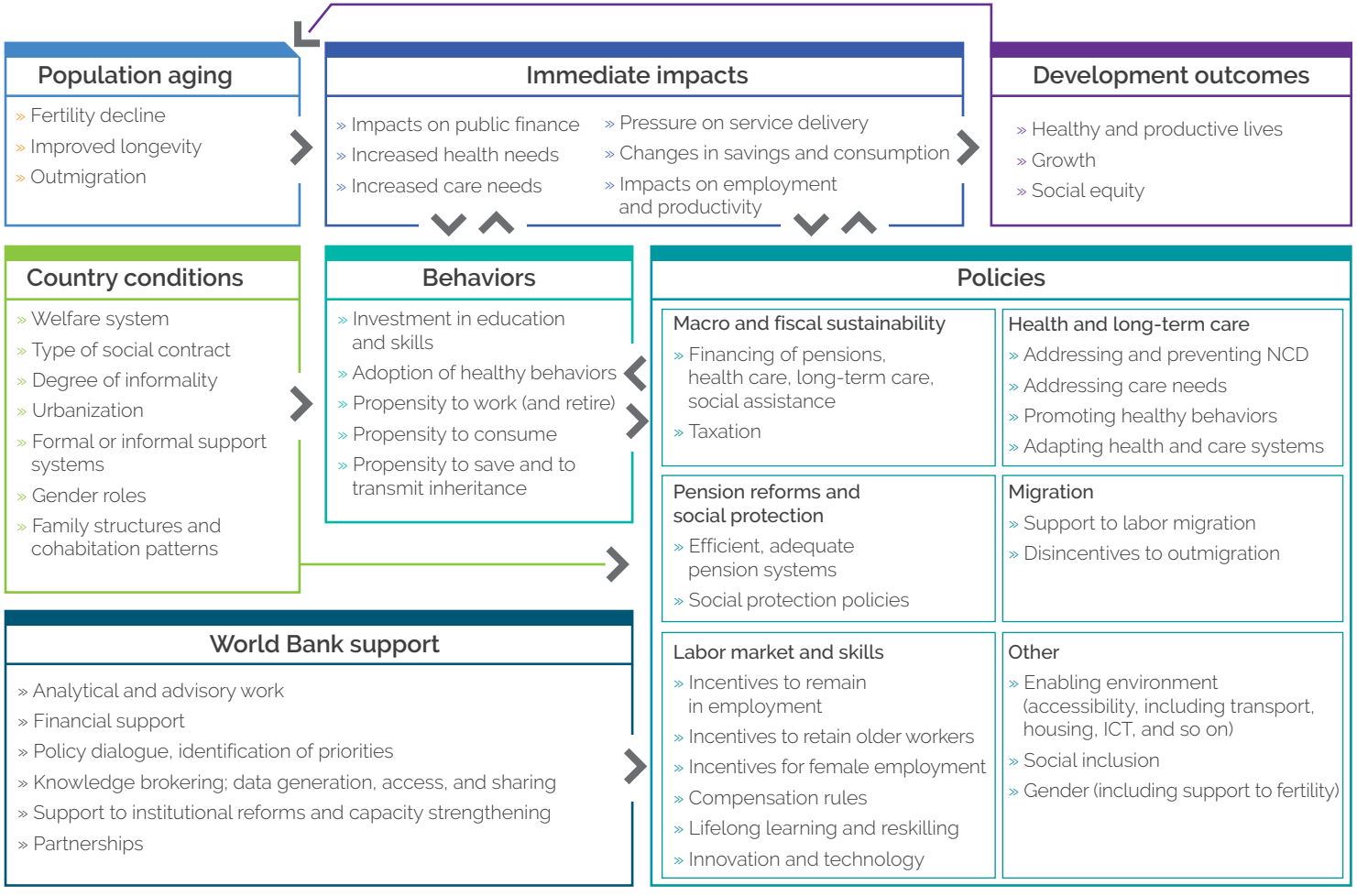
pervasiveness of informality; the magnitude of rural-urban migration; and preferences and attitudes toward coresidence, intergenerational support, and gender and social norms about care and female labor force participation.

The effect of population aging on growth and inequalities will ultimately depend on the type and timing of policy responses. Countries may need to adapt their health care systems to focus on preventing and managing noncommunicable diseases (NCDs); ensure access to long-term care services; adopt labor market policies that support employment (female employment in particular) and productivity; consider proimmigration policies to counteract the decrease in the working population; and counter fertility reduction with family-friendly policies. Policies can also provide incentives to change behaviors, for example for individuals to adopt healthy behaviors, for workers to delay retirement, and for workers and employers to invest in skills. Fiscal reforms and adjustments in social protection and pension systems may be needed to relax fiscal constraints and avoid increased labor costs and disincentives to competitiveness and job creation.

It is also important to recognize that economic development is not only determined by but also a determinant of aging. Economic development allows for technological advances and improvements in health systems, working conditions, and quality of life, and these impacts can counteract some of the negative impact of aging running in the opposite direction.

Policies may need to address inequalities related to population aging. The impact of aging on intergenerational inequalities will depend on how support for older people is provided for in a given society, including the extent of social programs, the prevalent familial systems and patterns of coresidence, and the allocation of savings and consumption across the life cycle (see Lee 2016; Lee and Mason 2011). Measures to cover the large informal sector characterizing most World Bank client countries may need to be considered. Gender inequalities may not be exacerbated if public policies are in place to provide long-term care and, at the same time, support female paid employment (OECD 2017). Countries may also need to consider how to improve "accessibility" (a broad category including access to information, accessible buildings, urban planning, affordable housing and services, and public transport) and ensure social inclusion of older people.

Figure 1.1. Conceptual Aging Framework



Source: Independent Evaluation Group.

Note: ICT = information and communication technology; NCD = noncommunicable disease.

The conceptual framework identifies the main instruments for World Bank support and the channels through which it can influence client countries' policies in a broad variety of sectors. The World Bank's work on aging—even when not labeled as such—spans several decades. This work has been delivered in the form of diagnostics, operational support (both lending and technical assistance), and policy dialogue and advice (figure 1.1 [bottom left box] and table 1.1).

Table 1.1. Main Entry Points for World Bank's Work on Aging

Instrument	Entry Point
Advisory services and analytics	Global, regional, and country diagnostics and analytical work produced for ad hoc reports or poverty assessments, public expenditure reviews, jobs diagnostics, and so on; diagnostics work in SCDs, originally produced for the SCD or harvested from existing knowledge products
Financial support and technical assistance	Lending and nonlending support to country policies and capacity strengthening to tackle aging challenges (as per analytical framework)
Policy dialogue	Inclusion of priorities related to aging in CPFs
Knowledge brokering and data generation, access, and sharing	Global, regional and country workshops; North-South and South-South learning activities; data collection; data identification; data use
Partnerships	Partnerships at the global, regional, or country level for direct financial support to countries or the production of analytical work or data work

Source: Independent Evaluation Group.

Note: CPF = Country Partnership Framework; SCD = Systematic Country Diagnostic.

Evaluation Methodology

IEG used the GMR categorization of aging countries as the basis for this evaluation. Aging countries are, for the purposes of this evaluation, the late- and postdividend countries where the World Bank has a portfolio of activities. IEG also selected 12 early-dividend countries that are fast approaching the late-dividend stage to assess how the World Bank helps these countries prepare for aging. See appendix C for the full list of countries and more details on their selection and analysis.

The evaluation used a multilevel design, whereby analysis was conducted for (i) the whole reference population (47 post- and late-dividend countries plus 12 early-dividend countries) and (ii) selected countries (6 countries visited by IEG, plus 9 countries selected for desk review). For the whole reference population, the evaluation reviewed 157 reports representing the main diagnostic work on aging, a portfolio of aging-relevant operations, the universe of existing Systematic Country Diagnostics (SCDs), and the most recent Country Partnership Framework (CPF). For selected countries, the evaluation conducted a more detailed portfolio review of operations and advisory services and analytics (ASA; including reimbursable advisory services [RAS]) and conducted country visits. The evaluation used semistructured interviews with key informants at both levels to support portfolio reviews and analysis and to complement findings from other sources.

Analysis of the World Bank's diagnostic work is a key element of this evaluation. This is because one of the evaluation goals is to assess how well the World Bank has used knowledge of specific demographic challenges to tailor its support to clients. In addition, the World Bank's production of diagnostic work is a key part of its engagement with upper-middle-income and high-income client countries—the ones for which aging is a critical challenge.

The combination of methods and the multilevel design facilitated the derivation of robust lessons, although managing the scope of the evaluation was an important challenge. The main challenge that the evaluation encountered was in identifying aging-relevant work at the conceptual and operational levels. The evaluation distinguished among different types of relevant activities in addressing this challenge at the conceptual level (box 1.2). At the operational level, the evaluation (i) recognized the limitations of a sector-driven selection of activities and searched for aging-relevant work in all sectors; (ii) used a keyword search to identify the potentially relevant lending and ASA portfolio and complemented this by manual scanning of Project Appraisal Documents (lending) and reports (ASA) to discard false positives and (for selected sectors) false negatives; and (iii) used interviews and a survey addressed to the country director in all Country Management Units (CMUs) of the reference population of aging countries to validate the selection of aging-relevant operations and diagnostic work.

Box 1.2. How to Identify Aging-Relevant Activities

Based on the literature and preliminary portfolio reviews conducted for this evaluation, aging-relevant activities may be

- Providing support targeted TO older people: pensions, long-term care, accessibility, social inclusion, social services;
- Related to sectors or areas that disproportionately AFFECT older people, de facto or by design, even when older people are not directly targeted: urban design, transport, health services, financial capability;
- Directed to the DRIVERS of population aging: migration, fertility, premature working-age mortality; or
- Addressing issues arising BECAUSE OF population aging: labor productivity, lifelong learning and skills development, fiscal burden constraint or deficit.

Source: Independent Evaluation Group.

The evaluation does not assess the work of the International Finance Corporation. The evaluation acknowledges that the private sector may be providing services to the older population and that age discrimination in the workplace is addressed in International Finance Corporation Performance Standards. However, the evaluation's focus is limited to the work of the World Bank to keep the scope manageable.

Using the country as the unit of analysis entails some limitations. Case studies allow for a deeper analysis of World Bank support, but they may not provide the full picture of World Bank work in this area. Case selection relies on external data, which may not cover the full range of countries, and on World Bank documentation, which is not always available or consistent.

The evaluation does not provide an in-depth assessment of World Bank sectoral work. For example, a proper analysis of the World Bank work on pensions, probably the most prolific and established line of work in the area of aging, would have required an extensive, ad hoc investigation (IEG con-

ducted an in-depth evaluation of the World Bank work on pension systems and pension reforms in 2006 [World Bank 2006]).

The evaluation includes an extensive discussion on the vulnerabilities of aging countries that have been affected by the coronavirus (COVID-19) pandemic. Because the pandemic began as the evaluation was concluding, IEG did not collect primary data in this area but commissioned a separate study, based on the emerging scientific and policy literature, which is reported in appendix G. Some lessons emerging from the pandemic that resonate with the evaluation findings have been woven into the main text of the report.

The report is organized as follows: Chapter 2 analyzes the evolution of the World Bank's perspective on population aging over the past 20 years. It shows that the volume of analytical work on aging has increased and has grown to cover more diverse sectors. Several reports on aging have used a comprehensive framework to demonstrate that population aging has wide-ranging socioeconomic consequences. Chapter 3 discusses how the World Bank engages with client countries on population aging using the country engagement model. Although this is not the only modality of engagement, it is the most regular and systematic. Moreover, as population aging can negatively affect growth and well-being if not addressed, the SCD-CPF model is the appropriate channel to analyze the issue and identify possible policy responses. The chapter also reviews some factors that may constrain systematic engagement with clients. Chapter 4 analyzes the type and characteristics of activities that can provide a timely, comprehensive, and coherent response to population aging. Activities are classified based on two elements: their contribution to countries' preparedness for population aging (support in anticipating aging challenges) and their ability to reflect a cross-sectoral perspective. The major constraints to developing these types of activities are reviewed in the final part of the chapter. Chapter 5 concludes by providing some insights into how the World Bank can improve its support to client countries that are increasingly facing the challenges of population aging.

[1] According to the projections of the United Nations Population Division, significant gains in life expectancy have been achieved in recent years in all regions of the world (United Nations 2017). Globally, life expectancy at birth rose by 3.6 years between 2000–05 and 2010–15, from 67.2 to 70.8 years. The greatest gains were in Africa, where life expectancy rose by 6.6 years between these two periods after rising by less than 2 years over the previous decade.

[2] Notable is the case of the Republic of Korea, where—according to the 2017 census—the working-age population ages 15–64 dropped for the first time, and the proportion of the population ages 65 or older increased to 14.2 percent. This transition from an aging to an aged society happened in just 17 years—the fastest ever recorded so far. Indeed, it was only in 2000 when the percentage of citizens ages 65 and over surpassed 7 percent (Statistics Korea 2017).

[3] The implementation update of the World Bank Group's *Forward Look* document refers explicitly to the challenges of aging societies and the need to meet increased demand for new types of products and services, such as pensions and insurance products, as populations in emerging markets become, on average, older and more affluent (World Bank 2018b). It also refers to middle-income countries' "unresolved development challenges" and signals that "many [middle-income countries] have lost their demographic dividend or will soon, and their pension and social protection systems are a rapidly rising financial burden" (World Bank 2018b, 4). The Bank Group Capital Package highlights ensuring health care for an aging population and preventing noncommunicable diseases as a prominent part of the Improving Human Endowment pillar of the World Bank Group Gender Strategy (World Bank 2018d). Indeed, this strategy identifies aging-related challenges in health, education, and social protection as part of emerging (second-generation) issues to be addressed under the first pillar (World Bank 2015m).

[4] The Independent Evaluation Group conducted an evaluation on demographic issues in 2009, which focused mostly on issues of high fertility (World Bank 2009a).

[5] An earlier version of this framework was presented in the evaluation Approach Paper and validated during the evaluation process by an extensive review of the literature and through interviews with key stakeholders within and outside the Bank Group.

2 World Bank Perspective on Population Aging

Highlights

The *Global Monitoring Report 2015/2016* and several country and regional aging reports produced over the past decade have given the World Bank the framework to think about population aging (World Bank and IMF 2016). These reports have shown that population aging is a complex phenomenon that touches on virtually all sectors of the economy and can affect growth and inequality.

The number of reports focusing on aging-relevant issues has increased over time. This diagnostic work is often grounded in demographic analysis, even when it adopts a sectoral angle. Over time, this work, which until 10 years ago was mostly focused on pensions, has become more varied as more sectors have been covered.

The amount, type, and quality of work on aging is not clearly correlated with how old a country is or how pressing specific issues are. For example, the World Bank has produced less good evidence on the impacts of outmigration for countries with strong outmigration (one of the drivers of aging) than for countries where this is less of a problem. Similarly, countries with low female labor force participation or large gaps between life expectancy and healthy life expectancy are not more likely to have good analysis on these issues.

World Bank analytical reports do not systematically analyze distributional issues. Gender gaps, intergenerational inequalities, gaps between formal and informal workers, spatial inequalities, and socioeconomic disparities are discussed by a surprisingly small share of reports, and the attention to these issues has not increased over time.

The lack of appropriate data may explain the limitations of the distributional analysis. The data requirements to properly analyze the the multiple implications of population aging are substantial.

The World Bank has increasingly recognized population aging as a relevant issue for many of its client countries and developed diagnostic work to explore the evolution and the impact of this phenomenon and identify appropriate policy responses. This chapter assesses how far the World Bank's diagnostic work aligns with country context and existing evidence, and how comprehensive it is. It also discusses the data requirements for the analysis of demographic trends and their implications. The findings presented answer evaluation questions 1a and 1b and part of question 2 (see box A.1 in appendix A).

IEG found that the World Bank work on population aging has evolved over the past 15–20 years and that this evolution had two main merits: it led the World Bank to (i) widen the analysis of potential impacts of population aging to more sectors and topics; and (ii) more frequently use a medium- and long-term perspective to inform its support to aging countries.

Two issues in particular deserve more attention: (i) there is some disconnect between country needs—measured by the demographic challenges faced by the country, according to the data—and the issues explored in the World Bank's analytical work; and (ii) the impacts of demographic change for different subgroups of the population are not systematically analyzed.

Evolution of the World Bank's Diagnostic Work on Aging

The World Bank's understanding of population aging as an issue relevant for development has gone through several phases, from a narrow focus on the sustainability of pension systems to a broader perspective encompassing the whole economy. The first World Bank report on aging was *Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth* (World Bank 1994).[1] This report focused on old-age security programs—and related policy options for reform—and called for reforming old-age financial security systems to meet the goal of protecting the old at the same time as avoiding negative impacts on growth.[2] More than a decade later, *From Red to Gray: The "Third Transition" of Aging Populations in Eastern Europe and the Former Soviet Union* was the first report to adopt a broad, cross-sectoral lens to analyze the interrelated impacts of population aging on productivity, savings and financial markets,

pension and health systems, social security budgets, long-term care needs, and education and to define a vision for the World Bank's support to countries in Eastern Europe and the former Soviet Union (World Bank 2007b).

The approach proposed in *From Red to Gray* is novel with respect to previous analytical work. Older reports had zoomed in on very specific issues, mostly poverty in old age and pension reforms (Aiyer 1997; Deaton and Paxson 1991; Holzmann 1999; Holzmann and Hinz 2005; World Bank 1994; World Bank 2005), especially in transition economies (Fox 1994; Kudat and Youssef 1999). In *From Red to Gray*, the World Bank introduced the concept of aging as a structural and comprehensive phenomenon.[3]

Over the past 10 years, several country and regional aging reports have used demographic analysis to study the drivers and impacts of population aging and identify possible policy responses. *From Red to Gray* paved the way for other aging reports (at the Region and country levels) and the GMR (World Bank and IMF 2016), which also discuss population aging as a systemic change with economywide implications to be analyzed and addressed. The regional reports published over the past few years were *Population Aging: Is Latin America Ready?* (World Bank 2011c), *Golden Aging: Aging in East Asia and Pacific* (Bussolo, Koettl, and Sinnott 2015), and *Live Long and Prosper: Aging in East Asia and Pacific* (World Bank 2016b). A second report on the Latin America and the Caribbean Region was released in 2020 (Rofman and Apella 2020). Country-focused aging reports have been issued for six countries—in chronological order, Brazil, Bulgaria, Argentina, Latvia, Uruguay, and Chile (Apella et al. 2019; Gragnolati et al. 2015; Rofman, Amarante, and Apella 2016; World Bank 2011b; World Bank 2013; World Bank 2015a). The GMR and the aging reports represent the World Bank's reference framework to understand the aging challenges of its client countries—and how policies can help turn those challenges into opportunities—before the transition becomes too advanced.[4]

The GMR and the aging reports find that the impacts of population aging on growth and individual well-being vary by country and by population subgroup within countries. The GMR and many recent knowledge products highlight that population aging may weaken future growth but not necessarily, if the right policies are adopted, as other studies have shown (Bloom, Canning, and Fink 2010; Onder and Pestieau 2014). Several reports show, for

example, that countries can reduce or even reverse the negative impact of an aging society on growth and well-being by maintaining a favorable labor force dependency ratio—that is, people living longer in good health and being active and more productive for longer in the labor force—thanks to investments in health, education, skills, and lifelong learning. They also discuss the regional and subregional differences across countries and the different implications that population aging has for different groups of the population within individual countries. The *Golden Aging* report (Bussolo, Koettl, and Sinnott 2015), for example, shows how the chances of living longer and healthier lives differ depending on education, income, and sex. Although the report highlights the fact that aging may bring opportunities, it also stresses that these opportunities may not be available to everyone. Earnings and savings gaps between skilled and unskilled individuals tend to increase with age; thus, the increasingly larger older population may be divided into two categories: a poorer and less-educated group that suffers from bad health, relatively shorter life expectancy and lower savings, and another group that is still active, has more assets, and benefits from increased healthy longevity.

The analysis presented by the GMR and the aging reports highlights the dynamic character of aging and the need for client countries to anticipate the challenges ahead. The GMR identifies aging countries using a dynamic definition, which combines changes in fertility and the working-age population. This definition classifies as aging countries those that may still be young (based on the current share of older people in the population) but that are expected to grow older soon. This dynamic definition provides the World Bank with a strong business case to advise its clients to maximize the benefits of the first demographic dividend (when the share of the working-age population reaches its peak) and create the conditions for a second demographic dividend (when the share of the working-age population decreases, but the economy can take advantage of the increased savings, investments, and productivity of the previous phase).[5] As fertility and mortality rates decrease, countries move across subsequent demographic transition stages, and their window of opportunity to adapt to population aging shrinks.

One area that remains less prominent in the World Bank's aging diagnostic work is the reference to social norms, perceptions about aging, and the cultural change that needs to happen for a society to be able to embrace an

aging population. Ageism—or the negative stereotyping of older adults, who are assumed to have mental or physical impairments due to their age—has been found to have negative repercussions at the individual and societal level. Negative stereotyping can, for example, affect individuals' memory and sense of worthlessness, cause depression, and even shorten their lives (Han and Kim 2010; Levy et al. 2002). These negative effects on health are pervasive across countries (Chang et al. 2020). A recent study calculates that ageism has substantial costs to society in terms of higher health costs (Levy et al. 2020). Considering aging as a social problem can also be an impediment to reorganizing societies to address the socioeconomic impacts of population aging; for example, it can translate into age discrimination in employment and discourage older people from remaining in the labor force.[6] Although some reports emphasize the critical policy goal of enabling a more active population (for example, Bussolo, Koettl, and Sinnott 2015), none of the World Bank reports discuss in depth the importance of and the options for changing norms to avoid reinforcing negative perceptions and creating instead a positive attitude toward aging.[7]

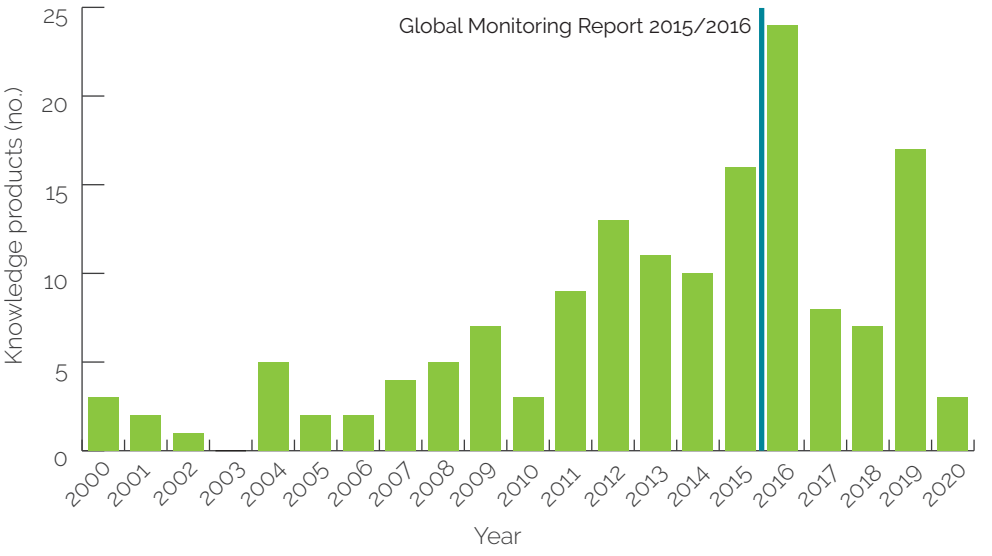
An increasing number of the World Bank's analytical products focus on the economic and social implications of population aging. Using the framework of figure 1.1, IEG has identified a set of core knowledge products that inform the analysis of population aging and its implications for the countries covered by the evaluation (the selection of these products was validated by the CMUs; see appendix D for the selection criteria). A few of these 157 reports (the country and regional aging reports) are comprehensive and analyze the cross-sectoral relationships of aging; most of them zoom in on one or a few specific topics. This core set of knowledge products does not include SCDs, which are analyzed separately given their strategic function of informing country engagement (see chapter 3). The number of reports has increased over time, particularly during the past decade, and especially around the time of the GMR, with a new spike in 2019 (figure 2.1). Not surprisingly, almost half of these reports refer to the Europe and Central Asia Region (73), followed by East Asia and Pacific (26) and Latin America and the Caribbean (21). Younger Regions have a handful of reports: Sub-Saharan Africa (4), Middle East and North Africa (4), and South Asia (8). Twenty-one are global reports.[8]

The common characteristic of these reports is reliance on an analysis of demographic trends, by either developing an original one or referring to an already existing one. Two-thirds of the knowledge reports include some demographic diagnostic, either as their main focus or as a starting point to develop a sector- or topic-specific analysis of the impacts or implications of population aging. They may investigate the drivers and present projections of the speed of population aging, sometimes using rich and original data sets, and show how these trends are likely to affect economic growth, labor productivity, or health needs. A paper for Poland, for instance, uses a variety of sources, including original qualitative data on the demand and supply of care services for older adults, to produce a detailed diagnosis of long-term care needs based on longevity patterns by region and gender (World Bank 2015f). Those reports that do not include a demographic analysis focus nonetheless on topics clearly related to population aging, such as reforming pensions or adapting social security and health systems to an increasingly older population. For example, a recent report analyzes the performance of the Ecuadorian pension system and produces simulations of coverage, total expenditures, and financial results using administrative data and the United Nations Development Programme population projections (Apella 2019).

The work on pensions, which was the predominant subject for a long time, is no longer the lion's share of the World Bank's work on aging. Over the whole period, most knowledge products focused on pensions, a long-standing tradition of the World Bank's work. When a single theme (main topic) is assigned to each report, almost one-third of the reports reviewed are classified under "pensions" (figure 2.2). However, the relative importance of pension reports has greatly diminished over time, as a much larger variety of topics has been added to the pool (figure 2.3).

Few reports focus specifically on health, although health is frequently discussed in reports covering multiple topics. This is quite surprising, considering that (i) healthy longevity is essential to increasing human capital and productivity and diminishing the negative impacts of population aging; and (ii) along with pensions, health is one of the most long-standing areas of the World Bank's support to countries. Yet health as a specific concern of aging countries has not received widespread attention at the level of diagnostic work.

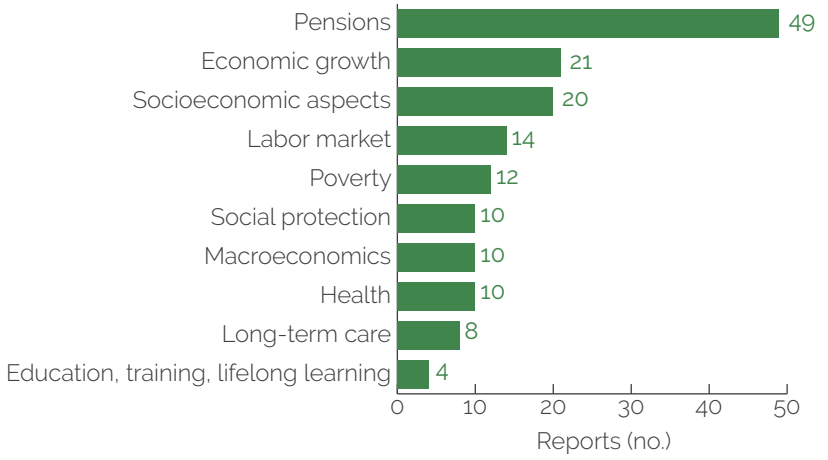
Figure 2.1. World Bank Aging Knowledge Products by Fiscal Year of Publication



Source: Independent Evaluation Group.

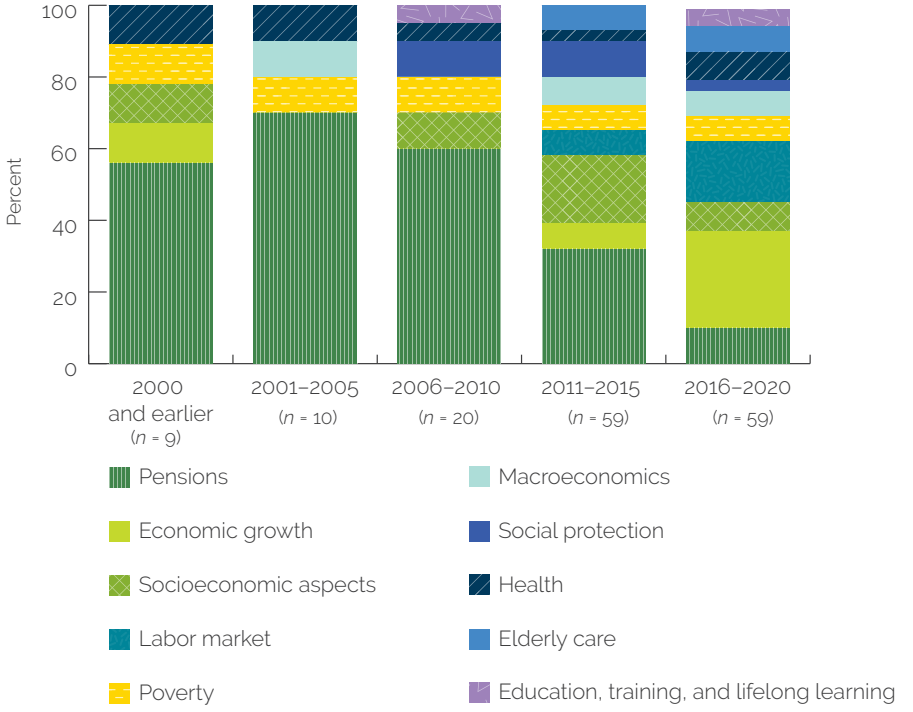
Note: The vertical bar represents the date of publication of the Global Monitoring Report.

Figure 2.2. Content of World Bank Knowledge Products



Source: Independent Evaluation Group.

Figure 2.3. Evolution of Topics Discussed in World Bank Core Knowledge Products



Source: Independent Evaluation Group.

Several reports use new tools and methodologies that facilitate the analysis of multiple implications of population aging. The Latvia aging report (World Bank 2015a), for example, uses the Active Aging Index to explore inequalities in employment and health outcomes by sex, educational attainment, and geographical region.[9] Several reports, mostly in the Latin America and the Caribbean Region but also in the South Asia Region, use the National Transfer Accounts (NTA) methodology to tease out the links between individual and aggregate income, consumption, and savings over the life cycle and explore the interconnections among population aging, labor force participation, productivity, and asset accumulation and decumulation (and investments) (Apella et al. 2019; Gragnolati et al. 2015; Rofman, Amarante, and Apella 2016; Rofman and Apella 2020; World Bank 2012b).

The NTA methodology allows the World Bank to highlight the connections among several sectors of the economy and introduces a more flexible defi-

nition of aging. The NTA application shows the links between earnings and consumption over the life cycle—that is, the relationships among participation in employment, productivity, and spending capacity. Using scenario analysis, this methodology allows for analyzing the evolution of private and public expenditures (including public and private spending on health care and, especially, of public spending on pensions and social protection) and highlights the positive contribution of female labor force participation and education to economic activity, productivity, and gross domestic product growth in a context of population aging. The NTA methodology de facto introduces a different way to think about dependency that is not linked to a predetermined age (such as 65) but is based on the ratio between earnings and consumption (essentially, the dependency rate in this framework is the ratio of people weighted by age-specific earnings and age-specific labor force participation to people weighted by age-specific consumption).

The World Bank analytical work has helped countries recognize that population aging is a challenge that requires swift action, in some cases generating concrete responses by governments. Uruguay is one of the oldest countries in Latin America; still, the 2016 aging report generated a new sense of urgency and a need to act to address the many challenges of population aging (Rofman, Amarante, and Apella 2016). Government officials stated that the preparation of the country aging report was fundamental to structuring the policy discussion about aging. The 2050 country development strategy draws from several World Bank reports, including the diagnostic work of the aging report. The strategy identifies demographic change as a main force requiring adequate responses concerning the labor market, social protection, demand for health services, and long-term care (Uruguay 2019). The strategy was prepared by a unit within the Budget and Planning Office, which was created as the World Bank engaged in regular dialogue with the government for the preparation of the country aging report.

In China, the high-quality diagnostic work and policy advice provided by the World Bank paved the way to the approval of the first two loans for piloting the development of long-term care systems. In 2011, the World Bank responded to the Chinese government's request and conducted analytical work to support China in its effort to build a comprehensive policy and institutional framework for long-term care. The diagnostic work was instrumental

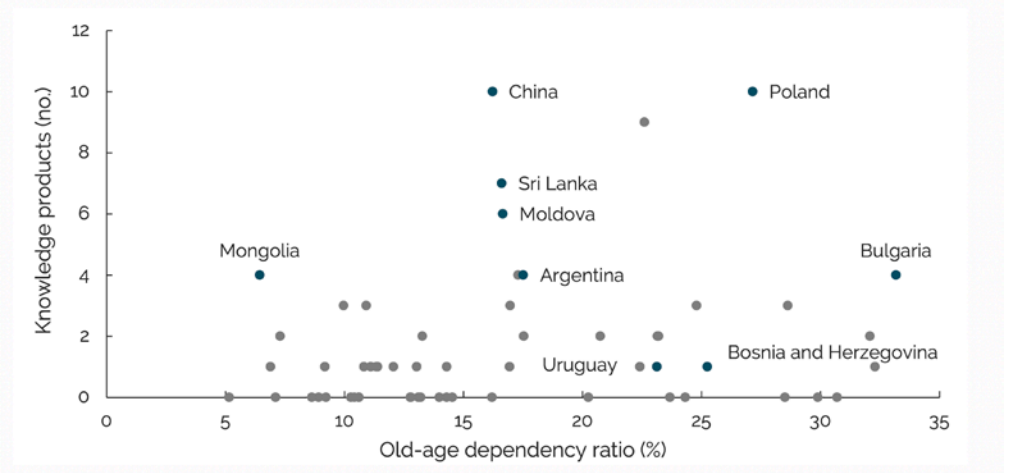
in the development and subsequent approval of the first two inaugural projects entirely focused on long-term care in World Bank history: Anhui (approved in June 2018) and Guizhou, in cooperation with Agence Française de Développement (approved in March 2019). Both projects support the government's goal to establish a three-tiered aged-care system, with a stronger emphasis on home- and community-based care, and to foster the development of an efficient market for long-term care provision. Project activities aim at building capacity to strengthen the government stewardship role, including the accreditation of community-based care, homecare, and nursing-care providers and setting standards for the quality of services they provide. The World Bank support also helped define the basic package of services, the eligibility criteria, and priority access for publicly subsidized services.

The long-standing World Bank Pension Reform Options Simulation Toolkit (PROST) model has a well-established reputation with governments and international partners; it supports pension reforms. The PROST model, refined over the past three decades, has been used to simulate the behavior of pension systems, assess their financial sustainability under different demographic and economic assumptions, and address questions related to the coverage and adequacy of pensions (World Bank 2010). There are many examples of applications of the model in the reports analyzed by IEG. These include analysis of pension reforms as part of either country-specific pension policy reports or broader reports such as public expenditure reviews in Azerbaijan, Bosnia and Herzegovina, Croatia, Ecuador, Kazakhstan, Kyrgyz Republic, Moldova, Mongolia, Montenegro, and Ukraine. Most of this work is highly specialized and focuses on fiscal sustainability issues, a critical complement to other aging studies. PROST was described as one of the World Bank's successes by several people interviewed by IEG for this evaluation. For example, the European Commission appreciates that several European Union (EU) countries (including Romania, one of the case study countries for this evaluation) can use PROST to forecast the impact of the change in population structure on public finances, as the European Commission would otherwise be unable to produce them directly because the model needs to be customized to the country context.

Insufficient Connection with the Country Aging Context

The World Bank's production of diagnostic work does not show a clear correlation with the country aging context, measured by select aggregate statistics. IEG observes that there is little association between the number of reports on aging-related issues and the country's stage of population aging.[10] No correlation is observed between the number of reports and how advanced a country is in the demographic transition (figure 2.4).[11] China has a similar number of reports (high) as Poland, which can possibly be explained by both the rapid pace at which the country is aging and the existence of operations in new areas (like long-term care). However, a relatively young country like Mongolia has the same number of reports as the oldest country: Bulgaria. And Moldova and Sri Lanka stand out as countries with many more reports than countries that are older, such as Bosnia and Herzegovina or Uruguay. Similarly, the oldest or more rapidly aging countries are not the ones with country aging reports: Argentina, for example, has an aging report but is still not technically an aging country, whereas many countries that are well advanced in the aging process have never had an aging report.

Figure 2.4. World Bank Knowledge Products by Country and Stage in the Aging Process



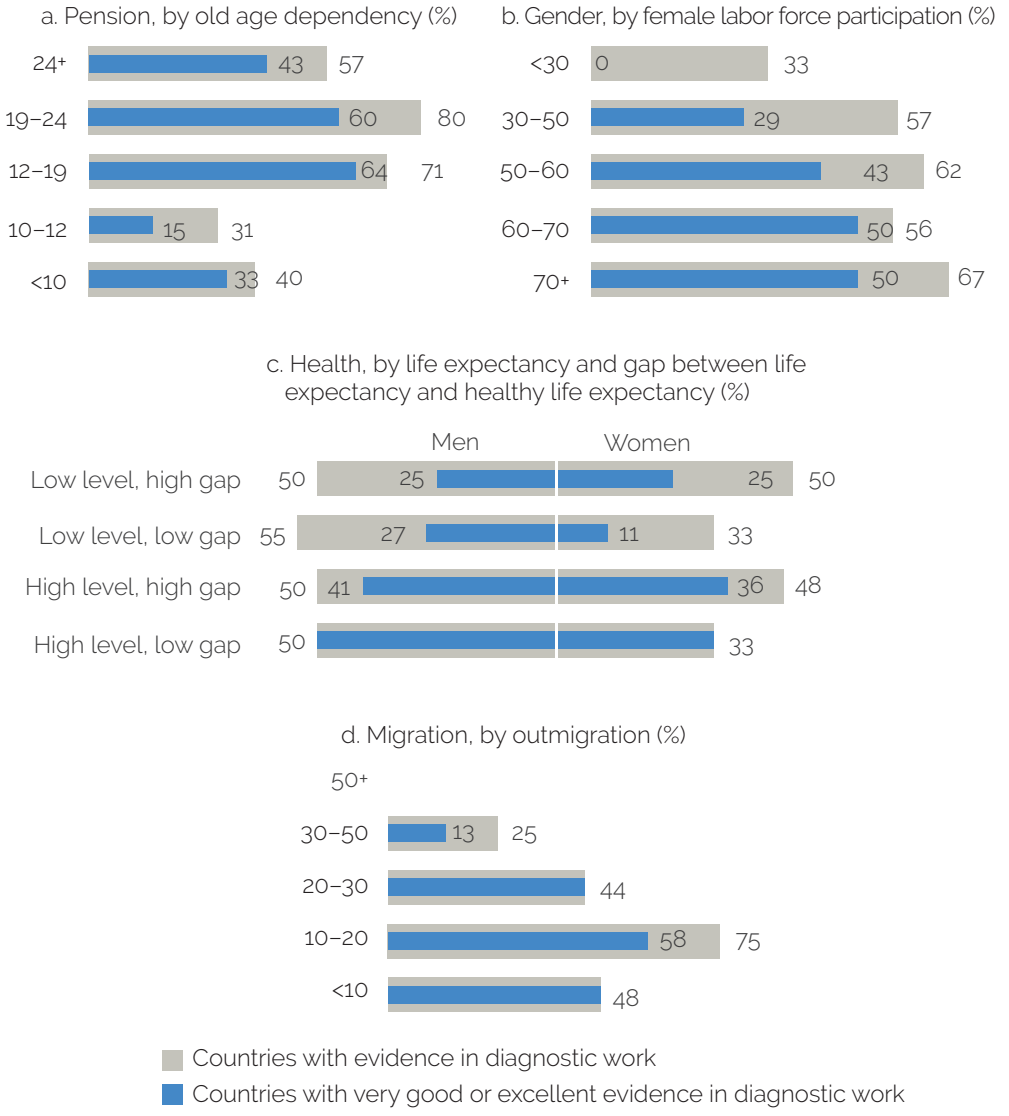
Source: Independent Evaluation Group.

Note: Old-age dependency ratio is defined as the ratio of older dependents (people older than 64) to the working-age population (people ages 15–64).

The World Bank has been more systematic in providing country-level diagnostics on some drivers of population aging (and related implications) than others. The correlation between the type of challenges faced by the country and the type of diagnostic provided by the World Bank is weak. IEG has looked at the existence, type, and quality of evidence at the country level and how it matches with specific country challenges.[12] Although all countries are aging, the country-specific drivers and the ways in which they play out can differ substantially, as do the issues, challenges, and potential policy responses. IEG has used aggregate data to classify countries based on some of the specific challenges they face—a high share of older people in the overall population, low female labor force participation, strong outmigration, and large gaps between life expectancy and healthy life expectancy—and paired these data with the type and quality of existing evidence (figure 2.5).

IEG observed that the countries for which specific age-related challenges are at a high level of urgency are just as likely as countries at a low level of urgency to have benefited from World Bank diagnostic work on aging. In other words, coverage, in terms of existing evidence on a specific topic, is not correlated with country needs based on demographics. Furthermore, the quality of diagnostic work is not correlated with level of urgency. We may have expected to see higher quality work on aging for countries with higher needs based on their demographic profile, but this was not the case. Not all the oldest countries have had country-specific diagnostics on pensions carried out over the past 20 years (figure 2.5, panel a).

Figure 2.5. Correspondence between the Country Aging Context and Diagnostic Work (share of countries, %)



Source: Independent Evaluation Group calculations.

Note: The share of countries with evidence on the topics of interest—pension, gender, health, migration—is represented by the gray bar, and the blue bar indicates the share of countries with quality of evidence rated very good or excellent (share of all countries with very good or excellent evidence). Each indicator (old-age dependency ratio for pension, female labor force participation for gender, gap between life expectancy and healthy life expectancy for health, outmigration for migration) is assessed for 59 countries, using discontinuities in the observed distribution as cut-off points to determine categories proxying for the level of urgency. Old-age dependency ratio: ratio of population ages 65 and over per 100 population ages 15–64; female labor force participation: percentage of women ages 15–65 who are in the labor force; outmigration: estimated stock of people who have emigrated as a percentage of the population.

More extreme is the case of outmigration. Only 15 percent (2 out of 13) of countries from which more than 30 percent of the population has migrated abroad have relevant (and good-quality) country-specific diagnostic work analyzing the challenges that outmigration represents in terms of erosion of the quantity and quality of labor force and negative impact on population aging—and potentially on growth. This can be partly explained by country awareness. There are essentially two types of countries where outmigration is a key driver of population aging: countries with fertility rates that are still relatively high (such as Antigua and Barbuda, Grenada, Guyana, the Seychelles, and Suriname) and countries with fertility rates that are already below replacement level and are rapidly decreasing, many of which are in the Europe and Central Asia Region (such as Albania, Armenia, Bosnia and Herzegovina, and Montenegro). Based on the IEG desk review, the CMU survey, interviews, and an in-depth study in the case of Jamaica, this first set of countries do not perceive themselves as aging.[13] Small Europe and Central Asia Region countries experiencing increased outmigration are instead generally aware of the consequences in terms of aging. In the case of the Balkans, for instance, the negative impact of outmigration on population aging and economic growth was well analyzed in a 2015 report (World Bank 2015e). This report uses trends and projections at the regional and individual country levels and decomposition analysis to derive the impact of aging on economic growth in the absence of policy changes. The report concludes that the Balkan countries are not fully prepared for the aging of their population and may experience negative economic growth unless they adopt adequate policies to induce a change in behaviors (regarding, for example, not only participation in the labor force but also risky behaviors that decrease healthy life expectancy) and boost labor productivity.

Similarly, countries with low female labor force participation and those with the poorest health outcomes have low coverage in terms of diagnostic work in these two areas. Figure 2.5, panel b, shows that a very small percentage of countries where female labor force participation is low have World Bank analysis available on the interplay of gender issues and population aging; countries where female labor force participation is less of a problem are *more* likely to have solid pieces of gender analysis. Similarly, there is no correlation between a country's urgency in addressing health issues (measured by

lower life expectancy and large gaps between life expectancy and healthy life expectancy for either men or women) and the likelihood of observing substantial analysis on the issue (figure 2.5, panel c).

Limited Attention to Distributional Issues

Distributional issues are not regularly tackled in World Bank analytical reports, which limits the effectiveness of the diagnostics work in identifying specific vulnerabilities. IEG tracked whether empirical analysis has been carried out along five specific dimensions—gender, age (younger versus older cohorts), informality in labor markets, spatial (rural versus urban), and socioeconomic (poverty, education, class, and so on)—because the general literature highlights that groups defined by these characteristics can be affected by population aging in distinct ways.

Population aging has important implications for gender equality. Older women face a higher risk of poverty than men because of many factors. Since women have longer life expectancy and typically marry older men, they are more likely to outlive their husbands. Given their longevity, women have worse health than men in later life, so they are more likely to need care exactly when they are more likely to be widowed. Moreover, because women are less likely to be in formal employment and more likely to have a discontinued career due to childbearing, they are less likely to receive pension benefits and, if they do, they tend to receive lower pensions since women, on average, earn less than men and pay lower pension contributions. Promoting female employment is therefore essential to close gender gaps in both working age and old age (World Bank 2012c). A potential solution to shrinking labor force participation in aging societies is to support female employment. Yet there is more demand for women's care work in aging societies, which (when unpaid) further limits women's labor market participation or adds to women's double burden of being responsible for both paid and domestic labor (World Bank 2015n). Adequate public policies are needed to provide long-term care and support female paid employment, thus addressing the specific vulnerabilities that an aging society entails for women (OECD 2017).

Gender issues are indeed the most frequently discussed distributional issue, present in just above half of all reports. The analysis of gender-related impacts

of population aging varies depending on the main topic of the report (table 2.1). Although it may not be surprising that all eight reports on long-term care discuss gender, it is rather puzzling that barely one-third of social protection reports do. When the main topic is health, poverty, pensions, or the socioeconomic and demographic analysis of the country or Region, gender issues are more likely to be discussed, but this does not always occur.

Table 2.1. Percentage of Knowledge Products Discussing Distributional Issues, by Main Topic of the Report and Type of Distributional Issue

Main Topic	Gender	Intergenerational	Formal-Informal	Spatial	Socioeconomic
Economic growth (*n* = 21)	38	29	33	38	33
Education or lifelong learning (*n* = 4)	25	25	0	25	25
Long-term care (*n* = 8)	100	25	38	63	50
Health (*n* = 10)	60	10	0	20	40
Labor market (*n* = 14)	50	21	29	43	29
Macroeconomics (*n* = 10)	30	40	10	30	20
Pensions (*n* = 49)	67	37	35	37	55
Poverty (*n* = 12)	58	25	33	58	83
Social protection (*n* = 10)	30	0	10	10	40
Socioeconomic or demography (*n* = 19)	68	26	37	47	63
All (*n* = 157)	57	27	28	38	48

Source: Independent Evaluation Group calculations, based on review of analytical reports.

The overall limited attention to gender in analytical reports on aging is disappointing, since addressing gender gaps related to aging is one of the focus areas of the World Bank Group Gender Strategy (World Bank 2015n). Working on emerging, second-generation issues such as aging is part of the first objective of the strategy Improving Human Endowments (health, education, and social protection). Quite perplexingly, though, attention to gender decreased after the introduction of the gender strategy, which is only partially driven by a relatively higher prevalence of reports on economic growth over 2016–20 (in this most recent period, discussion of gender issues has decreased for each topic except social protection; table 2.2).

Table 2.2. Percentage of Knowledge Products Discussing Distributional Issues, by Year of Publication and Type of Distributional Issue

Time of Publication	Gender	Intergenerational	Formal-Informal	Spatial	Socioeconomic
2000 and earlier (*n* = 9)	78	56	33	33	44
2001–05 (*n* = 10)	50	20	0	0	50
2006–10 (*n* = 20)	65	25	30	40	50
2011–15 (*n* = 59)	65	31	34	42	56
2016–20 (*n* = 59)	44	22	25	41	39
All (*n* = 157)	57	27	28	38	48

Source: Independent Evaluation Group calculations.

Population aging can also affect intergenerational inequalities. An increasing share of older people may pressure governments to revisit entitlements and make the social protection system less generous for the younger cohorts (to address the fiscal burden of aging), which implies a relatively more generous allocation of resources for the older generations—for health, social protection, long-term care, and pension benefits. Widening inequalities can affect the implicit social contract across generations and may be a source of social tensions.[14] Ultimately, intergenerational inequalities depend on how a given society provides support for older people, including the extent of social programs, the prevalent familial systems and patterns of coresidence, and the allocation of savings and consumption across the life cycle (Lee 2016; Lee and Mason 2011).

Issues related to intergenerational inequalities, however, are discussed in only one-quarter of the reports. Those discussing pensions and pension reforms are more likely to address how different generations can be affected by system reforms. The regional report for Europe and Central Asia thoroughly discusses intergenerational issues, but it is a rare example. *Golden Aging* analyzes the interplay of aging and inequality—including inequality among and within generations—and depicts a complex picture of how behaviors change and policies respond (Bussolo, Koettl, and Sinnott 2015). The report

considers inequalities originating in the labor market—driven, for example, by the different pension entitlements of low-wage, unskilled workers and highly skilled ones, and inequalities due to the lack of long-term care because of a change in the demographic profile, working patterns, and social norms, whereby younger people will be increasingly less available to provide support to older relatives in need.

Prevalence of informality in the labor market has a negative impact on contributory histories and productivity and hence on access to and adequacy of pensions, and, ultimately, poverty in old age: just above one-quarter of all reports discuss these issues. It is fair to expect that labor, pension, and poverty reports in particular would discuss informality. Barely one-third of reports in these three categories do. Yet a focus on informality can be illuminating. A couple of reports on Sri Lanka show that the de facto exclusion of informal workers from pension contributory schemes means that these workers will not have enough savings or pension to support themselves in old age (World Bank 2015j, 2019e). Although tackling informality is a complex task, designing the pension system in a way that it provides incentives for the informal workers to contribute could be an important first step—a point made also in a Bosnia and Herzegovina report, which shows that perverse incentives exist in the design of the pension system to move to informality after gaining a minimum of contributory history (World Bank 2007a).

Spatial inequalities are often analyzed in relation to long-term care and poverty but much less frequently in relation to other topics. Most reports in these two categories examine spatial inequalities. In China, spatial disparities between urban and rural areas are especially strong: an increasing number of older people are "left behind" in rural areas when their adult children migrate, which has disrupted the traditional coresidence arrangements and increased their vulnerability to poverty. The analysis of poverty and living arrangements of rural older people, the financial transfers they receive from migrant children, and the variability of those transfers has informed the design and evolution of China's rural pension system (Cai et al. 2012; Giles, Wang, and Zhao 2010). In Romania, the uneven geographical distribution of both the aging population and social insurance coverage is likely to increase the risk of old-age poverty of many future older adults. Moreover, the concentration of older people in rural areas makes it particularly difficult for

them to access health and long-term care services (Teşliuc, Grigoraș, and Stănculescu 2015).

Socioeconomic and poverty analysis of the older population is frequently carried out, especially in poverty assessments and poverty studies, but it has limitations. Poverty analysis in relation to age is not trivial. First, there are methodological issues. To correctly define how poor older people are, it is essential to understand the patterns of coresidence (including selection issues), the intrahousehold allocation of resources (which gets more complicated for extended households), and the level of needs of different categories (children, adults, older people) in calculating economies of scale (Deaton and Paxson 1998). Second, the analysis can be static (how many old individuals currently live in poor households) or dynamic (how vulnerable to poverty individuals are as they age, retire from the labor market, and become sick or disabled)—the latter being much more complex and data heavy but more interesting, as it allows for an assessment of how institutions, incentives, and policy reforms affect current and future vulnerability.

About half of the diagnostic work on aging has some analysis of poverty, but it is often a static analysis of the poverty of (currently) older people. Some older reports in the Europe and Central Asia Region and Sri Lanka have a strong focus on the living conditions of older people, as they discuss how to meet the needs of an aging population. More recently, the Belarus 2017 Poverty Assessment presents poverty data on older people (poverty rates of individuals with zero, one, or more than two older adults in the household) and includes an analysis of how pensions contribute to shared prosperity (Cojocaru and Matytsin 2017). Many of these studies do not address the methodological issues mentioned in the previous paragraph. The IEG review was unable to locate any longitudinal study on the vulnerability of middle-aged individuals and older workers to poverty in old age and on the role of the pension system and private savings in reducing that vulnerability.

The Data Challenge

The lack of adequate data may be an important explanation of the observed limitations of distributional analysis and sporadic attention to certain topics. In the World Bank's empirical work, IEG observed great reliance on aggre-

gate (macro) data and household survey data (Living Standards Measurement Study type), occasional use of Demographic and Health Survey data, and—only very rarely—specialized surveys. Although macro data and general household surveys provide relevant information, they also have limitations that prevent certain types of analysis. The data required for the analysis of several topics that were seldom or never addressed in the World Bank analytical work are discussed in this section.

Evidence on the links between aging and health is still limited on several fronts, including (i) the determinants of healthy aging; (ii) the evolution of health and functionality as people age; (iii) the variation of health inequalities among older adults over time and across and within countries; and (iv) the needs and preferences of older adults regarding health care and long-term care services. These are areas where granular and specialized data are needed, such as data on disability, functional dependency, cognitive status, mental health, and use of health care services.[15] The paucity of data in these areas has been recognized in World Bank analytical work. For instance, the most recent regional report for Latin America and the Caribbean recognizes that limited data on functional capacities do not allow proper investigation of disability trends and demand for long-term care (Rofman and Apella 2020). To properly analyze care demand and supply in countries in Europe and Central Asia, a background paper to the Europe and Central Asia Aging report complemented existing data from household surveys and time use surveys with an original mixed-method data set gathered purposely for that study in seven countries in Europe and Central Asia, which demonstrates both the usefulness and the scarcity of data on care (Levin et al. 2015).

The analysis of vulnerability in the postretirement stage requires information about wealth. Wealth can top up pension income after retirement and can be annuitized into a flow of future incomes, in the same way pension assets are annuitized into a stream of pension benefits. The total income a person can rely on after retirement, and hence their risk of poverty, is the sum of pension benefits and the income derived from asset annuitization. Asset composition is also important, as annuitizing financial wealth is much easier than annuitizing housing wealth, which assumes the existence of reverse mortgage types of products, rarely available in thin financial markets.

The study of retirement behavior requires knowledge of pension contribution histories, employment and occupational histories, and health status. Individuals do not necessarily retire at the statutory retirement age but make decisions based on their health, accumulated pension entitlements, savings, and household composition, in addition to responding to institutional incentives, such as the provision of the social protection system. Those individual- and household-level variables allow for a better understanding of the future changes in the labor force and of the pool of retirees.

Cross-country data comparability is an issue. A seminal 2001 report of the US National Research Council highlighted the need to improve data on aging and stressed the importance of comparable cross-national and longitudinal data (National Research Council 2001). The same message has been echoed in the latest World Health Organization (WHO) report on aging and health (WHO 2015), which called for greater attention to cross-country data harmonization and standardization. Few countries have specific health surveys targeted at older adults that are truly comparable (box 2.1). Even when surveys were designed to ensure comparability, differences in the methodology, the questions included, or the wording of the questions may prevent cross-national comparisons or generalizations.[16] Census and national household surveys sometimes (but not always) include a health section, but in those cases, cross-country comparison is even more difficult. Even when the same types of questions are included in health-specific surveys, the exact questions are often different, preventing comparisons. For instance, Uruguay is the only country in the Longitudinal Social Protection Survey to include both basic and instrumental activities of daily living in the section on functional dependency. The other Longitudinal Social Protection Survey countries include only basic activities, and these activities are not standardized across countries.

Longitudinal data are also often unavailable or difficult to access. Despite notable country efforts—some supported by the World Bank and other international organizations—longitudinal, good-quality, and comparable information on the health status of older people is either lacking or difficult to access, particularly in developing countries. Work history (longitudinal) data are available for some OECD countries but not for developing countries, with very limited exceptions (the China Health and Retirement Longitudinal Study, for example).

Box 2.1. What Data Are Available to Better Understand Population Aging?

A set of harmonized surveys for the study of the multiple dimensions of aging is provided by the Survey of Health, Ageing and Retirement in Europe, covering 27 European countries and Israel; the US Health and Retirement Study; and the English Longitudinal Study of Ageing. This model has been followed by other countries: Brazil, China, India, Ireland, Japan, Mexico, and the Republic of Korea. These data sets are not representative of the whole population but sample only middle-aged and retired people. However, they are extremely comprehensive, as they collect information on health, socioeconomic status (including income and wealth), work, retirement, pension, demographic characteristics, care, family transfers, and social networks and activities. Multiple waves have been conducted, which allows for longitudinal analysis.

The World Health Organization Surveys on Ageing and Health were carried out in several developing countries during 2006/07 and later in 2014. In Latin America, the Longitudinal Social Protection Survey also focuses on older people; it is available in Chile, Colombia, El Salvador, Paraguay, and Uruguay.

The harmonized Household Finance Consumer Survey conducted by the European Central Bank and covering the European countries is one of the very rare data sets that include both asset levels and income data. The data set has a longitudinal dimension and follows the same individual over time, allowing for an analysis of wealth accumulation and potential future income.

The Luxembourg Wealth Study is a database that includes detailed asset data for several countries, including some developing ones. The data sets are harmonized but lack a longitudinal dimension.

The World Value Survey includes measures of cultural values, attitudes, and beliefs toward gender, family, social tolerance and trust, and cultural differences and similarities among regions and societies. It has been collected since the 1980s and is currently adding its seventh round. It is available in 100 countries.

Source: Independent Evaluation Group.

Other issues pertain to privacy and data manipulation. Administrative and medical records, which usually span the entire life of the individual, are a rich source of information; however, harmonization across countries may even require addressing issues of format and software compatibility. Privacy concerns usually surround the use of administrative records. Yet being able to link administrative and medical records to survey data would open immense research possibilities for evidence-based policy (National Research Council 2001). Similarly, the ability to access administrative data on pension contributory histories and (ideally) match them with survey data would provide tremendous potential for the study of retirement, pension accumulation, poverty, and more.

[1] The first paper mentioning aging that the Independent Evaluation Group identified was a paper almost 30 years old on the patterns of aging in Côte d'Ivoire and Thailand (Deaton and Paxson 1991).

[2] The report famously promoted the development of three pillars of old-age security: a publicly managed system with mandatory participation and a main goal of reducing poverty among the old; a privately managed, mandatory savings system; and a voluntary savings component.

[3] This reflects, albeit with some delay, the general recognition that population aging was not only confined to Organisation for Economic Co-operation and Development countries. The United Nations Political Declaration and Madrid International Plan of Action on Ageing had recognized in 2002 that aging was "gaining real momentum in developing countries" and that this phenomenon had "profound consequences for every aspect of individual, community, national and international life" (United Nations 2002, para. 2).

[4] Many World Bank reports well describe the conditions that allow countries to take advantage of the first demographic dividend to secure the benefits of the second demographic dividend and turn aging challenges into opportunities. In the words of one of the most recent reports: "The first dividend occurs when the share of the working-age population in relation to other age groups reaches a maximum level. At this point, more labor is available and GDP [gross domestic product] per capita may grow faster. The second dividend is generated by the accumulation of capital and productivity increases that occur during the first dividend. Although the first dividend is temporary (it will disappear and reverse when population aging accelerates and dependency rates begin to grow), the second dividend may have a permanent positive impact on the economy" (Rofman and Apella 2020, 10).

[5] The report *Pensions in the Middle East and North Africa* stands out as it puts forward options for pension reforms for a generally young region with a still expanding labor force (Robalino 2005). The report focuses on the pension system—as opposed to the potential impact of demographic change on the economy at large—but it stresses the urgency of pre-empting a crisis and points to inter- and intragenerational distributional issues that need to be addressed before it is too late.

[6] The Organisation for Economic Co-operation and Development has recommended the elimination of mandatory retirement policies on the grounds that a worker's age is not an indicator of productivity or employability (OECD 2015).

[7] The report *Promoting Active Aging in Russia* provides some qualitative evidence about attitudes toward older employees, and older workers' preferences to continue in the workforce

(Levin 2015). The results point to the willingness of older workers to stay in the labor market past the legal retirement age if flexible work arrangements and more childcare and long-term care options are available. At the same time, both workers and employers recognize that, while older workers can be more responsible and reliable, they often face age-related discrimination, job search difficulties, and skill mismatches.

[8] These global reports are not necessarily aging reports; several are on pensions and social protection.

[9] The Active Aging Index is a joint product of the United Nations Economic Commission for Europe Population Unit; the European Commission Directorate General for Employment, Social Affairs and Inclusion; and the European Centre for Social Welfare Policy and Research in Vienna. It is a composite measure, obtained by aggregating scores from four domains: (i) employment, (ii) participation in society, (iii) independent, healthy, and secure living, and (iv) enabling environment (see Karpinska and Dykstra 2015).

[10] The number of reports is used as a proxy for the World Bank's extended attention (over time) to a country demographic situation.

[11] Figure 2.4 uses the old-age dependency ratio to rank countries from the youngest to the oldest; the results are robust to using the proportion of the population over age 65 instead of the old-age dependency ratio. These ratios are not used in a normative sense (that is, to endorse one specific definition of aging over another) but uniquely for convenience, as they are widely adopted.

[12] For this analysis, the number of reports has been compacted into a country-level dummy indicating the presence or absence of evidence of a certain quality on a certain topic (see appendix D for details).

[13] Jamaica's fertility rate is already below replacement rate, but aging is still not perceived as an urgent priority in that country.

[14] The *World Development Report 2019: The Changing Nature of Work* observes that social contracts in Eastern Europe and East Asia would need to create mechanisms to sustainably finance the protection and care of older people (World Bank 2019h).

[15] A US National Research Council report recommends that countries follow a system of "hierarchy of data collection modules," where minimum sets of data are defined for each module, from basic data to increasingly elaborated data sets, that guarantee the comparability across countries. According to the report, these data sets should include, at least, "the

frequency and rates for (1) deaths and their major causes; (2) important acute and chronic medical conditions and their major manifestations; (3) measures of important self-reported health status; (4) population levels of physical, social, and mental function; (5) preventive and health promotional behaviors; and (6) important disabilities. In addition, minimum health care information for older persons should include (1) utilization rates for important types of health services, including institutional and home-based care; (2) personal and family expenses for formal health services; (3) rates of use of medications and devices; (4) major cultural influences on the concept of health and the use of health services (such as gender, ethnicity, geographic residence, and socioeconomic status); and (5) the use of informal and alternative and complementary health care services" (National Research Council 2001).

[16] Projects to improve cross-country comparability of aging and retirement surveys are underway. See Boersch-Supan (2016).

3 | Engaging Countries on Population Aging

Highlights

The country engagement model is the key channel for analyzing the main constraints and opportunities for growth, prosperity, and poverty reduction at the country level, but it is not regularly and systematically used to assess the drivers and consequences of one of the most important phenomena affecting those: population aging.

The large body of aging-related analytical work produced by the World Bank has been used very selectively to inform its Systematic Country Diagnostics. The fiscal sustainability of pension and health systems is the issue most frequently discussed and is more likely to draw from existing analytical work. Quite welcome is the good attention in Systematic Country Diagnostics to labor market issues in relation to aging.

Country Partnership Frameworks are unlikely to discuss the challenges of population aging and its consequences, even in cases where the Systematic Country Diagnostic had a good focus on aging.

Country Partnership Frameworks that stand out are those that use demographic analysis to identify the challenges of population aging and propose policies for medium- and long-term solutions, for example those aimed at strengthening the human capital of the population.

Several factors inhibit the ability of the World Bank to engage more systematically with client countries. These factors include the lack of a natural counterpart in governments for such a cross-sectoral topic, the short time horizon of client countries, the absence of attention to population aging in World Bank corporate agendas (the Human Capital Project, future of work, inclusion, and gender strategy), and the insufficient use of partnerships to help advance the dialogue with the client.

The World Bank is increasingly aware that population aging is affecting the growth prospects and well-being of an increasing number of countries. But how effective is the World Bank in raising awareness of population aging and advancing it on the policy agenda of its client countries? This chapter focuses on World Bank engagement with governments on population aging and specifically on how the country engagement model has been used to inform the country's understanding of the issue and elevate it as a priority for the policy maker. Although there are other ways in which the World Bank can trigger a policy discussion with its clients (some of which are discussed in the previous and following chapters), the country engagement model is the most regular and systematic channel through which to analyze, discuss, and prioritize issues that can affect growth and prosperity—demographic change being a pressing issue for many clients.

The evaluation found that the World Bank is not using the country engagement model to its fullest potential. The SCD reports about countries that are aging only occasionally discuss the impact that population aging can have on growth and shared prosperity, even in instances when they could rely on an existing body of relevant analytical work. The CPFs are therefore unlikely to recognize aging as an area of focus and to identify aging-related policy priorities. A few exceptions are noted. This is not to say that SCDs and CPFs are not raising issues that matter for aging—they are—but (i) they are not *deliberately* connecting them to population aging and hence are not using the powerful cross-sectoral SCD lens to integrate what is an eminently cross-sectoral issue; and (ii) they tend to focus on the immediate challenges—such as the fiscal sustainability of pension and health costs (essentially a constraint)—rather than on medium- and longer-term solutions; hence, they are not using the country engagement model as a platform to plan ahead. These two aspects—the cross-sectoral nature of population aging and the importance of anticipating challenges (preparedness)—are discussed in depth in the next chapter.

Country Engagement Model

The country engagement model is a key channel to bring population aging-related challenges to the attention of the policy maker. The SCD is the

analytical underpinning of World Bank engagement with client countries.[1] Its purpose is to identify the main constraints and opportunities for growth, prosperity, and poverty reduction to guide priorities for engagement. Since population aging affects productivity, consumption, savings, investments, and—ultimately—economic growth and prosperity, the SCD is the appropriate instrument for analyzing these impacts and identifying possible priorities for the CPF in a regular and systematic way.

Despite producing an increasingly rich body of analytical work, the World Bank has not used it systematically to inform its SCDs. Forty percent of SCDs in late- and postdividend countries do not have a demographic analysis that informs whether aging could negatively affect growth prospects and societal well-being. Although about half of the available SCDs for the universe of countries analyzed in this evaluation (24 out of 45)[2] discuss aging issues, only 4 of them discuss the potential impacts of aging comprehensively—3 of them in Europe and Central Asia (Armenia, Bulgaria, Poland) and 1 in Latin America and the Caribbean (Uruguay).

SCDs that integrate aging well not only provide detailed information on the drivers but also discuss the potential challenges of population aging (box 3.1). The Albania and Armenia SCDs, for example, both identify low fertility and the strong outmigration of young (and disproportionately educated) people as drivers of aging. Both discuss issues that create special challenges for an aging society, such as the low participation of women in the labor market, the high level of informality, and the rapidly increasing outmigration (World Bank 2015b, 2017a). However, the Albania SCD does not discuss the ways in which these issues can affect future growth and prosperity. In contrast, the Armenia SCD uses a sensitivity analysis to project changes in gross domestic product in the context of halted population and different dependency ratios, depending on alternative levels of female labor force participation.

SCDs that discuss aging issues tend to focus on pensions and fiscal sustainability. Analysis of the fiscal sustainability pressures associated with the demands of an aging population is the most common aging issue discussed in SCDs (figure 3.1). This analysis highlights pressures driven by projected higher public expenses on health and pensions. In a few cases, the discus-

sion includes potential negative impacts on the sustainability of the broader social assistance system (the Seychelles, Vietnam) or future demands for long-term care (Bulgaria, Thailand). Less common are SCDs presenting more granular analysis of how different segments of the population are affected now and will be in the future by population aging and hence by the current and future allocation of social expenditures.

Box 3.1. What Do Systematic Country Diagnostics That Integrate Aging Well Look Like?

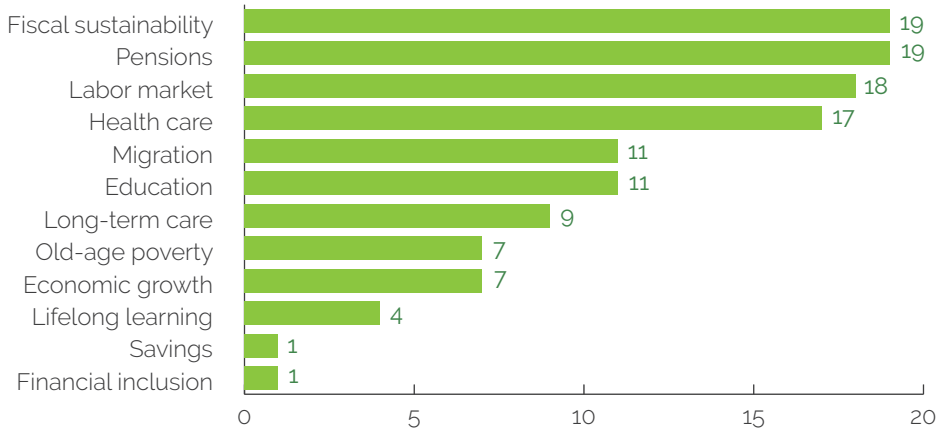
The most salient features of Systematic Country Diagnostics that raise aging as a critical issue are the following: (i) they clearly identify the different drivers for aging; (ii) they use supporting data, or even original analysis, including projection modeling; and (iii) they present a comprehensive discussion of the implications of aging, including the links among affected areas. For example, they discuss how projected changes in labor force participation affect gross domestic product growth and education and skills needs; they analyze both how fiscally sustainable pension and health care systems are and their role in strengthening resilience and protecting from shocks; and they integrate the issues of increasing quality and availability of childcare and long-term care and supporting female labor force participation. Finally, (iv) they identify at least one policy priority related to aging.

Source: Independent Evaluation Group.

The focus on the fiscal sustainability of pension reforms is by far the most prevalent, dominating the discussion of pension coverage and adequacy. Of the 24 SCDs that include a discussion of aging, almost all (23) emphasize the potential negative impact that population aging will have on pension expenditure, but only a few include a thorough discussion of the coverage (11) and adequacy (6) of pensions, supported by empirical evidence. The Moldova SCD, for example, discusses the risk that population aging poses for the pension system's sustainability, alongside a thorough analysis of the role of pension income in providing economic security to older people (World Bank 2016c). It also includes projections of replacement rates (ratio of pension to average wage) and pension coverage, and links very effectively the three

elements—coverage, adequacy, and sustainability—to present options for reforms in the broader framework of improving social assistance programs. By contrast, the Belarus SCD raises the concern of the fiscal sustainability of the existing pay-as-you-go system without presenting data on pension coverage and adequacy (World Bank 2018a).

Figure 3.1. World Bank SCDs in Aging Countries Discussing Themes Relevant to Population Aging



Source: Independent Evaluation Group.

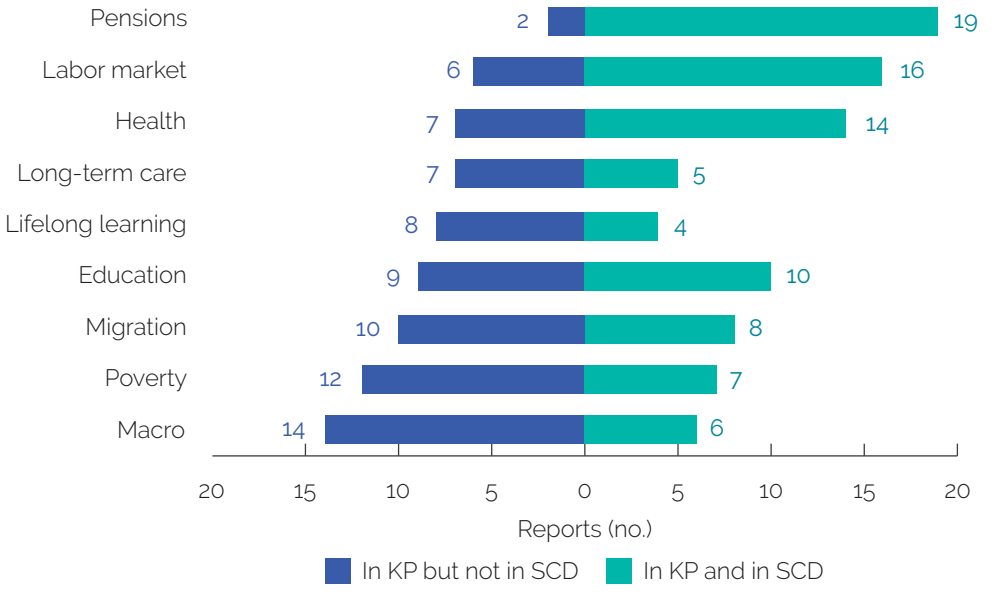
Note: n = 24 (45 countries have SCDs; of these, 24 discuss population aging). SCD = Systematic Country Diagnostic.

Labor market issues are an important area of focus in SCDs. Frequently mentioned is the importance of increasing workers' productivity and women's participation to counterbalance a shrinking labor force. Labor market analysis in the context of aging is often present in SCDs. SCDs of countries in Europe and Central Asia are more likely to flag that a potentially shrinking workforce due to population aging can negatively affect growth, present data and projections, and discuss policy options. The Armenia SCD, for example, highlights the need to look ahead and think of a new economic model, where barriers to work participation are removed to support female labor force participation, and investment in skills sustains workers' productivity (World Bank 2017a). The Moldova SCD stresses the need to increase productivity and female labor force participation and to remove disincentives in the pension system for older workers to stay in formal employment (as opposed to moving to early retirement or inactivity, which would likely be a move to

informality; World Bank 2016c). Although many SCDs concur that supporting female employment is critical (for example, by adopting family-friendly policies and strengthening care systems), they rarely tackle the issue of the employability and productivity of *older* workers. Often, investing in skills and boosting productivity is discussed in relation to *young* workers.[3]

When SCDs do not focus on the challenges of population aging, or focus only on certain topics, it is not necessarily because relevant World Bank analysis does not exist. IEG observed a systematic bias toward using available empirical evidence to inform SCDs. Countries for which empirical analysis on pensions, the labor market, or health exists are much more likely to have SCDs discussing these issues; however, other topics, such as long-term care, lifelong learning, migration, or poverty are much less likely to be discussed in the SCD, even when World Bank–produced evidence exists that could inform that discussion (figure 3.2). Except in Bulgaria and Uruguay, SCDs in countries with an aging report are not more likely to have a comprehensive discussion of how population aging is or may be affecting their economy.

Figure 3.2. Using Existing Analysis to Inform SCDs



Source: Independent Evaluation Group.

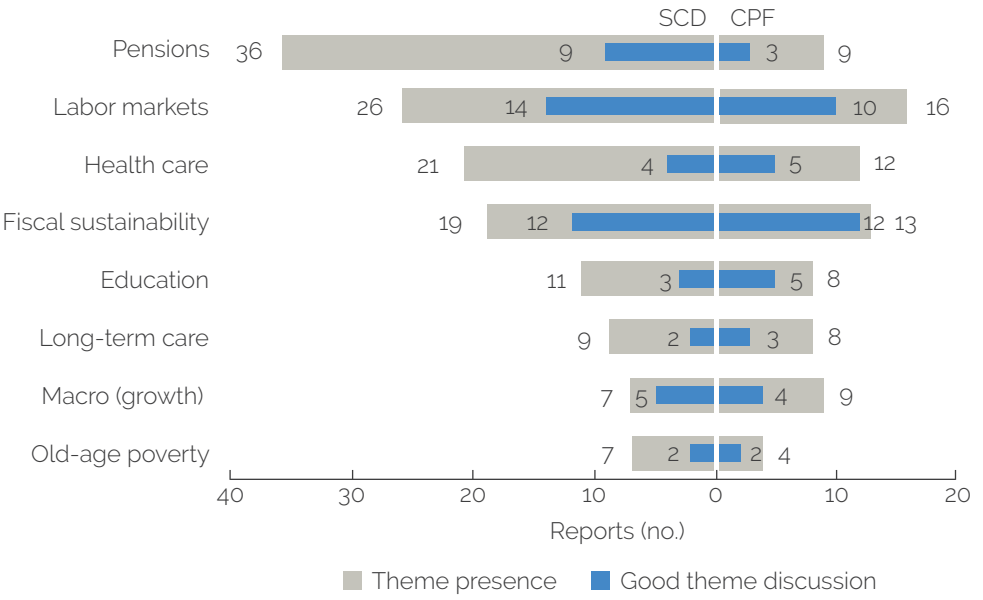
Note: n = 24 (45 countries have SCDs; of these, 24 discuss population aging). KP = knowledge products; SCD = Systematic Country Diagnostic.

Like SCDs, CPFs seldom include a discussion of the challenges of population aging and its consequences. Sixteen CPFs out of the 36 available (42 percent) for post- and late-dividend countries do not mention aging at all. An additional 9 (25 percent) pay only cursory attention to it, with no supporting numbers, no reference period, no sense of evolution, and no explanation of the implications. Only 5 (14 percent) discuss aging-related issues with detailed descriptions of potential impacts, supporting data, analysis, and projections and place a strong emphasis on aging in the document.

A good discussion of aging in the SCD does not always carry over to the CPF (figure 3.3). Of the four SCDs that excel in identifying concrete policy priorities related to aging, only for Poland was this diagnostic translated into a CPF objective. For the other three countries (Armenia, Bulgaria, and Uruguay), the issue was raised in the CPF and the SCD analysis was used to inform or justify some of the other priorities. Many CPFs do not diagnose aging-related issues even when the SCDs (or other analytical work) do. Serbia is an example. The SCD links issues of labor force, pensions, health care, and education to aging (World Bank 2015i). It points to the need to increase the education level and inclusion of Roma people to counter the shrinking workforce. It also clearly articulates the issue of fiscal sustainability of pensions in relation to population aging. The CPF, however, does not reflect any of these issues (World Bank 2015h).

What distinguishes a CPF with a good treatment of population aging is its capacity to articulate a discussion of the challenges and policy options that can provide medium- and longer-term solutions based on data. It is not the number of themes or the focus on short-term constraints such as fiscal sustainability. The Croatia CPF identified four areas or themes connected to aging (labor force, growth, education, and long-term care) but neither presented supporting data nor included a discussion of the interrelationships among these themes (World Bank 2019a). The Uruguay CPF, however, highlighted just two themes in relation to aging—education, to strengthen the skill set, and labor force participation, to increase the productivity of its population—but the discussion was underpinned by good evidence for each (World Bank 2015k).

Figure 3.3. Aging-Related Themes in SCDs and CPFs



Source: Independent Evaluation Group.

Note: CPF = Country Partnership Framework; SCD = Systematic Country Diagnostic.

CPFs that discuss aging issues are often focused on fiscal sustainability issues associated with pension and health spending. Although necessary, addressing fiscal sustainability is not a solution to population aging; it consists of relaxing a short(er)-term constraint.

Gender issues related to aging are sometimes mentioned, mostly in relation to care responsibilities. This was the case in the Bulgaria, Poland, and Thailand CPFs. The Thailand CPF, for example, refers to the differential impacts of aging on older women, given their limited access to resources, including inheritance, and having to "shoulder a higher share of responsibilities of caring for grandchildren and older family members" (World Bank 2018e, 11).

CPFs that focused on the challenges of population aging identified policy priorities related to strengthening human capital as critical solutions. In the Costa Rica and Poland CPFs, changes in health systems are argued based on aging: "Population aging and a high prevalence of non-communicable diseases place a new set of challenges for health services in Poland, by increasing and altering the demand for care. This will require a different strategy

and one that enables productive aging" (World Bank 2018c, 44). In Costa Rica "health services require adaptation to better tackle new demographic and epidemiological challenges to ensure quality and timeliness of service delivery" (World Bank 2015d, 29). In Bulgaria and Uruguay's CPFs the logic for supporting education and skills rests on the rapidly aging population: "Against the backdrop of a rapidly aging and declining population, Bulgaria needs to equip its future cohorts of labor market entrants with the skills and competencies that would help the country make a significant leap in boosting employment and labor productivity" (World Bank 2016a, 36). "The education and skills agenda… are supporting productivity and competitiveness and preparing Uruguay for the aging of its population as demographic transition proceeds" (World Bank 2015k, 26).

CPFs that build on a more deliberate demographic analysis, usually provided by the SCD and other country diagnostics, can successfully provide a solid base for the formulation of policy priorities. Uruguay is a great example. The SCD and the country aging report were prepared almost simultaneously (the country report was published immediately after the SCD). This explains the SCD's thorough analysis of the country aging-related challenges. The 2015 CPF, based on the analysis presented in the SCD and the country aging report, draws attention to the conflicting needs and expectations of younger and older people originating from a generous social protection system in the context of a rapidly aging population (World Bank 2015k). It indicates the priority of reforming the education system, investing in skills, and increasing workers' productivity and country competitiveness to counter the potentially negative impact of a rapidly shrinking labor force. The strong demographic foundation of the CPF also allows for identifying the implications that population aging has for the social contract: "There is a need for concerted efforts to improve access to quality education and expand early childhood development programs. . . This reprioritization is of particular importance given that ongoing population aging will increase the relative proportion of elderly versus the working age population" (World Bank 2015k, 27).

The country engagement model is not the only channel for positioning aging on the policy agenda of client countries, but it is the most regular and suitable one. The analytical work—in the aging reports in particular—has been in several cases a good vehicle for establishing a fruitful policy discussion. In

Uruguay, the aging report generated a positive momentum whereby the government produced a national strategy strongly centered on aging. In Chile, the aging report (launched during the IEG field visit in May 2019) was the result of a joint study program through which the government cofinanced the analysis. At the same time, the analytical work by itself is clearly not enough to move the needle. The very good aging reports of countries like Argentina and Brazil did not leave a mark on their SCDs and CPFs, which did not focus on the issue. The SCD-CPF model has the advantage of adopting a cross-sectoral analysis, bringing together teams from various Global Practices and being focused on challenges related to growth, poverty, and shared prosperity. It hence is the natural vehicle through which to discuss the implications of population aging in a regular and systematic fashion.

Constraints and Enabling Factors

What are the obstacles to a more regular and systematic engagement on aging issues between the World Bank and its client countries? This section analyzes elements that have been repeatedly raised with IEG—at both the global and country levels—and forms a consensus opinion.

Client Demand in a Country-Driven Model

All stakeholders interviewed for this evaluation (both government representatives and World Bank staff) agreed that there is a strong but often not well-articulated demand for World Bank support in relation to aging. There are several explanations. First, because population aging is a cross-sectoral issue there is no clear counterpart, in either government or the World Bank. In Chile, for instance, although the Office of the Presidency leads the agenda on aging, relevant programs are housed under the Ministry of Social Development, the Ministry of Health, and at the state level, with little coordination, strategic direction, or dedicated budget among these. Aging is not addressed across sectors in any of the countries IEG visited. Second, the minister of finance has typically a partial view of the aging agenda, that is, the immediate fiscal pressures arising from current and future pension liabilities. Third, governments are often shortsighted and unable or unwilling to plan long term. The governments' time horizon corresponds to the electoral

cycle, typically much shorter than the ideal time horizon to plan for population aging. This disconnect is often aggravated by the existence of severe fiscal constraints in aging countries. As a result, countries give limited attention to preparedness and underinvest in areas that require long-term investments, for example reskilling and lifelong learning or even long-term care.

Some governments may not see population aging as a government priority, even when the current trends suggest otherwise. In Jamaica, for example, despite the existence of aging strategies and plans, the government does not consider population aging as an urgent issue to be addressed. The strong outmigration is not perceived as a problem, given the large volume of remittances sent by migrants. A similar situation was observed in Bulgaria and Romania, despite pressures and incentives from the EU to invest in policies and programs to support active aging. Among the 12 early-dividend countries reviewed for this evaluation, only Argentina and Turkey recognize that aging may be a problem in the future.

The World Bank client-driven engagement model can be powerful in raising awareness of population aging challenges, but it has limitations. The World Bank issued seven policy notes on aging in the Russian Federation between 2014 and 2015, aiming to bring the issue to the attention of the policy makers. The comprehensive analytical work underpinning these policy notes was summarized in an overview report that was published and widely disseminated (World Bank 2015g). Yet it did not lead to additional lending or technical assistance. World Bank engagement is driven by country priorities, with plans and results set over a four- to six-year time frame, which may not be conducive to supporting longer-term efforts. Still, an in-depth demographic analysis in the SCD can show a country how population aging can affect its economy and help inform its formulation of policy priorities.

Corporate Priorities

Population aging is not included in four prominent corporate agendas that could catalyze country efforts. Population aging is surprisingly marginal in the Human Capital Project, future of work agenda, inclusion agenda, and gender strategy. The Human Capital Project aims to raise awareness and increase demand for interventions to build human capital and invest more in

people's education and health. The life cycle approach of the Human Capital Project is very conducive to extending the framework to the middle and later years of life and focusing the attention of governments on the economic costs of not preventing NCDs, in terms of (lost) productivity and (diminished) returns of human capital investments. The agenda was originally centered on the early years, but the World Bank is increasingly calling attention to how rising NCD levels threaten countries' human capital because of productivity losses; it aims to include this issue in the Ministry of Finance agenda in client countries (World Bank 2019b).

The future of work agenda does not focus on the need to retool and retrain older workers. The *World Development Report 2019: The Changing Nature of Work*, for example, only tangentially mentions adult learning, but not in relation to aging countries, and mostly refers to out-of-work individuals (World Bank 2019h). Yet the review of SCDs has shown that labor market issues are among the most frequently analyzed in relation to population aging, as aging countries need to keep individuals active and productive for longer. Addressing skills mismatches, accelerating workforce reskilling, and promoting continuous learning could figure more prominently in the future of work agenda as policy priorities aimed at increasing the productivity of all workers, including older workers, in aging countries.

Aging is not an active part of the implementation of the gender strategy and inclusion agenda. Population aging has widespread implications for gender equality, as discussed in various parts of this evaluation and recognized by the World Bank Group Gender Strategy. IEG was unable, however, to discern a specific commitment by the Bank Group on addressing gender gaps in relation to aging. The issue is rarely even articulated. Also surprising is the lack of consideration of aging in the social inclusion agenda, given the important impacts of population aging on different groups. Further, the cultural impact of negative attitudes toward aging could jeopardize the efforts to make older people fully contributing members of society. The accessibility agenda led by the Sustainable Development Global Practice can have important overlaps with aging, but this work is not yet fully developed.

Collaboration with External Partners

Partnerships are not fully leveraged to raise awareness and move the aging agenda forward. Aging is becoming a priority in the work of several multilateral development banks and other international organizations. In the Latin America and the Caribbean Region, the Inter-American Development Bank (IADB) has been actively investing in two lines of work related to aging—long-term care and the "silver economy"—and has recently launched the Aging Observatory, a centralized repository of data, publications, and references to "promote the design of effective policies to mitigate the impact of population aging."[4] The IADB also facilitates the intergovernmental dialogue in the Region on aging-related issues and is currently working on a position paper on aging, expected to be completed in 2021. In Europe and Central Asia, the EU requires accession countries to outline aging strategies and has promoted multiple initiatives to respond to population aging. Most recently, the European Commission has released a report on the drivers and impacts of demographic change (European Commission 2020), which will be followed by a green paper on aging.[5] The OECD is producing relevant diagnostic work for both developed and developing countries and helps countries access EU funds for aging-related work. In the East Asia and Pacific Region, the Asian Development Bank has committed to help its member countries address the challenges of population aging as one of the key priorities in its 2030 strategy, including through sharing of experiences, best practices, and innovation (Asian Development Bank 2018). The International Monetary Fund (IMF) is increasingly calling attention to the topic in its publications.

Despite clear priority overlaps, IEG found little evidence of strategic collaboration or coordination on this topic. During country visits, IEG found many examples where the World Bank and other agencies were unaware of one another's relevant material produced or initiatives promoted. This point was also made repeatedly during interviews with government officials and staff of multilateral development banks and other international organizations (notably the United Nations Development Programme, OECD, EU, International Labour Organization, and WHO, including its regional hubs). World Bank officials interviewed for this evaluation agree that there are few incentives to collaborate across institutions and that highly centralized and

bureaucratic processes and procedures inhibit collaboration. The UN Decade of Healthy Ageing (2021–2030)[6] calls for a concerted global effort to foster healthy aging and improve the lives of older people and their families and communities. It is yet to be seen whether the World Bank and other international organizations will support this effort.

In the Europe and Central Asia Region, the World Bank has provided technical assistance to EU accession countries to implement the EU active aging agenda, as a condition to benefiting from EU funds disbursement—with mixed results. In Bulgaria and Romania, for instance, the World Bank helped draft several relevant strategies to meet EU requirements. Interviews conducted for this evaluation indicate that in both countries these strategies are not being implemented as planned, and budgets have not been allocated. Implementation of the active aging agenda was not at the core of the EU reviews when assessing Bulgaria and Romania's fulfillment with disbursing conditions, and governments had little incentive to implement the associated strategies. The World Bank was not included in any follow-up conversations after assisting with the preparation of the strategies, and EU officials were not able to monitor country progress in implementation. Although the client generally appreciated the World Bank's analytical work and advice, it treated it opportunistically and did not disseminate it in the country. IEG findings suggest that, given the low commitment of countries to fulfill the active aging strategies promoted by the EU, there was little or no strategic coordination between the World Bank and the EU on how to best advance this agenda.

A few other examples of collaboration stand out. The World Bank collaborated with the Economic Commission for Latin America and the Caribbean to apply the NTA methodology in the Chile and Uruguay aging reports. There are examples of collaboration to produce knowledge products, such as the *Pensions at a Glance: Latin America and the Caribbean* report in 2014, with OECD and IADB, and the GMR itself, which was produced by the World Bank and the IMF (OECD, IADB, and World Bank 2014; World Bank and IMF 2016). Moreover, the World Bank has been supporting the China Health and Retirement Longitudinal Survey, in collaboration with the US National Institutes of Health, the Chinese government, and Peking University. The only example of cofinancing is found in China, where the World Bank is cofinancing the Guizhou long-term care project with the Agence Française de Développement.

[1] The Bank Group approach to country engagement has four distinct components: (i) the Systematic Country Diagnostic, which is a diagnostic exercise conducted by the Bank Group in close consultation with national authorities, the private sector, and other stakeholders, as appropriate; (ii) the Country Partnership Framework (CPF), which builds selectively on the country's development program and articulates a results-based engagement; (iii) the Performance and Learning Review, which is prepared every two years during the implementation of a CPF, or at midterm, and summarizes progress in implementing the CPF program; (iv) the Completion and Learning Review, which is prepared at the end of every CPF period to assess the CPF program performance using the results framework set out in the most recent Performance and Learning Review. In addition, the Country Engagement Note is used in very specific cases, where the Bank Group may not be able to prepare a CPF because uncertainty makes it impossible to commit to detailed objectives, develop a program, or engage at significant scale in the medium term. For more details on country engagement including policies, procedures, guidance, templates, learning, useful links, contacts, and other resources, see https://projects.worldbank.org/en/projects-operations/country-strategies.

[2] Only 45 out of the 59 countries considered for this evaluation had a Systematic Country Diagnostic as of March 2019.

[3] For example, the Bulgaria Systematic Country Diagnostic acknowledges the debate on the impact of population aging on productivity but raises the policy issue about increasing productivity in relation to the younger generation: "[Because of the positive association between productivity and the share of younger workers] it will become increasingly important for Bulgaria to offer high quality primary and secondary education to most Bulgarians. This would enable younger workers to work in more technology-intensive sectors and facilitate life-learning. In order to achieve this, Bulgaria would need to reduce the high rate NEET youth [not in education, employment, or training] youth; improve the quality of education in some schools; and ensure that the Roma, who are an increasing share of the population, get better access to education" (World Bank 2015c, 46–47).

[4] For more information on the work of the Inter-American Development Bank on aging in Latin America and the Caribbean, see https://www.iadb.org/es/panorama/panorama-de-envejecimiento.

[5] A key goal of the report is to show the "need to embed demographic considerations across EU [European Union] policy"—a need that has been painfully demonstrated by the coronavirus (COVID-19) pandemic —and, through a statistical dashboard, provide countries with a "reliable basis for informed policy reflections and decisions" (European Commission 2020,

30). This report kick-starts the commission's work in this area and will be followed by a green paper on aging, as demography is recognized as a cross-cutting issue that will help steer European recovery from the crisis.

[6] The proposal for the United Nations Decade of Healthy Ageing (2021–2030) was endorsed by World Health Organization member states at the 73rd World Health Assembly in August 2020. The proposal has four focus areas: (i) changing how we think, feel, and act toward age and aging; (ii) ensuring that communities foster the abilities of older people; (iii) delivering person-centered integrated care and primary health services responsive to older people; and (iv) providing access to long-term care for older people who need it (WHO 2020). More details about the proposal can be found at https://www.who.int/docs/default-source/decade-of-healthy-ageing/final-decade-proposal/decade-proposal-final-apr2020-en.pdf?sfvrsn=b-4b75ebc_5.

4 | Addressing Population Aging

Highlights

Focusing on preparedness and thinking cross-sectorally are necessary to help countries plan for population aging.

The World Bank has not been systematic and deliberate in helping countries prepare for population aging. Except for its work on reducing tobacco consumption, the World Bank has not invested extensively in programs to incentivize healthy behaviors. The World Bank is preparing a lifelong learning framework, but it has not integrated it into aging work. There is no activity on financial awareness, access to financial products, or migration. The age-friendly environment is considered a potential area of interest, but it has not generated any activity. The World Bank has not done any work on how to address social norms in relation to aging.

The most innovative work the World Bank has done over the past 10 years is supporting countries to pilot new approaches to long-term care. This work has been prompted by client requests and has provided an opportunity for the World Bank to build internal capacity and visibility.

The World Bank is experiencing challenges in thinking cross-sectorally, as is required by a complex and cross-sectoral issue like population aging. This inability increases the risk that sectoral work is not responsive to issues that pertain to other sectors, thus potentially undermining them or not helping them.

Addressing internal constraints by improving coordination across Global Practices, strengthening resources and expertise available to work on population aging, and improving access to and use of knowledge—especially the knowledge generated through reimbursable advisory services—can help the institution increase cross-fertilization, coherence, and innovation.

This chapter discusses how the World Bank assists its clients in addressing and anticipating the consequences of population aging. It analyzes the type and characteristics of the activities in which the World Bank engages clients, the areas where the World Bank has made inroads over the past few years, and areas where progress has been slow. The chapter also reviews the explanations of what may have kept the institution from making headway toward advancing its work on aging. This chapter addresses evaluation question 2, on the comprehensiveness, timeliness, and coherence of World Bank support to countries.

The World Bank has a strong tradition of supporting countries to strengthen and reform their pension and health systems. The bulk of the operational work on aging is in the areas of health, pensions, and social protection more generally (see appendix F for a description of the distribution of the World Bank portfolio in aging countries). Most of these activities happen across countries, irrespective of their aging status. The evaluation goal was not to assess this work but rather to focus on the approaches that can help countries to plan for population aging and create opportunities to ensure the health and well-being of an aging population.[1]

Focusing on preparedness and thinking cross-sectorally is what characterizes a systemic response to population aging. The two aspects are intertwined. Timely policy solutions, those that are adopted when population aging is not yet very advanced, provide more options to countries to set up and reform their systems rather than being forced to make painful adjustments at the margin—and these are typically multisector solutions.

The evaluation found that the World Bank has not been systematic and deliberate in helping countries *prepare* for population aging, that is, creating the conditions for a healthier and more productive society. The World Bank has successfully worked with countries to pilot new approaches to long-term care, the area where the World Bank has shown most innovation over the past 10 years. On other fronts, the World Bank record is mixed or absent.

The World Bank's approach to finding solutions in response to population aging is not sufficiently comprehensive and informed by cross-sectoral thinking. To address a systemic issue like population aging, sectoral solutions need to consider the complex relationships that exist across sectors to

avoid undermining efforts and to maximize complementarities. This is even more relevant in the case of early interventions, when the longer horizon allows for planning at the system level.

The two aspects—preparedness and cross-sectoral thinking—are discussed in the following sections, providing examples of where the World Bank has been innovative and where instead there has been little focus.

Focusing on Better Preparedness

Attention to Health Promotion

Investing in better health and disease prevention to extend the number of years people live free of illness and disability is the best approach to promoting healthier and more productive lives, as noted in the reviewed World Bank aging reports. The increasing prevalence of NCDs in aging populations has had adverse implications for overall productivity. The economic costs of NCDs are well-documented. Bloom et al. (2014) projected that cardiovascular disease, cancer, chronic respiratory disease, diabetes, and mental health disorders would cost $27.6 trillion in China and India over 2012–30—a cost that can be avoided through prevention.[2] For example, Heijdra and Reijnders (2012) show that when boosts to longevity take place in a context of increased "economic longevity" (that is, longevity that allows individuals to stay longer in the labor market) the resulting increases in human and physical capital are enough to totally counteract the negative effects of aging on economic output. Reducing exposure to NCD-related risk factors through stronger health promotion and public health interventions is therefore key in aging countries to prevent an otherwise inevitable shrinking of their workforce.

The World Bank's analytical work has been influential in informing policies to reduce tobacco consumption in many countries. The World Bank contributed to building the evidence base needed to demonstrate that tobacco taxation reduces tobacco consumption, which in turn has other potential benefits, including greater labor productivity and increased life expectancy. The World Bank provided critical evidence in the form of technical assistance for tax policy assessments, including modeling work to estimate the impact of tobacco tax reforms on prices, consumption, and domestic reve-

nue mobilization under different policy scenarios; it also provided capacity building and facilitated learning across countries. The World Bank's work informed policy discussions in aging countries (Azerbaijan, Belarus, Bosnia and Herzegovina, Kazakhstan, Moldova, North Macedonia, Russia, Trinidad and Tobago, Ukraine, Uzbekistan, Vietnam, and the members of the Organisation of Eastern Caribbean States). It was also influential in younger countries with high levels of tobacco consumption, such as Indonesia.

The World Bank also supported tobacco taxation policy reforms through prior actions for fiscal development policy loans in several aging countries between 2015 and 2019. Examples come from Armenia, Colombia, Moldova, Mongolia, and Montenegro. In Colombia, for instance, these prior actions contributed to increased revenues from tobacco taxes through specific excises. Revenues were earmarked mostly for health expenditures, thus increasing the available resources for the government's health spending.

The World Bank has recently launched a global study on obesity prevention and control and increasingly receives requests from countries for support on implementing sugar-sweetened beverage taxes. The global study lays out the rationale to address overweight and obesity, pointing to its negative economic and health impacts, especially for poor people and people who live in low- or middle-income countries. It also presents evidence-based opportunities for fiscal and regulatory policy reforms and investments across several sectors that could prevent overweight and obesity. One such policy is the introduction of sugar-sweetened beverage taxes, for which several countries have recently requested World Bank assistance (Colombia, Kazakhstan, Kerala state in India, the Philippines, and Saudi Arabia; the last three countries are not yet in a full-blown aging stage). Support has been provided by outsourcing to consultants so far. The World Bank has only recently focused on creating internal capacity to support the design and implementation of such taxes, relying on the expertise created through tobacco taxation. However, the World Bank was not a pioneer in this field, as these taxes have been introduced in at least 45 countries worldwide since early 2000. This isolated effort contrasts with the long-standing commitment of the World Bank to support client countries in designing and implementing policies and programs to reduce child malnutrition. Similarly, little (or nothing) has been

done to promote the reduction of alcohol consumption, another important risk factor for NCDs.

Large-scale, communitywide interventions to promote healthy behavior are not usually included in World Bank support to countries. IEG found two cases in the review of the portfolio for this evaluation. The World Bank helped the Ministry of Health in Turkey implement its strategic plan for 2010–14, which included goals for NCD control. World Bank–supported activities included a surveillance study on childhood obesity, the development of national guidelines on physical activity, and the regulation of school cafeterias to promote healthy food consumption in primary and secondary schools. In Uruguay, the Noncommunicable Diseases Prevention and Promotion Project proposed a multidimensional approach to prevent NCDs, extending beyond the role of ministries of health and health services to the community level, including schools. The approach was not articulated in the project development objective or the design and focused mostly on secondary prevention under the control of the Ministry of Health, with limited attention on the social determinants of health and behavior change activities. Although strategies to influence the behavior of the population with respect to NCD risk factors were implemented in schools and at the community level, their emphasis and scale were limited, and their continuity and sustainability relied mostly on the interest of individuals and municipalities (World Bank 2019f).

Planning for Increasing Care Needs

Aging countries will need to invest in provision of long-term care, given the higher prevalence of functional dependency at old ages. Low- and middle-income countries show higher rates of functional dependency at old ages than high-income countries (WHO 2015). According to WHO estimates, in China 35 percent of people ages 75 or older need some type of assistance for at least one basic activity of daily living; this figure reaches 45 percent in South Africa, more than 60 percent in Mexico, and about 80 percent in India and Russia. Yet less than 20 percent of people ages 75 or older have difficulties with basic activities in Denmark, the Netherlands, and Switzerland. IADB estimates that in the Latin America and the Caribbean Region the number of people with difficulties performing activities of daily living could triple by 2050 (Aranco et al. 2018). Similarly, in Thailand the proportion of older

people with difficulties performing these activities could more than double by 2050 (Loichinger and Pothisiri 2018).

Long-term care is a new line of work in which the World Bank has been increasing its engagement with countries and building expertise and reputation. Over the past 10 years, the World Bank has supported countries in assessing their future long-term care needs and offered policy recommendations to address these. Most of this support involved reviewing existing long-term care systems in high-income countries in terms of coverage, benefits, funding, and quality. It also included analysis of the demand and supply of long-term care services, financing, and institutional arrangements (detailed reports are available for Chile, China, Estonia, Poland, and—more recently—Saudi Arabia). In China, the study recommended a balanced mix of services across home, community, and institutional settings, and expanding home and community care. It also recommended policy and institutional reforms to build the stewardship role of the state in long-term care. The report found that, although continued government support is needed for vulnerable older adults, the most effective and sustainable approach to developing the sector would be to leverage resources and complementary capacities in the private sector (Glinskaya and Feng 2018).

The World Bank has used a variety of instruments to develop its work on long-term care. In addition to analytical work, the World Bank has approved two projects in China,[3] and it used reimbursable technical assistance in the Europe and Central Asia Region (Estonia, Latvia, and Romania) and in Chile and the Seychelles.[4] In Chile, three subsequent RAS helped the government design, implement, and evaluate the Chile Cuida pilot phase, to establish a national system of long-term care. One of the most praised aspects of the design supported by the World Bank, as evidenced in IEG field interviews, was the decentralized, bottom-up approach. This consisted of identifying, expanding, and adapting the services and programs already present in each community. The approach focused on improving the coordination across municipalities and institutionalizing initiatives that were already happening at the municipal level in an uncoordinated and fragmented fashion. Although not fully successful in achieving strong coordination between municipalities and central governments, leveraging the existing local initiatives (some of which were quite creative) was a very innovative approach.

Provision of long-term care, however, is a complex undertaking that requires strategic planning and a cultural change; it will likely challenge the World Bank to test alternative approaches. Because publicly funded provision of care for older people is extremely expensive, governments normally consider long-term care needs as a private issue to be addressed by the families in kind or through personal insurance. At the same time, direct and opportunity costs of long-term care are very high for families too, so private care is accessible only to the better-off. Part of the difficulty in finding a public solution to this issue is that long-term care is analyzed from a short-term perspective that neglects the many contributions that older people often provide, for example informal childcare, which allows many parents to work. These private and public benefits are not accounted for in the market, even if governments save on childcare and benefit from increased participation in employment (and higher tax revenues). Working with governments to mobilize private sector involvement with a strong government regulation (as in China), to support greater use of community-based solutions (as in Chile), or to promote other subsidized solutions could be the next challenge for the World Bank.

Supporting Productive Aging

The work on lifelong learning is still at the incipient stage and only partially integrated into the aging work. Several World Bank reports recognize that lifelong learning is critical to increasing labor productivity and improving the employability of older workers (Dávalos et al. 2017 for Moldova; World Bank 2008 for Sri Lanka; World Bank 2011a for Georgia; World Bank 2015m for Central Europe and the Baltics; World Bank 2016d for Vietnam), but these do not go beyond a simple acknowledgment of the issue. One report for Latvia presents a deeper discussion, corroborated by original analysis of two Eurostat surveys, the Adult Education Survey and the Continuing Vocational Training Survey (World Bank 2015a). This report analyzes the extent of adult education and training of older workers; the barriers to access; the policy options, such as improving information flows and coordination among the various actors (firms, industry associations, trade unions, training providers, and government at different levels); facilitating financing; and setting regulation. It also discusses several trade-offs that the policy maker

needs to reconcile (for example, whether to focus on current or future older workers, on those currently employed or out of work, and so on). Not surprisingly, the World Bank's limited work in this area has happened in Eastern European countries, as the EU has been pushing countries to adopt policies to address the educational challenges of an aging population through directives and funding (such as the Grundtvig program and Erasmus+; Council of the European Union 2011, 2018). At the same time, the Education Global Practice in the World Bank has been developing a lifelong learning framework to help countries create platforms for accessing training when and where it is needed and in the form and intensity required (World Bank 2019c). So far, this framework—which has been fine-tuned based on qualitative analysis of workplace training conducted in Romania and Serbia—has not been integrated into aging. This nascent framework could be linked more explicitly to the aging agenda.

Migration to aging countries may be a solution to a shrinking labor force but a politically and socially difficult one. The GMR and various knowledge products acknowledge that migration can help increase labor force participation rates in aging countries but also recognize the challenges. Immigration from younger to older countries helps, but it can generate social problems (see Flochel et al. 2014). However, in some Regions that are uniformly aging, such as Europe and Central Asia, several countries experience outmigration, which makes the situation worse. For example, in Moldova, the inflow of remittances does not compensate for the negative impact of working-age adults leaving the country. Remittances can discourage the older adults left behind from taking up jobs, a disincentive compounded by the fact that older people may be left with extra care responsibilities (Dávalos et al. 2017). Apart from diagnostic work and some CPFs (for example, in Romania) touching on the issue, the World Bank does not have insights on how to manage migration to support the labor force of aging countries or to avoid aging countries losing valuable prime-age workers. A recent briefing to the Board of Executive Directors does not provide clarity on this point (World Bank 2019d). It is therefore not surprising that there are only a few projects supporting migration aimed at (i) integrating immigrants into the local economy and social services (Colombia); and (ii) promoting outmigration

from countries with excess idle labor force to countries where demographic changes have shrunk the labor force (Morocco and Tunisia).

Higher female labor force participation is highlighted as a solution for the dwindling labor force of aging countries in almost every report reviewed, but there are very few examples of actual policy advice to support countries achieving this goal. Provision of childcare is the main policy measure proposed in World Bank projects in aging countries. The evaluation identified just seven projects supporting childcare services in late- and postdividend countries aimed at improving labor market or economic outcomes for women (during fiscal years 2005–19). Just two projects (both in China) aimed to support the provision of long-term care. The evaluation did not find support for policies such as establishing equal pay or pay transparency legislation, or tax policies to incentivize female employment.

Increasing Financial Awareness and Access to Financial Products

As pension systems have become progressively less generous, the importance of individual pension awareness and financial education has increased. The World Bank has limited experience in this area. Pension awareness is needed to align the workers' future pension entitlements with their needs and preferences. Financial education and information on pension entitlements are essential to determining whether a pension level is adequate for the desired standard of living (Debets et al. 2018). IEG found only nine projects in the portfolio aimed at increasing access to and usage of a range of appropriate and affordable financial services, including savings, insurance, payments, and credit. Activities also included consumer protection and financial capability (or literacy).

Limited work has been done in terms of promoting or developing financial products to increase or integrate retirement savings. The NTA model stresses the importance of accumulation and decumulation of individual savings over the life cycle. This assumes the availability of financial products to withdraw housing assets, an important saving vehicle. A recent paper analyzing the potential of reverse mortgages in China shows that the interest among potential buyers in such a product reaches 90 percent if the product

is explained clearly (Hanewald et al. 2019). The World Bank has recently produced a paper on this issue, expressing a more skeptical position on reverse mortgages (Knaack, Miller, and Stewart 2020). The 2017 edition of the *Good Practices for Financial Consumer Protection* added a chapter on private pensions, discussing principles of consumer protection and good practices in this complex field (World Bank 2017b). The evaluation did not find any further work being done at this time.

Ensuring Accessibility

The World Bank is currently exploring the viability of a line of work on "accessibility" and "aging-friendly cities." In an age-friendly city, policies, services, and structures are designed to support and enable older people to age actively—that is, to live in security, enjoy good health, and continue to participate fully in society (WHO 2007). Supportive and enabling environments include places to rest; access to green spaces; well-designed and safe streets and pavements; and accessible pedestrian crossings, walkways, and cycling paths. The work on friendly cities is still very much at the interlocutory stage, and there are virtually no examples of tangible activities. The viability of this work, led by the Urban, Disaster Risk, Resilience, and Land Global Practice, is still being assessed. IEG identified one example in Colombia of a project aimed at encouraging healthier habits by promoting urban cycling. A background paper commissioned for this evaluation identified several entry points for the World Bank to consider (Orloff and Vergara 2021).

Changing Behaviors and Social Norms

The World Bank's diagnostic work often recognizes the importance of behavioral responses to counteract the potential negative impacts of population aging, yet behavior changes are hypothesized but not tested. One of the main takeaways of *Golden Aging* is that changes in behaviors are critical to determining the impacts of population aging on the economy and society (Bussolo, Koettl, and Sinnott 2015). Individuals, for example, may anticipate longer life expectancy and work longer and save more for retirement. Firms may adjust their production processes to an older workforce to minimize loss of productivity or even take advantage of skills that sharpen with age. *Live Long and Prosper* also stresses the importance of behavioral changes

for countries to adapt to population aging and recognizes that these may challenge social norms and citizens' expectations of each other and the state (World Bank 2016b). There are, for example, very few empirical studies on workers' retirement patterns and how they depend on individual, household, and social conditions.[5] There are no studies on savings behavior, its determinants, and how it responds to social security reforms. Risky behaviors for health, such as smoking and alcohol consumption, are frequently mentioned, but no World Bank report presents an analysis of how individuals respond to circumstances and incentives.[6] The few studies that include an analysis of micro data have important limitations, the most obvious being that they are based on cross-sectional and not panel data.

Aggregate data and scenario analysis are usually used to analyze changes in behavior. For example, changes in fertility rates may be analyzed using aggregate data pertaining to a single cohort of women (World Bank 2015m). However, realized fertility, labor force participation, retirement patterns, and so on, are the result of supply- and demand-side constraints; hence, understanding individual behavior is fundamental. Often both analytical reports and operations assume, for example, that a pension reform that increases the retirement age will automatically be complied with, without analyzing which other incentives individuals respond to when they decide to exit the labor market.

Attention to the implications of population aging for the social contract is also, surprisingly, a rare exception. The Uruguay SCD is such an exception, explicitly raising this issue (World Bank 2015l). The SCD reflects on the threats to Uruguay's progressive social contract arising from two channels. First, it recognizes that pursuing a growth model based on high skills, productivity, and innovation can be at odds with the high value society places on poverty reduction, equity, and decent labor conditions. Second, it recognizes that sustaining a social contract built on a strong social welfare system like the current one can become onerous in the context of population aging, especially as resources will need to be directed to the younger generations to counter the high prevalence of child poverty and the low social mobility due to youth exclusion and poor educational outcomes.

Although World Bank reports do not mention ageism, a few do raise the issue of age discrimination in employment. Some World Bank reports discuss the factors constraining firm-level demand for employing an aging workforce and the elements that may limit the employability of older workers (Flochel et al. 2014 for East Asia and Pacific). Some review the approach to the right not to be discriminated against (Dávalos et al. 2017 for Moldova) or identify potential policies to support the employment of older workers (World Bank 2015a for Latvia). The evaluation was not able to locate any activity (either project or technical advice) supporting governments in addressing age discrimination.

Thinking Cross-Sectorally

The GMR and the aging reports show that population aging has consequences for the whole economy and society, yet the World Bank does not regularly use a cross-sectoral angle to inform its sectoral work and to identify potential weaknesses and unintended impacts. Although the aging reports analyze the implications of population aging using a broad, cross-sectoral framework, sectoral work frequently ignores relevant cross-sectoral relationships, even when a more comprehensive background diagnostic could have identified gaps and potential contradictions or found evidenced synergies with other activities. For example, a rich literature exists on the economic determinants of the retirement decisions of men and women, including public and private pensions, wealth and savings, health and health insurance, and labor demand (for an overview, see Coile 2015). This literature is not only limited to economics, but spans multiple disciplines (for a systematic review, see Scharn et al. 2018). Yet most of the World Bank's analytical work on pensions has traditionally focused on the type and structure of the pension system and its parameters (such as the contribution rate for the worker or the employer), without contextualizing the analysis and framing its policy recommendations within a more comprehensive diagnostic that includes how the labor market operates and how individual decisions are made.

A fragmented approach that misses critical connections across issues can lead to misguided conclusions and advice. A good example is given by the World Bank's difficulties in providing viable solutions for long-term care that are compatible with promoting (good-quality) female employment. The

long-term care sector is frequently seen by World Bank teams as offering great opportunities for female employment, without regard for the occupational segregation, high level of informality, and low wages typical of that sector—and the risk of reiterating traditional gender roles (OECD 2020; UN Women 2017). Addressing aging challenges, increasing the quantity and quality of jobs for women, and providing care services to facilitate female employment are all gender priorities, which need to be reconciled. The two issues (long-term care provision and support to female employment), however, are often dealt with in isolation, both conceptually and operationally, as World Bank teams working on long-term care do not regularly include gender experts or labor specialists and the Gender Group in the World Bank has not included care (especially long-term care) among its priorities in the implementation of the gender strategy.[7]

Options for pension reform do not convincingly address the gender pension gap. This gap originates from gender wage gaps in the labor market, the double burden of work for women, women's longer life expectancy, and their living arrangements. Pension reforms that aim at making the system more financially sustainable—for example, by moving from a pay-as-you-go to a defined contribution system or by strengthening the privately funded voluntary pillar—tend to penalize women, who have more irregular working patterns, earn lower wages, and contribute less to the system (Chłon-Dominczak et al. 2019). Pension reforms typically increase women's retirement age (aligning it with men's retirement age), a measure aimed at lengthening the working and contributory lives of women and improving the financial sustainability of the system. However, this measure is generally insufficient to ensure both adequacy of the pension for women and equity. To explore options for reforms that work for women, it is important to understand how the labor market, the provision of care, the specific vulnerabilities of women (including the risk of widowhood, disability, and divorce and its legal consequences) and the pension system combined produce inequalities and potentially poverty in old age. This type of analysis, however, is rarely found as a background to pension reforms. The only example the evaluation was able to locate was a study produced to inform the debate about the Vietnam Labor Code revision of 2009, a study still very much centered on increasing the retirement age of women (World Bank 2009b).

The persistence of informality in a rapidly aging world requires making social protection systems more coherent with the functioning of the labor market. As highlighted by the *World Development Report 2019*, informality has remained high and stable in most developing countries, which has challenged the traditional pension systems designed for a formal labor force (World Bank 2019h). The World Bank's most recent Jobs and Social Protection white paper, *Protecting All* (Packard et al. 2019), proposes a new social contract based on social protection systems that are less dependent on a person's work situation and blur the distinction between contributory social insurance and noncontributory social assistance. It is too early to observe how this approach will influence World Bank advice to client countries.

World Bank pension work is increasingly called to focus on noncontributory pensions,[8] which requires concerted action by labor market, poverty, and social protection teams. A few SCDs, for example, recognize that pension reforms aimed at making the system fiscally sustainable, increasing pension adequacy, and providing incentives to longer working lives should go hand in hand with social assistance reforms to protect those who are not covered by pension insurance because of rapid aging and persistently high incidence of informality (for example, the Mongolia SCD; Vietnam SCD). Similarly, knowledge products such as Schwarz et al. (2014) present a comprehensive discussion on how to introduce noncontributory social pensions and use social assistance to pursue the goal of poverty alleviation in old age—striking a difficult balance among sustainability of the pension system, adequacy of pensions, and incentives to labor market participation.

Most of the World Bank work and advice on ways to increase efficiency in health spending provides another example of the need for cross-sectoral thinking. A common source of inefficiency in aging countries is the use of acute hospital beds in lieu of long-term care, so that much hospital infrastructure is being used to provide inappropriate and expensive care for older patients. As a result, World Bank teams promoted hospital reforms aimed at rationalizing (downsizing) the hospital network to increase the system's efficiency. But, other than the occasional mention of the intent of "reprofiling" the excess hospital capacity that will be made available, there is no explicit provision or plan to address the long-term needs of older people. IEG ob-

served this disconnect in the review of the operational and diagnostic work and in its fieldwork in Ukraine and, to a lesser extent, Romania. This and the previous examples show that although selectivity is an important criterion for the World Bank's operational engagement, it can be better informed by comprehensive diagnostic work that explores the relationships—and the potential synergies and trade-offs—among issues with the aim to avoid unintended negative consequences and maximize positive impacts.

There are encouraging examples of a more interconnected approach. The Human Development sector in the Europe and Central Asia Region, for instance, at the request of and with funding from the CMUs, is building a framework that explicitly describes the links among health care, social care, skills, and jobs. The East Asia and Pacific and the South Asia Regions joined efforts to prepare a proposal to develop a diagnostic tool to support World Bank dialogue on long-term care and standardize the diagnostics in this area to help countries prioritize interventions to improve long-term care systems. The proposal also includes the organization of a South-South regional workshop to facilitate the exchange of experiences among client governments. These are encouraging initiatives, but still very much with a Human Development focus. Other institutions are engaging in a similar exercise. IADB, for instance, originally looked at aging as a long-term care issue but later moved to integrate health, labor markets, macro and fiscal policy, pensions, and the "silver" economy (private sector).

The World Bank's analytical work on aging in Russia is a good example of an approach that is multisectoral and forward looking. The aging framework is not centered on the needs of older people, or on the fiscal burden of pensions, but rather on strengthening the size, health, and skill set of the labor force. The priorities to be addressed are about anticipating future challenges by reducing the NCD burden on the working-age population, providing adult workers with the education and training they need in a changing labor market, promoting better human resource policies to manage age in the workplace, and retaining women and older workers in the labor force.

The COVID-19 pandemic has drawn attention to the specific challenges faced by older people in the face of the pandemic, highlighting in particular the cross-sectoral nature of these challenges. COVID-19 has shown that not

only are older people especially at risk of contracting the virus but also the degree and type of vulnerability depends on multiple factors, including gender, health status, and socioeconomic conditions (box 4.1 and appendix G). Understanding how these vulnerabilities interact and differently affect older and younger people is essential to designing appropriate policy responses.

Box 4.1. COVID-19 and the Aging Population

Older people are disproportionately vulnerable to coronavirus (COVID-19). They are most at risk of contracting the COVID-19 and of severe illness and death. Preexisting chronic illnesses common among older adults, especially high blood pressure, obesity, and diabetes, increase COVID-19 risks. The presentation of COVID-19 symptoms may vary by age, with older patients exhibiting a different array of symptoms from the standard fever, dry cough, and shortness of breath. *Health systems must adapt and prepare for greater care needs with consideration of their population's age structure and chronic disease profile.*

The distancing and isolation measures imposed in response to the pandemic have unique impacts on older adults. Loneliness and other mental health issues are common among older people and may be exacerbated by confinement, disruption of regular routine, and separation from social support networks. Isolation and fear of infection may also make older people less likely to access medical care for other physical conditions. Food security and access to essential medications are of particular concern. Older people may face challenges obtaining accurate information about ways to protect themselves from COVID-19 and accessing relevant services. *Health and social support systems must anticipate these needs and respond.*

COVID-19 presents a unique array of challenges to those who provide care for older adults, especially in residential care facilities. Many care homes have become incubators for COVID-19 infection. Their residents may present heightened physical, psychological, and social care needs during the pandemic. Acquiring and maintaining adequate equipment, staffing, and infection control procedures for long-term care facilities is of paramount importance. *The World Bank is entering into the long-term care business and must be attentive to issues of service quality, stewardship, elder abuse, and the regulatory role of governments.*

(continued)

Box 4.1. COVID-19 and the Aging Population (cont.)

Older adults are particularly vulnerable to the economic impacts of the COVID-19 pandemic. Their retirement savings have fewer years to recover from financial shocks than those of younger counterparts. Older workers who lose their jobs may have more difficulty finding alternative employment or accessing emergency financial protection schemes. The pandemic's unprecedented stress on local and national economies may affect the sustainability of public pension plans. *It is important to protect all workers, with explicit attention to the disproportionate vulnerabilities of older people.*

The pandemic magnifies existing inequalities related to gender. Older women may be experiencing lower mortality rates directly from COVID-19, but they are more exposed along other dimensions. They are more likely than older men to live alone or in a care home. Caregiving is overwhelmingly done by women—and many caregivers are themselves older people—most often working in low-paid, informal, or nonpaid capacities. The pandemic has disproportionately affected female-dominated service sector industries, producing a gender imbalance in job loss. Overall, COVID-19 may stall or reverse hard-won progress on gender roles. The consequences may reverberate across women's entire lifetimes, into their older years. *It is important for the World Bank's work to be attentive to the gender dimension of distributional impacts in the context of aging.*

There are significant gaps in available data on aging adults' experiences during the pandemic and the multiple, intersectional impacts of the pandemic on aging populations. The impact of COVID-19 on older people's physical and psychological health, delivery of geriatric health care and social services, and survivors' long-term health is far from well understood. The pandemic highlights the importance of data for better preparedness. Data gaps complicate country responses and planning. *Data on the pandemic's social and economic effects and behavioral data on older populations' compliance and coping with physical distancing requirements should be disaggregated by age so that specific impacts and patterns related to older adults can be discovered and analyzed.*

Source: Independent Evaluation Group.

Constraints and Enabling Factors

This section reviews the challenges that the World Bank faces in supporting countries in a more timely, comprehensive, and coherent way. Some issues touched on in chapter 3 (such as client demand and the short-term horizon of governments) are relevant here too. Others reviewed here relate to internal coordination, use of resources, and knowledge management.

Coordination across Global Practices

There is no formal owner of the aging agenda, which results in poor coordination and collaboration across sectors. Population aging is a systemic issue that often requires sectoral but coordinated solutions that pertain to several Global Practices. Currently, the bulk of the work is localized in Human Development, but Equitable Growth, Finance, and Institutions also houses part of it; there is almost no participation by Sustainable Development. In the absence of a formally appointed or recognized leader within the institution, nobody is spearheading the agenda at the corporate level or systematically promoting internal collaboration.

Opportunities for collaboration are recognized as important, but few initiatives exist and often rely on external partnerships. An attempt to create a Community of Practice to increase internal coordination was not successful. Based on IEG's interviews, several staff in different sectors were interested in participating, but an agreement could not be reached about which group should have led the agenda and whether the focus should have been more macro (Macroeconomics, Trade, and Investment) or micro (Human Development). Limited or no incentives for collaboration and the absence of a recognized champion have so far prevented establishing the Community of Practice or other forms of institutional coordination.[9] The tobacco control work discussed earlier in this chapter is an example of good collaboration across Global Practices and Practice Groups. It involved Health, Nutrition, and Population and Equitable Growth, Finance, and Institutions and brought together expertise from public health, macroeconomics, tax policy, tax administration, and trade and competitiveness. In several instances, it also benefited from good collaboration with the IMF. The work was championed and spearheaded by a senior health staff member and was possible thanks

to dedicated funding from Bloomberg Philanthropies and the Bill & Melinda Gates Foundation. At the analytical level, global, country, and regional aging reports are the result of team collaboration across Global Practices and in some cases even with external partners (the IMF in the case of the GMR; the Economic Commission for Latin America and the Caribbean in the case of the Chile and Uruguay aging reports). In Belarus, the ongoing ASA on long-term care for older people is led by Health, Nutrition, and Population but integrates inputs from Jobs and Social Protection and from Macroeconomics, Trade, and Investment to produce recommendations that align with the Ministry of Social Welfare's agenda and Belarus's public expenditure priorities.

World Bank Resources for Aging Countries

The World Bank has a limited pool of experts working on aging-related issues and in aging countries. Based on interviews and the extensive desk reviews conducted for this evaluation, IEG found that the World Bank has a very limited pool of public health specialists and no gerontological expertise; very few staff have knowledge of long-term care or lifelong learning issues; and, although there is a reliable but small group of pension experts, no hires occurred over the past few years. Over time, the World Bank has lost experienced demographers, who have not been replaced. Although part of the work can be outsourced to consultants with specialized expertise, this solution cannot replace investing in building the core capacity of internal staff. IEG noticed—and interviewees pointed out—that the production of knowledge products is often driven by staffing (having the right person in the right place at the right time) rather than considerations regarding the country aging context, as the review of country reports suggests.

Issues arise from limited internal expertise. Relying on a limited group of internal staff with expertise on aging may be a problem because (i) expectations from the clients are high; (ii) more countries are going to face aging challenges in the future; and (iii) the complexity of the aging agenda requires strong cross-sectoral collaboration and coordination. Clients in aging countries expect the highest quality from World Bank technical assistance (especially when they pay for it at higher rates through RAS) and expect the advice received from World Bank staff to reflect the global reputation of the World Bank in ASA. World Bank staff need therefore to be up to date with the

global knowledge on the topic and, at the same time, have in-depth country knowledge to adapt the global knowledge to the specific context.

World Bank resources available to aging countries are not commensurate with the sophisticated requests and needs of this type of client. Almost all aging countries are upper-middle-income countries (and even high-income in some cases) for which (i) the World Bank has much fewer resources to generate global knowledge and deploy innovative solutions than it does for International Development Association countries; and (ii) World Bank financing is less competitive than it used to be, and RAS is expensive. As a result, stakeholders in countries complained that the World Bank is not investing enough in this area and that some of the issues countries are interested in are not innovative enough for the World Bank.[10] During field visits, this issue was raised by government officials, stakeholders in academia, and think tanks, who contrasted the current (insufficient, in their view) engagement of the World Bank with the leadership it used to have in pensions.

Knowledge Sharing and Knowledge Management

Identifying and locating knowledge products on aging for this evaluation was extremely challenging. IEG experienced firsthand the poor organization of the internal body of knowledge on aging as it undertook the task of gathering the main reports on this topic (see box 1.2 in chapter 1). There is no repository, tagging, or annotated reference list. An earlier attempt by the World Bank to conduct a stocktaking exercise for the Aging Community of Practice ran into similar difficulties, and an inventory of products was never validated or updated. The population and demographic code is either unreliable or not used.

Transmission of knowledge often happens regarding individual tasks and through informal (personal) channels. Specific tasks, products, and activities may benefit from exchange of information, often prompted by personal connections but not through more systematic and institutionalized channels (such as a Community of Practice or other more structured networks). Exchange of information is frequently confined to the specific Global Practice, and even so it is not guaranteed. There is no Global Solutions Group associated with aging, although some existing ones are relevant for this agenda

(for example, Data for Decision Making; Fiscal and Social Policies for Poverty Reduction and Shared Prosperity; Healthy Societies; Jobs, Population and Development; Skills).

Client countries and other external stakeholders are sometimes unaware of the World Bank's work on aging. IEG interviews with stakeholders in academia, think tanks, and other international organizations and with client counterparts during country visits suggest that, although counterparts appreciate the quality of the World Bank's analytical work on aging, they are frequently unaware of important work in this area. Experts in this area in other organizations have lamented the absence of regular communication from the World Bank regarding new releases of reports or important initiatives. Some lines of work—especially in consolidated areas such as pensions—are exceptions. PROST, the well-known pension reform simulator first released by the World Bank 20 years ago, is still in high demand and supports partnerships and policy dialogue. Another vehicle for country engagement is the annual Pension Core Course, designed for policy makers, regulators and public pension or social security fund managers globally.

A relevant body of knowledge on aging is generated through RAS but has limited disclosure and dissemination—a further limitation to knowledge sharing. Several examples identified by IEG suggest that knowledge generated through RAS is not shared among or internalized by World Bank staff. The exceptions are cases in which (i) knowledge has been shared through the formal quality review process, when reviewers are staff working on similar topics in other countries or regions (for example, the Guizhou project in China), or (ii) knowledge generated through RAS was integrated into broader analytical work (for example, pensions in Trinidad and Tobago). Frequently, IEG found duplications or important omissions instead of examples of existing knowledge being used to push the analysis further. In some cases, knowledge produced through RAS is confidential, but not always. The lack of any guidance regarding what to do with knowledge generated through RAS means that internal dissemination is up to the individual staff responsible for the RAS.

The misconception that aging is an issue relevant only to high-income countries further limits knowledge exchange. The general feeling is that, as aging

countries are middle- to high-income countries, there are fewer institutional incentives to promote knowledge sharing. More and more countries will be facing aging challenges, and South-South and North-South learning will become increasingly important. Investing in building global knowledge (which currently largely comes from more advanced economies); transmitting it to a larger number of client countries; and learning from pilots, experiments, and reforms implemented in client countries will be an increasingly critical task for this agenda. This issue was raised repeatedly during field visits by government officials, stakeholders in academia, and think tanks, who expect a stronger role of the World Bank in knowledge brokering in this area, especially given the quality of its analytical work.

[1] As discussed in the Approach Paper (World Bank 2019g), this evaluation used the country as the unit of analysis. An evaluation of World Bank support to pension reforms for 1984–2005 was completed in 2006 (World Bank 2006).

[2] This figure will likely need to be reassessed in light of the coronavirus (COVID-19 pandemic).

[3] The Anhui Aged Care System Demonstration Project (P154716, $118 million, approved in fiscal year 2018) supports the developing and managing of a diversified, three-tiered aged-care service delivery system for older people, targeting those with limited functional ability; and a Program-for-Results (P162349, $220 million, approved in fiscal year 2019) for Guizhou province aims to provide equitable access to a basic package of aged-care services and to strengthen the quality and efficiency of the aged-care system.

[4] Operation numbers: Chile (P159331), Estonia (P158968), Latvia (P149711), Romania (P147650), the Seychelles (P157794).

[5] An exception is World Bank (2015l), which presents a microeconometric analysis of individual employment and retirement behavior as a function of receiving a pension eligibility.

[6] The Latvia report presents an interesting microeconometric analysis of the relationship among a number of individual and household variables (including health status, depression, education, citizenship, ethnicity, employment of the partner, household income) and participation in employment after age 50 (World Bank 2015a). A Sri Lanka discussion paper includes a microanalysis of women's probability of ever giving birth and the socioeconomic and cultural factors influencing fertility (World Bank 2012a).

[7] The recently approved Rapid Social Response proposal for Elder Care and Female Employment in Asia—Addressing Aging Needs from a Gender Perspective (P173533) is emblematic in that it is built on the untested hypothesis that female employment in care occupations is a great opportunity for women.

[8] The Independent Evaluation Group (IEG) Pensions evaluation found that the World Bank did not always prioritize the need to expand safety nets to those outside the formal system nor fully analyze noncontributory options (World Bank 2006).

[9] Some interviewees indicated that a mailing list exists to exchange knowledge and information, but IEG did not find it to be active.

[10] In the words of a government official interviewed for this evaluation, "Isn't reforming the social protection system innovative enough? Even if this is our main priority now?"

5 | The Way Forward

This section outlines the main messages arising from the evaluation and puts forward two suggestions for the World Bank to consider to develop the aging agenda further. As this is a formative evaluation on a relatively new topic for the institution, no recommendations are presented.

The World Bank has made great progress in moving toward a more comprehensive approach for aging. The regional and country reports and the GMR have articulated an integrated approach to analyzing population aging as a cross-sectoral issue. This framework highlights that a complex issue like population aging has wide-ranging socioeconomic implications and calls for cross-sectoral solutions. The use of demographic analysis, tools like the NTA methodology, and data from multiple sources to explore alternative medium- and long-term scenarios have been powerful in identifying policy options. The number of regional and country reports is still very limited, but they provide a useful reference framework for additional World Bank analytical work on aging.

The body of aging-relevant analytical work in late- and postdividend countries has grown substantially over the past 10 years and has become more diverse. An increasing number of reports discuss how the labor market and productivity may be affected by population aging, the challenges of providing long-term care, and the potential consequences of population aging for growth and well-being.

The World Bank diagnostic work, however, is not well aligned to country needs and priorities and often does not explore the distributional implications of population aging. A country's stage of demographic transition is weakly correlated with the volume of diagnostic work on aging-related issues. The evaluation found that the oldest countries did not have the largest amount of analytical work on the consequences of population aging. Moreover, a country's need for diagnostic work on specific, very pressing issues (for example, especially low female participation rates or substantial outmigration) is also uncorrelated with the volume of this work and its qual-

ity. This seems to reflect data limitations, although analytical work can often be quite opportunistic and reflect factors such as staff availability in the Region to work on a certain topic for a certain country. Another limitation is that many reports do not discuss how different groups of the population are or may be differently affected by population aging. This was seen all too frequently, even in cases where the report would have benefited from deeper analysis of the spatial, socioeconomic, or gender aspects of aging. In some cases, this is quite puzzling; for example, the explicit inclusion in the gender strategy of aging as a second-generation issue does not yet appear to be reflected in more attention to gender gaps in analytical work.

A key issue with the World Bank analytical work is that it is not systematically used to inform the engagement with aging countries. There are some notable examples of how analytical work has informed the World Bank response to country demand for aging-related issues. The evaluation found several examples of influential aging reports and support for data generation and technical assistance that informed the policy discussion about aging in client countries. Most of these cases, though, are isolated. What is missing is the systematic, deliberate, and regular use of analytical work as an input to the SCD and the CPF. The probability that the SCD will integrate analysis from existing diagnostic reports depends on the topic; analytical work on pensions and, to a lesser extent, on the labor market and health is more likely to also feature in the SCD, but this is not the case for other topics.

The insufficient attention to aging in the SCDs and CPFs for aging countries suggests that the speed of demographic change and the potential of population aging to disrupt growth and prosperity are not widely recognized as urgent priorities. There are relatively few SCDs that provide an in-depth analysis of the drivers and impacts of aging on growth and prosperity through impacts on the labor force and productivity; changes in consumption patterns, saving or dissaving, and investments; and pressures on social protection, pension, health, and care systems. Population aging is not treated as a systemic issue in SCDs and CPFs but rather as mere context. There is no widespread perception that aging can be an appropriate lens through which to assess the implications for growth, inequalities, and well-being in countries that are aging (and often well advanced in the process). The evaluation findings point to two explanations: (i) the lack of an institutional

endorsement of the issue; and (ii) the client's difficulty in reaching a full awareness of the issue and expressing a clear demand to the World Bank.

Population aging is recognized as a critical issue affecting client countries by groups of World Bank staff, but it is not highlighted by the institution as a whole. Most interviewees lamented the lack of a unified vision and guidance. Interviewees expressed the hope that the World Bank could articulate a clearer and more coordinated position on how to firmly include population aging in the policy agenda of client countries and provide more systematic support. The insufficient integration of an aging perspective in the Human Capital Project, the future of work agenda, the gender strategy, and the inclusion agenda suggest that opportunities exist but have not been used.

Client countries often understand the inevitability and irreversibility of the aging challenge but have little incentive to adopt the medium- and long-term horizon that adequate policy solutions require. The electoral cycle is not conducive to pursuing the long-term policies that addressing (or even anticipating) the challenges arising from population aging demand. At the same time, the World Bank is also called to help the client plan for the medium- and long-term horizon, requiring a strong focus on systemic solutions, even with short-term fiscal concerns. This relates to two further challenges for internal World Bank attention identified by the evaluation: the need to focus on preparedness and the need to think cross-sectorally.

The World Bank has not paid enough attention to preparedness. Supporting a healthier and more productive population calls for investing in a healthy and productive population. The World Bank has here a mixed record: it has worked with countries to better respond to NCDs but has not invested in promoting healthy habits to reduce risk factors for them. Similarly, it has not worked toward promoting more productive lives and permanence in employment in old age through encouraging lifelong learning, fighting age discrimination, and removing barriers to low female labor force participation. Attention to long-term care has been the most important development in World Bank work over the past decade, although the number of activities is limited to a couple of operations in China and technical assistance in Chile, Estonia, Latvia, Romania, and the Seychelles. Other topics have yet to be properly articulated and linked to aging. There is clear interest within the

World Bank in expanding topics such as lifelong learning and age-friendly cities, but there is virtually no evidence of a discussion of financial inclusion in relation to aging and the silver economy.

The World Bank needs to improve thinking cross-sectorally. Although the analytical framework proposed by country and regional reports is a systemic, multisector framework, quite often activities have been developed without carefully assessing the links across sectors and themes. This may lead to overlooking not only potential unintended impacts but also potential synergies across issues and policy solutions. The evaluation shows several examples, including missing connections between long-term care provision and female labor force participation (including gender gaps in wages and working conditions and risks of reinforcing gender norms); weak or absent links between the discussion or proposal of pension reforms and the realities of the labor market and retirement behavior; and insufficient consideration on how to integrate fiscal sustainability of pensions with concerns for coverage and adequacy. These disconnects happen frequently not only at the operational level but also in analytical work.

To address some of these issues, the evaluation has two suggestions.

Suggestions

Suggestion 1: **Better formulate the World Bank position with respect to population aging.** This should facilitate dialogue with clients and potential partners and improve the World Bank's capacity to provide support to aging countries. Population aging is not a visible issue at the institutional level. This means that the framework that several aging reports have powerfully outlined has not generated a common understanding of how the institution thinks about population aging. Since population aging is a cross-sectoral issue, the skills and viewpoints to develop a richer and more mature perspective need to come from across the institution. A better articulation of the World Bank's position on population aging can therefore support a more powerful use of internal expertise, more regular coordination across teams, and more systematic use of knowledge. Moreover, a more cohesive position on aging could help better frame the issue with ministries of finance in client countries and help them better articulate their policy priorities and demand

for World Bank support. Concrete steps that the World Bank can consider to achieve this goal are the following:

- Identify a champion who can coordinate the efforts related to this agenda. Currently, the bulk of the work is in Human Development, but other groups working on aging are found in other Global Practices (Macroeconomics, Trade, and Investment; Social Development; Poverty; and the gender Global Theme). Moreover, education, financial, and private sector groups could expand into aging. A recognized champion can facilitate cooperation across teams and promote the inclusion of aging in relevant institutional agendas: the Human Capital Project, future of work, gender strategy, and inclusion.
- Produce a high-level report or position paper on population aging, outlining the World Bank framework and priorities for engagement. The 2015/2016 GMR has been very influential in inspiring World Bank analytical work, but its focus was on demographic challenges at large, including high fertility, not just aging (World Bank and IMF 2016). Several other institutions (OECD, IADB, WHO, and the EU) have issued high-level reports signaling their perspective on aging to countries and potential partners. A World Development Report on population aging, for instance, could provide a framework for the World Bank.

Suggestion 2: **Improve the systematic production and use of diagnostic work to provide more regular analysis of the drivers and consequences of population aging to inform engagement with aging countries.** The SCD and CPF products and process are an excellent vehicle through which to focus on aging issues, align them with the country aging context, and identify policy solutions. The World Bank diagnostic work, however, does not systematically assess the distributional implications of population aging or explore relevant policy areas in all aging countries. Moreover, when available, relevant World Bank diagnostic work is not adequately reflected in the SCD and is therefore less effective in informing engagement priorities. Concrete steps that can be considered to achieve this goal are the following:

- Make the existing wealth of analytical work more easily accessible. In particular, improving access to relevant analysis developed for RAS should be prioritized. The evaluation has shown that this knowledge is highly valued and appreciated by clients but frequently unknown beyond the responsible team.

» Invest in generating high-quality analytical work and in the production of and access to aging-relevant data. The World Bank can build on its comparative advantage in generating knowledge and help client countries evaluate policies and programs to respond to population aging. The evaluation has stressed the need to identify and fill key data gaps to better understand distributional issues, explore overlooked topics, and more systematically inform diagnostics, planning, and policy discussions.

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APPENDIXES

Independent Evaluation Group

World Bank Support to Aging Countries

Appendix A. Methodological Approach

Evaluation Purpose and Questions

The overarching objective of the evaluation was to assess how well the World Bank supports client countries in addressing and anticipating their aging population challenges. This objective was embedded into two main sub-questions, each covering three underlying questions (box A.1 and table A.1), which guided the methodological approach and the framing of the evaluation findings.

Box A.1. Evaluation Questions

How well is the World Bank supporting client countries in addressing and anticipating their aging challenges?

1. How well does the World Bank diagnose aging-related challenges in client countries?
   a. To what extent are World Bank diagnostics aligned to country needs and priorities?
   b. To what extent are World Bank diagnostics informed by the current evidence on the challenges and opportunities of aging countries?
   c. To what extent are World Bank diagnostics used to inform its strategy and policy dialogue with the country?
2. How comprehensive, timely, and coherent is the World Bank's operationalizing of its support to aging countries?
   a. How comprehensive and timely are the solutions proposed by the World Bank?
   b. How internally coherent are the solutions proposed by the World Bank with respect to the instruments mobilized and across Global Practices?
   c. How externally coherent are the solutions proposed by the World Bank with respect to what other actors and partners are doing on the topic?

Source: Independent Evaluation Group.

Methodology

The evaluators used the country as the entry point for analysis, focusing on those client countries where aging is an issue or likely to become an issue over the next two decades. The evaluators selected as a primary focus all the client countries that the Global Monitoring Report 2015/2016 identified as late- or postdividend countries where the World Bank has an active portfolio of activities (World Bank and IMF 2016). These include 38 late-dividend countries and 9 postdividend countries, of which 22 are in Europe and Central Asia, 13 are in Latin America and the Caribbean, 6 are in East Asia and Pacific, 3 are in the Middle East and North Africa, 2 are in Africa, and 1 is in South Asia.

In addition to these 47 countries, the evaluators included 12 early-dividend countries where the aging process is accelerating. These countries are the next in line to become late-dividend countries based on the Global Monitoring Report data (see appendix C for more details on the country selection). This group of 59 countries is the *reference population* for the evaluation.[1] Including countries where the aging process is not yet pressing was important to assess how well timed World Bank support is to help anticipate and preempt aging issues and transfer lessons from countries that have already aged. Where appropriate, the evaluators considered a regional or subnational focus (when issues or policies were better understood at this level—as was the case for migration or cultural and gender norms, for example—and when the World Bank's support targeted specific regions within a country, for example the long-term care projects in the Guizhou and Anhui provinces of China).

The evaluators used a multilevel design to assess World Bank support to client countries in addressing and anticipating their aging challenges. Since the World Bank tailors its support at the country level, the country case analysis was the bedrock of the evaluation. Data collection and analysis were conducted at two levels: (i) for the whole reference population of 59 countries and (ii) for selected countries.

For the second level, the evaluators selected from the reference population a group of six countries in which to do field-based cases studies and an additional nine countries on which to do desk-based case studies to maximize

variation along two dimensions: (i) the nature and magnitude of the World Bank's portfolio (to represent countries with diverse types of World Bank engagement); and (ii) specific macrocharacteristics measuring how advanced a country is in the aging process and the main reasons for aging, such as extended longevity, fertility decline, and outmigration (see appendix C for details on country selection, for both field-based and desk-based analysis).

The evaluators identified the multiple entry points that the World Bank uses to support aging countries, based on the analytical framework (box A.2). The evaluators did not exclude any sector from the analysis, although some sectors were looked at in more detail (specifically the human development sectors; see appendix F for more details on the portfolio review).

Box A.2. Multiple World Bank Entry Points to Support Client Countries: World Bank Support Mechanisms

- Analytical and advisory work
- Financial support
- Policy dialogue; identification of priorities
- Knowledge brokering; data generation, access, and sharing
- Support to institutional reforms and capacity strengthening
- Partnerships

Source: Independent Evaluation Group.

The evaluators did not assess the work of the International Finance Corporation. The evaluators acknowledge that the private sector may be providing services to older people and that age discrimination in the workplace is addressed in International Finance Corporation performance standards; however, the evaluators limited their focus to the work of the World Bank to keep the scope manageable. But they highlighted situations where diagnostics or strategic programming pointed to opportunities for the private sector.

Evaluation Components

The evaluators used a mixed-methods approach that relied on both quantitative and qualitative methods. It rested on the following building blocks: structured literature reviews (SLRs); a structured document review (SDR); data analysis; a portfolio review; semistructured key informant interviews; and a survey of Country Management Units (CMUs). Specific methods are described in the following sections. Table A.1 highlights which method was used to answer which question.

Literature Reviews

Three SLRs were conducted to identify the main challenges and policy areas associated with aging related to (i) labor markets and pensions; (ii) health and long-term care; and (iii) accessibility and "friendly cities" (or "smart cities"). The SLRs focused on identifying policies and interventions aimed at attenuating the potential negative socioeconomic impacts of aging or leveraging its opportunities, paying special attention to examples from developing countries. Clear search criteria and inclusion and exclusion rules based on relevance and quality parameters were followed. The team synthesized the evidence from the SLRs and used it to refine the conceptual framework (see appendix B for details), which represents a benchmark to position the World Bank's approach and identify the possible entry points for World Bank support (question 1b). Literature reviews were also used to assess the completeness of the set of keywords used for portfolio identification and to identify and validate the categories included in the templates used for portfolio reviews (of analytical products, Systematic Country Diagnostics, and lending).

Document Review

An SDR of the World Bank's work on aging in relevant Regions and countries was conducted to take stock of World Bank support in terms of (i) knowledge products; (ii) lending; (iii) technical assistance and reimbursable advisory services; (vi) strategic work (including Systematic Country Diagnostics and Country Policy Frameworks) for the reference population and at the country level; and (v) strategic work related to ongoing partnerships. For support to

areas (ii) to (v), the SDR analysis was descriptive at the level of the reference population and more granular at the level of the countries selected for the case-based analysis. The SDR was used as an input to respond to all evaluation questions.

(Quantitative) data analysis was conducted to profile different groups of countries and country contexts. A data set of aggregate variables was compiled from different data sources (United Nations Development Programme, International Labour Organization, Global Health Data Exchange catalog, HelpAge, and so on) for all countries in the reference population. Based on these data, countries were categorized by their aging stage and the main reasons for aging. This exercise supported the selection of country cases and complemented the analysis of client needs (question 1a). Relevant (aggregate) data were identified through the SLRs and the SDR.

A portfolio review analysis identified and analyzed aging-relevant lending operations. For the reference population, the portfolio review analysis allowed for an overall mapping and description of an aging-relevant portfolio (based on the refined conceptual framework), highlighting countries and thematic areas with heavy, light, and no engagement, and how this varied over time (to respond to question 2a). A more detailed portfolio review analysis was conducted at the country case level to assess the internal coherence of World Bank policy options proposed by the different Global Practices; that is, whether the World Bank's country-level diagnostics, country strategies, operations, and advisory work logically derive from each other (to respond to question 2b).

Interviews and Survey

Semistructured key informant interviews were used strategically throughout the evaluation to guide the literature review, support detailed portfolio reviews and analysis, and complement findings from other sources. Key informant interviews helped identify relevant operations and advisory work that might have escaped a more traditional scanning of the portfolio. At the country level, these interviews helped answer questions associated with the identification of country needs (question 1a), the use of World Bank diagnostics to inform its strategy and policy dialogue (question 1c), and the World

Bank's capacity to propose comprehensive, timely, and coherent solutions in response to country needs (questions 2a and 2b). They were also used to assess the World Bank's positioning on this issue with respect to other actors (question 2c). Overall, about 80 general interviews were conducted. For each field-based country case, the team interviewed an average of 60 local stakeholders.

Although the exact questions asked varied depending on the role, affiliation, and knowledge of the interviewee, the following questions were normally asked to World Bank staff and managers:

1. Is there an aging agenda at the World Bank? That is, is there a shared understanding within our institution of the implications (if any) of demographic change for aging clients? Can you elaborate why and why not?
2. What does *aging* mean for your Global Practice or Region?
3. When you think about the World Bank's portfolio (lending) in your area of expertise, what do you see us doing differently in aging countries? Why? What about nonlending, diagnostic, and advice activities?
4. What are the specific approaches, tools, and instruments that stand out? Do you have good (successful) and not-so-good examples?
5. Do you see the World Bank work in traditional "product lines"—pensions, health systems, noncommunicable diseases, and so on—being conducted differently in aging countries? How?
6. The amount and content of work on aging-related issues varies a lot across countries; in your view, what prompts a team to conduct analytical work in one country as opposed to another? What about the topic?
7. What are the challenges that the World Bank faces in developing and strengthening its work in aging countries (if appropriate, prompt for presence or absence of demographers and specific expertise; difficulty of seeing the interrelations across themes or sectors; difficulty of working across departments; difficulty of transforming analytics into operations; difficulty of countries in understanding the importance or urgency of the issue; aging countries are mostly upper-middle-income countries—with limited engagement and resources).

External stakeholders interviewed in relation to the general evaluation questions (as opposed to specific field-based country cases) were experts of other financial institutions (such as the Inter-American Development Bank and the Asian Development Bank), the European Commission, the Organisation for Economic Co-operation and Development, and the World Health Organization. The questions were very much dependent on the specific institution or type of stakeholder being interviewed. In general, the first part of the interview was about the strategic approach and type of support provided to aging countries by the institution being approached, and the second part of the interview was about their understanding and opinion of the work of the World Bank, including the type of approach, comparative advantage, added value, examples of collaboration, and reasons for noncollaboration.

CMU surveys were used to assess client needs and the demand for World Bank support (question 1a). CMU surveys were also used to confirm the selection of all relevant World Bank support in each country and to identify potential missing elements. Moreover, surveys were used (alongside key informant interviews and other available administrative and portfolio data) to assess the World Bank's capacity to propose comprehensive, timely, and coherent solutions to client needs (questions 2a and 2b).

The CMU survey was administered via email to the country director and solicited both a response via email (to confirm the identification of the advisory services and analytics and lending portfolio in the CMU and to provide good examples of internal coordination across Global Practices to respond to the client's aging challenges) and participation in a survey conducted online through SurveyMonkey. The questions included in the SurveyMonkey questionnaire were the following:

1. In the past five years, did your CMU engage in discussions with the client regarding potential World Bank support to anticipate or address aging-related challenges? Please elaborate on which type of discussion or activities and specify if the issue was brought up by the client or by the World Bank (note we want to capture interest, potential demand—not only formal requests—as well as the World Bank's offers of support).

2. If there were discussions, what happened after? Would you say that the operational and analytical program agreed that the client was able to address them? Please specify how.

3. If there were no discussions or the issue was quickly dropped, why do you think this was the case? (not relevant to country priorities, not an area where the World Bank has a comparative advantage, and so on).

4. In general, would you say that the World Bank has a comparative advantage over other institutions and development partners in helping countries address or anticipate aging challenges? How?

The response rate to the CMU survey was low (country managers and country directors for 13 client countries responded out of 51 contacted); the coronavirus pandemic started before the deadline to answer the survey, which likely influenced the response rate.

Design Limitations

The combination of methods and the multilevel design allowed robust lessons to be derived, yet limitations exist due to the need to restrict the evaluation scope and shortcomings in the availability and quality of existing data and documentation. Case studies allow for a deeper analysis of World Bank support, yet they may not provide the full picture of the World Bank's work in this area, and generalizations are only possible with caution. Case selection relies on external data, which for a few variables and some countries were not complete, and on World Bank documentation, which was in some cases not available or consistent. Excluding the private sector portfolio from the analysis made the scope more manageable but removed a potentially relevant area when the evaluators recognize the importance of retaining all sectors, since solutions to aging challenges are systemic. To address the absence of a predefined aging-relevant World Bank portfolio, the evaluation used an identification strategy reliant on keywords and manual scanning that, although updated several times and validated by the SDR, SLRs, interviews, and CMU surveys, may not have reached the desired level of accuracy, considering the very broad set of sectors involved. Hence, inclusion and exclusion errors may be present. In in some cases, not enough time may

have lapsed to assess the implications of some recent initiatives, the use of knowledge products, or the response to the World Bank's engagement with governments or partners.

Table A.1. Evaluation Main Questions and Subquestions

Key Questions	Information Required and Sources	Data Collection and Analysis Methods
1. How well does the World Bank diagnose aging-related challenges in client countries?		
1a. To what extent are World Bank diagnostics aligned to country needs and priorities?	For the reference population: Information on the nature and scope of the World Bank's analytical work. Sources include country and regional diagnostic and sector work (for example, regional and country reports on aging, poverty assessments, public expenditure reviews, Country Economic Memorandums, Jobs Diagnostics, and SCDs). For the reference population and more in depth for selected countries: Information on client needs, priorities, and demand with respect to the country's aging challenges. Sources include government strategies and national development plans; macro, fiscal, demographic, and socioeconomic databases; and, at the country level, client surveys and country-level interviews.	Structured document review of ASA work; data analysis; structured literature reviews; semistructured interviews; survey to CMUs.
1b. To what extent are World Bank diagnostics informed by the current evidence on the challenges and opportunities of aging countries?	For the reference population: Information on policies recommended for aging countries in the World Bank's analytical work; broader literature on aging.	Structured literature reviews; structured document review of ASA work; CMU survey.

(continued)

Key Questions	Information Required and Sources	Data Collection and Analysis Methods
1c. To what extent are World Bank diagnostics used to inform its strategy and policy dialogue with the country?	For the reference population and more in depth for selected countries: Information on the nature and scope of the World Bank's analytical and strategic work. Sources include country and regional diagnostic and sector work (for example, regional and country reports on aging, poverty assessments, public expenditure reviews, Country Economic Memorandums, Job Diagnostic, and SCDs), review of country strategies, and (at the country level) key informant interviews.	Structured document review (ASA and SCD or CPF review); semistructured interviews.
2. How comprehensive, timely, and coherent is the World Bank's operationalizing of its support to aging countries?		
2a. How comprehensive and timely are the solutions proposed by the World Bank?	For the reference population and more in depth for selected countries: Information on lending portfolio and assistance provided to countries in designing policy reforms or programs (including technical assistance and reimbursable advisory services); identification of recommended policy priorities. Sources include detailed review of the World Bank's strategic and operational work and client perception.	Portfolio review; structured document review; structured literature reviews; semistructured interviews; CMU survey.
2b. How internally coherent are the solutions proposed by the World Bank with respect to the instruments mobilized and across Global Practices?	For selected countries: Information on analytical work produced or supported by the World Bank; identification of recommended policy priorities; information on lending portfolio and assistance provided to countries in designing policy reforms or programs (including technical assistance and reimbursable advisory services). Sources include detailed review of the World Bank's analytical, strategic, and operational work and client perception. For the reference population and more in depth for selected countries: Information related to incentives, internal behaviors, tools, learning, and resources (expertise, capacity, budgets); internal and external perception of existing capacity and resources.	Structured document review; portfolio review; semistructured interviews; CMU survey.

(continued)

Key Questions	Information Required and Sources	Data Collection and Analysis Methods
2c. How externally coherent are the solutions proposed by the World Bank with respect to what other actors and partners are doing on the topic?	For selected countries: Information regarding existing partnerships. Sources include formal and informal channels for collaboration and knowledge exchange; and internal and external repositories of knowledge, forums, and events.	Semistructured interviews; structured document review; CMU survey.

Source: Independent Evaluation Group.

Note: ASA = advisory services and analytics; CMU = Country Management Unit; CPF = Country Partnership Framework; SCD = Systematic Country Diagnostic.

Reference

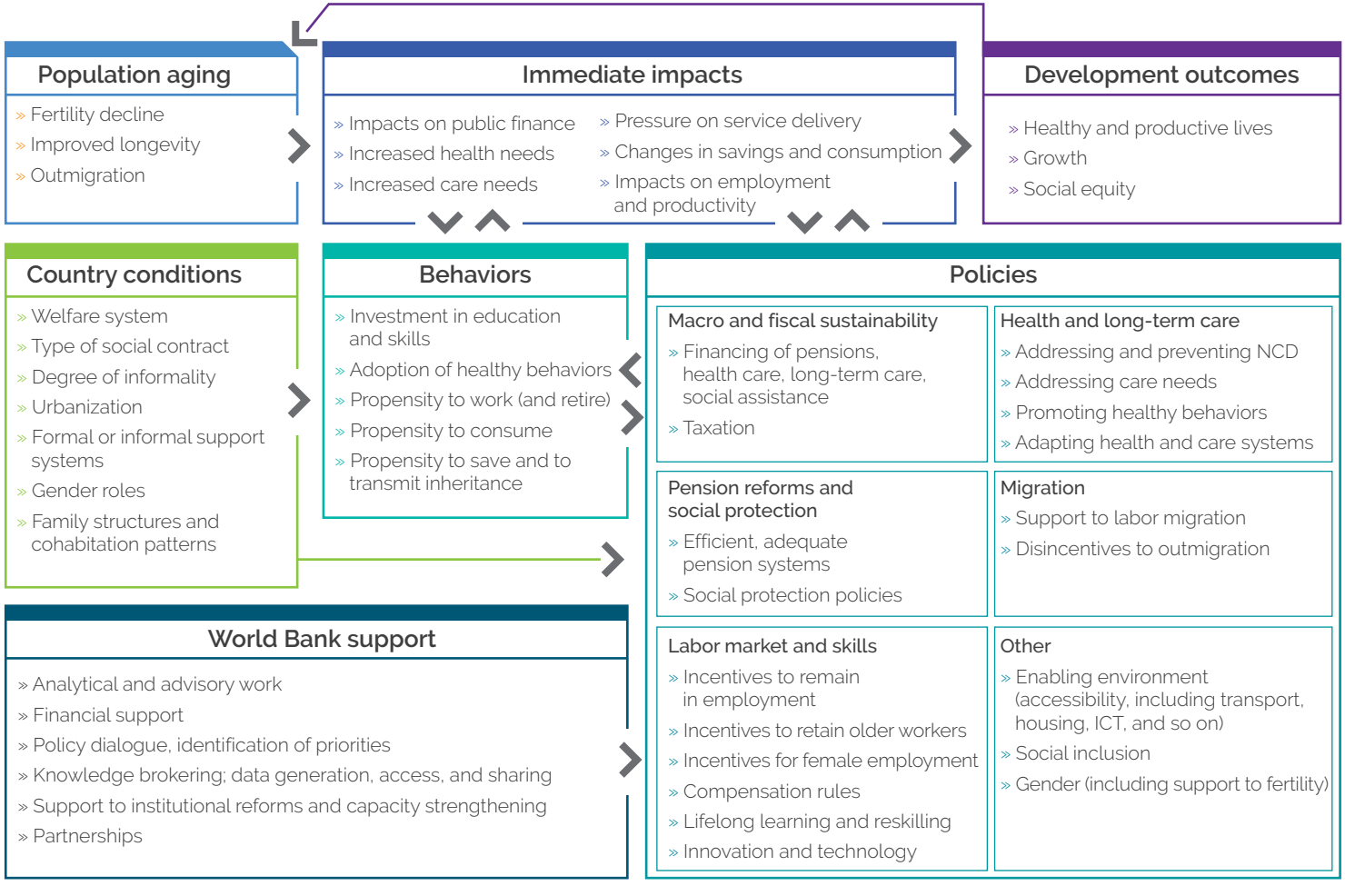
World Bank and IMF (International Monetary Fund). 2016. *Global Monitoring Report 2015/2016: Development Goals in an Era of Demographic Change*. Washington, DC: World Bank.

[1] The Global Monitoring Report uses aggregated data on fertility and working-age population to rank countries and classify them into four phases of the demographic dividend.

Appendix B. Conceptual Framework

The conceptual framework was refined based on the findings of three structured literature reviews (figure B.1; see appendix A for details on evaluation components). The framework was validated during the evaluation process through interviews with key stakeholders within and outside the World Bank Group. The goal of the conceptual framework was (i) at the *analytical level*, to describe the channels (as emerging from the literature) through which population aging can affect a country's development outcomes, define the sectors potentially involved, identify the World Bank's entry points, and guide the interpretation of the evaluation's findings; and (ii) at the *methodological level*, to delimit the space of topics and potential interventions that can be mapped to aging to identify keywords for searching World Bank databases to compile the relevant portfolios of World Bank activities and support the preparation of templates for the screening of knowledge products, Systematic Country Diagnostics, Country Policy Frameworks, and lending.

Figure B.1. Conceptual Framework



Source: Independent Evaluation Group.

Note: ICT = information communication technology; NCD = noncommunicable disease.

Population aging is the result of falling fertility rates, improved longevity, and outmigration (figure B.1, light blue box). This has implications for gross domestic product (GDP) growth, health, and overall well-being and economic and social equity through multiple channels: a potential reduction in employment and labor productivity, changes in savings and consumption patterns, pressures on the health system and service delivery, and fiscal pressures (figure B.1, purple box and light blue box).

Population aging can have important implications for individual well-being. Longevity has been accompanied by better health, so that as people are living longer they are also healthier at older ages (Sanderson and Scherbov 2005, 2007, 2010). If longer lives are also healthier lives, individuals can work longer and care for themselves. This, however, varies by country, with recent evidence indicating that in less developed countries, the gap between life expectancy and healthy life expectancy is larger (Lancet 2017). Moreover, though older people are not necessarily poorer than other age groups, there is high variability across countries (Evans and Palacios 2015). In some cases, aging may be associated with illness, disability, social isolation, inability to be employed, and uncertainty about income support sources. Vulnerabilities increase dependency on the coverage of the pension and health systems; the pervasiveness of informality; the magnitude of rural-urban migration; and preferences and attitudes toward coresidence, intergenerational support, and female labor force participation. In China, for instance, despite impressive economic growth over the past three decades, the rural older population, accounting for about 60 percent of all older people, remained poorer and more vulnerable than the urban older population because of the large rural-urban disparities, low savings, lack of pension, and heavy reliance on family support (Cai et al. 2012).

Population aging can put downward pressures on growth, because some of the fast-aging countries are key contributors to global GDP, such as Brazil, China, and the Russian Federation.[1] Some simulations indicate that, everything else being equal, the worldwide annual average GDP growth rate over the next 40 years could be 1.2 percentage points lower than it would otherwise be, because of the slowdown in population growth and the increase in old-age dependency ratios (Onder and Pestieau 2014).[2] Ultimately, the effect of population aging on GDP growth depends on how population aging affects

the size and productivity of the labor force, capital intensity, and returns to capital, consumption, and asset accumulation and on how public policy reacts and behaviors adjust (Lee 2016; Lee and Mason 2017).[3]

Population aging can also affect intergenerational inequalities. An increasing share of older people puts pressure on governments to reallocate resources in favor of the old generation—for health, social protection, long-term care, and pension benefits—and to raise taxes to fund these programs. Reforms that revisit entitlements and make the social protection system less generous for younger cohorts (to address the fiscal burden of aging) affect the implicit social contract across generations and may be a source of social tensions.[4] Ultimately, intergenerational inequalities depend on how support for older people is provided for in a given society, including the extent of social programs, the prevalent familial systems and patterns of coresidence, and the allocation of savings and consumption across the life cycle (see Lee 2016; Lee and Mason 2011).

Population aging has important implications for gender equality. Older women face a higher risk of poverty than men because of many factors. Since women have a longer life expectancy and typically marry older men, they are more likely to outlive their husbands. Women have worse health than men in later life, despite a greater life expectancy, so they are more likely to need care exactly when they are more likely to be widowed. Moreover, because women are less likely to be in formal employment, they are less likely to receive pension benefits, and if they do, they tend to receive lower pensions because of the wage gap during their working years. Promoting female employment is therefore essential to closing gender gaps in both working age and old age populations (World Bank 2012). It is also a potential solution to support employment in aging societies. Yet in aging societies there is more demand for care work, which is typically done by women, which (when unpaid) further limits women's labor market participation or adds to women's double burden of being responsible for both paid and domestic labor (World Bank 2015). Adequate public policies are needed to provide long-term care and support paid employment for women, thus addressing the specific vulnerabilities that an aging society entails for women (OECD 2017).

The cumulative impacts of aging can be positive or negative depending on how behaviors change and policies adjust. First, the increase in the old-age dependency ratio could be somewhat counterbalanced, especially in developing countries and in the early stage of the demographic transition, by a reduction in youth dependency ratios. More importantly, individual behaviors tend to adjust to the new reality of a longer life expectancy, especially if increased longevity has been achieved by adding healthy years (figure B.1, gray box). For instance, as the life cycle lengthens, individuals may increase their participation in employment and retire later. They can save more or invest more in education as returns to education increase, with positive repercussions on productivity.

Policy interventions will need to respond to the structural change induced by population aging to stimulate positive behavioral responses and prevent potentially adverse impacts on socioeconomic well-being (figure B.1, green box). How deep and widespread these interventions should be depends on country conditions, such as the degree of formalization, structure of support systems, and societal expectations regarding care provision and gender roles (figure B.1, orange box). It also depends on the stage of the demographic transition (including how fast the society is moving from "aging" to "aged").

Potential policy responses identified by the *Global Monitoring Report 2015/2016* and other regional reports are classified in the conceptual framework under five main headings and a miscellaneous category (figure B.1, green box; World Bank and IMF 2016). At the macro level, fiscal reforms and adjustments in social protection systems are necessary to increase efficiency, possibly without increasing taxes. Pension reforms should maintain effective social safety nets while avoiding an increase in labor costs and downward pressures on competitiveness and job creation. They should also aim to provide coverage for the large informal sector characterizing most client countries. *Health care systems* need to focus on preventing and managing noncommunicable diseases and supporting behaviors to promote healthy aging. Systems and insurance for long-term care need to be planned for. *Labor market* policies and programs need to support employment (including female employment) and productivity and provide incentives to workers and employers for later retirement. Incentives for innovation and technology to support productivity in a context of declining employment should be con-

sidered. *Proimmigration* policies can counteract the decrease in the working population. Family policies can aim at increasing or supporting fertility while simultaneously supporting women's employment. And improving accessibility (a broad category including access to information, accessible buildings, urban planning, affordable housing and services, and public transport) and ensuring social inclusion of the older population need to be addressed. Gender considerations should be pervasive when designing and implementing any policy and program related to aging.

The World Bank has been using multiple entry points to support client countries to undertake the various policies and programs referred to in figure B.1 (dark blue box). First, it has contributed to the generation of knowledge through analytical and advisory work. The regional- and country-level reports focusing specifically on aging epitomize this category; poverty assessments, public expenditure reviews, social assessments, jobs diagnostics, Systematic Country Diagnostics, and ad hoc studies also play an important knowledge generation function. Second, the World Bank has provided financing and technical assistance to clients—through its different lending instruments—to undertake reforms and implement programs and policies. Third, the World Bank has assisted countries in defining priorities for policy and program interventions, as reflected in policy dialogue and Country Partnership Frameworks. Fourth, the World Bank has supported countries through its convening power in knowledge brokering through data generation, access, and sharing. Fifth, the World Bank has also supported countries in undertaking institutional reforms and strengthening their capacity. Finally, the World Bank has promoted strategic partnerships to advance specific policy issues with other institutions engaged in the aging agenda, such as the World Health Organization, the United Nations Population Fund, the Organisation for Economic Co-operation and Development, the European Union, and various bilateral donors.

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[1] In China and Brazil, the old-age dependency ratio is projected to increase from 13 percent in 2015 to nearly 40 percent and 33.8 percent, respectively, in 2050 (United Nations 2017).

[2] These calculations are based on the decomposition of the gross domestic product (GDP) historical growth rates in three components: labor productivity, population growth, and growth in labor force participation rate. To calculate a counterfactual GDP reflecting demographic changes, the first component is held constant, while the second and third components reflect future projections in demographic changes instead of the current figures. The per capita GDP growth rate would be less (0.4 percent per year) because of the fall in total population. (Although population aging likely leads to a decline in the growth rate of GDP, it may not lead to a decline in the growth rate of GDP per capita because of a decrease in total population.) Behavioral adjustments (such as postponing retirement) can further attenuate the estimated impacts.

[3] The impact of population aging on GDP growth can occur through several channels. First, it can be determined by a higher dependency ratio (in principle, fewer workers in a fixed population produce less output, which implies a decrease of per capita GDP with a higher dependency ratio). Another channel is through reduction in labor productivity, if older cohorts are less productive than younger cohorts. A third one can be via a reduction in aggregate savings (as older people dissave after retirement), although with a declining population, savings can decline to maintain the same capital-labor ratio (plus individuals may increase their savings propensity in consideration of a longer life expectancy). All these effects are compounded by increased spending for social programs. Empirically, the macroeconomic effect on aging is not clear cut. Aiyar, Ebeke, and Shao (2016) find that workforce aging in Europe reduced growth in labor productivity via its negative effect on total factor productivity growth (the estimated impact being a 0.2 percentage point reduction in total factor productivity every year over the next two decades). A negative relationship between aging of the working population and total factor productivity is also found for Japan (Liu and Westelius 2016). For the United States, Maestas, Mullen and Powell (2016) estimated that 10 percent growth in the percentage of the population aged 60 and older decreased GDP growth per capita by 5.5 percent; two-thirds of this variation was due to a reduction in labor productivity and one-third to slowing labor force growth. A review of the literature of macroeconomic effects of aging in the United States established, however, that productivity effects are likely to be negligible but called for further empirical investigation (National Research Council 2012). Indeed, other researchers did not find a negative impact of population aging on growth. Using a sample of 169 countries, Acemoglu and Restrepo (2017) ran regressions of the change in (log) GDP per capita from 1990 to 2015 on the change in the ratio of the population above 50 years old to those between the ages of 20 and 49. They found that countries that are undergoing rapid population aging

experienced more rapid technological change, which may have counterbalanced the negative effect of population aging on economic growth (they recognized, however, that this is not a causal effect).

[4] The *World Development Report 2019: The Changing Nature of Work*, observes that social contracts in Eastern Europe and East Asia would need to create mechanisms to finance the protection and care of older people in a sustainable manner (World Bank 2019).

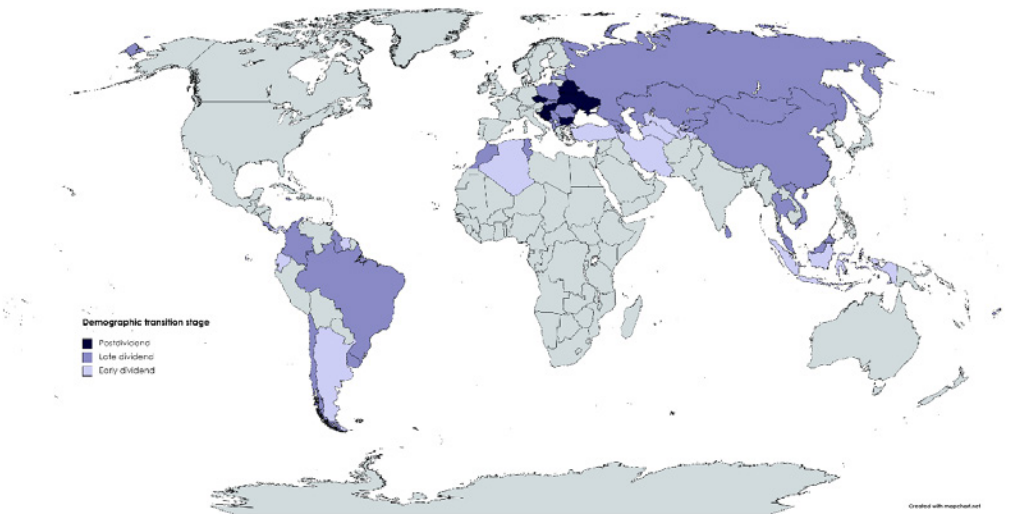
Appendix C. Country-Level Analysis

The *Global Monitoring Report 2015/2016* proposes a demographic classification of countries that combines changes in fertility and the working-age population (World Bank and IMF 2016). Based on these trends, countries are classified into four stages of demographic transition: predividend countries (where fertility is greater than 4 births per woman); early-dividend countries (where fertility is lower than 4 births per woman, but there is an increasing working-age population); late-dividend countries (with a shrinking working-age population but where fertility fell only recently); and postdividend countries (with a shrinking working-age population and where fertility fell below the replacement level, or 2.1 births per woman, three decades earlier). The latter two stages characterize aging countries. This evaluation adopted the Global Monitoring Report definition to define the reference population of aging countries.

Reference Population

The *reference population* included all the client countries that the *Global Monitoring Report 2015/2016* identified as late- or postdividend and where the World Bank has at least one activity (for a list of countries in the reference population see figures C.1 and C.2).

Figure C.1. Reference Population



Source: Independent Evaluation Group review based on Global Monitoring Report data.

Figure C.2. Countries in the Reference Population

Albania	Costa Rica	Lebanon	Sri Lanka
Algeria	Croatia	Malaysia	St. Lucia
Antigua and Barbuda	Czech Republic	Mauritius	St. Vincent and the Grenadines
Argentina	Ecuador	Moldova	Suriname
Armenia	Fiji	Mongolia	Tajikistan
Azerbaijan	Georgia	Montenegro	Thailand
Bahamas, The	Grenada	Morocco	Trinidad and Tobago
Barbados	Guyana	North Macedonia	Tunisia
Belarus	Hungary	Panama	Turkey
Bosnia and Herzegovina	Indonesia	Poland	Turkmenistan
Brazil	Iran, Islamic Rep.	Romania	Ukraine
Bulgaria	Jamaica	Russian Federation	Uruguay
Chile	Kazakhstan	Serbia	Uzbekistan
China	Kyrgyz Republic	Seychelles	Vietnam
Colombia	Latvia	Slovak Republic	

Source: Independent Evaluation Group.

Note: Dark blue identifies the posttransition countries; middle blue the late-dividend countries; and light blue, the early-dividend countries.

Selection of Countries for In-Depth Analysis

From the reference population, six countries were selected for *field-based analysis* and an additional nine countries for *desk-based analysis*.

Field-Based Country Case Analysis

The six field-based countries were Chile, China, Jamaica, Romania, Ukraine, and Uruguay, and they were selected from the post- and late-dividend countries only. Table C.1 and figures C.3–C.7 show that the field-based country cases were selected across the whole spectrum of demographic characteristics, drivers of aging, and World Bank engagement.

Table C.1. Main Characteristics of Countries in the Post- and Late-Dividend Categories

Country	Demographic Type	Income Group	Total Population (thousands)	Female LFP (%)	Life Expectancy (years)		Healthy Life Expectancy (years)		Outmigration[a]	Relevant World Bank Portfolio[b] (number)				
					Male	Female	Male	Female		Grants	Lending	Non-RAS ASA	RAS ASA	Total
Europe and Central Asia														
Albania	LD	UM	2,873.46	57.7	76.5	80.6	65	70.5	41.0	1	10	7	0	18
Bosnia and Herzegovina	PD	UM	3,507.02	42.7	74.5	79.6	63.7	67.7	47.0	1	5	10	0	16
Serbia	LD	UM	7,020.86	59.6	73.6	78.7	63.7	66.9	18.0	0	7	10	0	17
Montenegro	LD	UM	622.37	56.5	74.8	79.6	64.1	67.9	45.4	0	2	0	0	2
North Macedonia	LD	UM	2,083.16	50.8	73.8	77.9	63.9	68.4	30.2	0	6	5	0	11
Georgia	LD	LM	3,728.00	65.4	69.2	77.6	60.4	67.2	16.6	0	15	8	0	23
Ukraine	PD	LM	44,831.14	60.7	67.0	76.8	56.7	65.4	12.3	2	6	17	0	25
Armenia	LD	UM	2,930.45	55.6	71.4	77.8	63.4	68.1	33.0	3	18	6	0	27
Belarus	PD	UM	9,498.26	—	69.3	79.2	60.3	67.3	17.0	0	2	6	0	8
Moldova	LD	LM	3,549.20	45.0	67.4	76.0	59.6	66.2	24.2	4	13	11	0	28
Russian Federation	LD	UM	144,496.74	69.0	67.1	77.4	58.4	65.8	7.6	0	1	27	2	30
Kyrgyz Republic	LD	LM	6,198.20	49.3	67.2	75.4	60.9	66.0	12.9	1	8	5	0	14
Kazakhstan	LD	UM	18,037.78	—	68.7	76.9	59.3	66.1	22.5	1	2	2	17	22
Azerbaijan	LD	UM	9,854.03	—	69.1	75.2	59.5	64.9	12.0	1	3	6	0	10
Poland	LD	H	37,974.83	62.6	73.9	82.0	63.7	66.9	10.2	0	8	14	1	23
Romania	LD	UM	19,583.99	58.3	71.7	79.1	61.9	67.6	17.2	1	8	7	10	26
Slovak Republic	LD	H	5,439.23	65.9	73.8	80.7	63.7	68.9	10.9	0	0	2	0	2

(continued)

Country	Demographic Type	Income Group	Total Population (thousands)	Female LFP (%)	Life Expectancy (years)		Healthy Life Expectancy (years)		Outmigration[a]	Relevant World Bank Portfolio[b] (number)				
					Male	Female	Male	Female		Grants	Lending	Non-RAS ASA	RAS ASA	Total
Bulgaria	PD	UM	7,075.95	67.1	71.3	78.5	62.2	67.7	21.0	0	4	6	0	10
Croatia	PD	H	4,124.53	61.4	74.9	80.9	64.9	69.9	20.9	0	9	5	0	14
Czech Republic	PD	H	10,594.44	68.7	76.5	82.6	65.1	69.6	5.0	0	0	2	0	2
Hungary	PD	H	9,787.97	64.2	72.6	79.7	63.1	68.3	5.8	0	1	0	1	2
Latvia	LD	H	1,942.25	74.3	69.9	79.7	60.9	68.0	17.0	0	2	1	1	4
Latin America and the Caribbean														
Bahamas, The	LD	H	395.36	—	72.7	78.7	63.2	66.9	11.0	no relevant portfolio				
Brazil	LD	UM	209,288.28	59.9	72.1	79.3	63.1	67.7	1.0	1	26	15	0	42
Chile	LD	H	18,054.73	57.2	77.2	82.1	67.1	70.2	3.5	0	2	1	9	12
Colombia	LD	UM	49,065.61	63.1	71.0	78.2	68.7	72.1	5.3	1	13	15	3	32
Costa Rica	LD	UM	4,905.77	50.3	77.7	82.4	67.9	71.9	2.8	0	2	4	1	7
Guyana	LD	UM	777.86	47.4	64.5	69.2	58.6	62.4	60.8	1	8	1	0	10
Jamaica	LD	UM	2,890.30	64.3	73.7	78.5	63.9	67.4	40.4	1	8	2	0	11
St. Lucia	LD	UM	178.84	—	73.0	78.4	64.9	67.9	31.0	0	2	1	0	3
St. Vincent and the Grenadines	LD	UM	109.90	—	71.1	75.5	61.7	65.5	55.4	0	1	1	0	1
Trinidad and Tobago	LD	H	1,369.13	57.8[c]	67.3	74.4	65.7	67.2	27.8	0	0	0	2	2
Uruguay	LD	H	3,456.75	67.8	74.0	81.0	64.8	69.5	10.0	0	7	11	0	18
Antigua and Barbuda	PD	H	102.01	—	73.9	78.8	66.4	68.1	72.0	1	0	0	0	1
Barbados	PD	H	285.72	75.7[c]	73.6	78.4	67.2	68.6	35.0		no relevant portfolio			

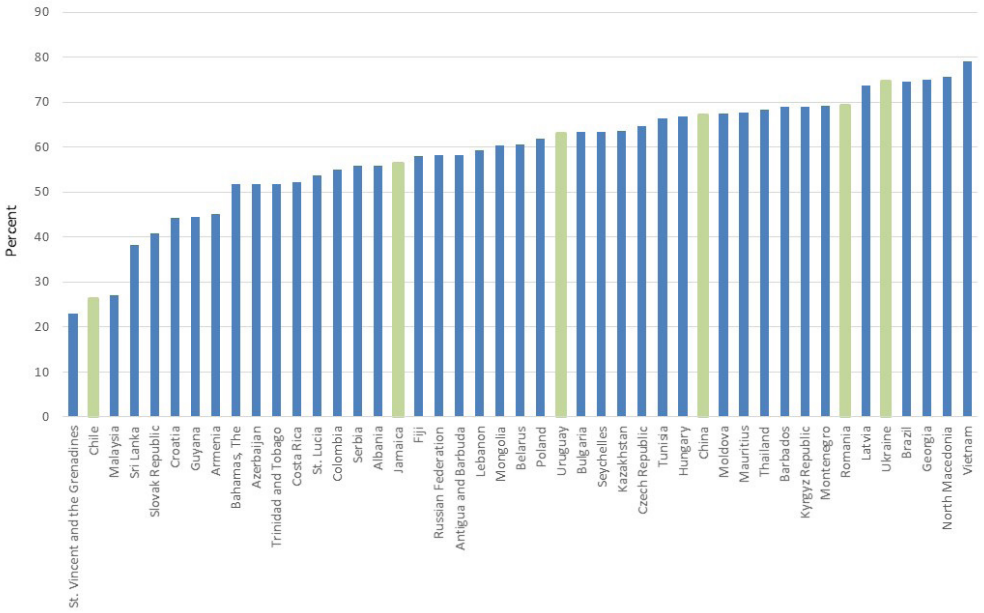
(continued)

Country	Demographic Type	Income Group	Total Population (thousands)	Female LFP (%)	Life Expectancy (years)		Healthy Life Expectancy (years)		Outmigration[a]	Relevant World Bank Portfolio[b] (number)				
					Male	Female	Male	Female		Grants	Lending	Non-RAS ASA	RAS ASA	Total
Middle East and North Africa														
Lebanon	LD	UM	6,082.36	—	78.2	81.6	65.0	67.4	18.0	6	3	7	0	16
Morocco	LD	LM	35,739.58	—	74.8	77.2	63.0	63.3	9.1	4	9	9	0	22
Tunisia	LD	LM	11,532.13	—	73.9	77.9	65.8	69.0	6.2	3	9	9	0	21
South Asia														
Sri Lanka	LD	LM	21,444.00	39.9[c]	72.1	78.8	65.2	70.6	8.7	2	5	14	0	21
Africa														
Mauritius	LD	UM	1,264.61	52.5	71.3	77.8	62.5	67.2	13.7	0	3	3	0	6
Seychelles	LD	H	95.84	75.9	70.3	78.5	62.4	67.9	10.6	0	4	1	5	10
East Asia and Pacific														
China	LD	UM	1,386,395.00	—	74.9	77.9	66.6	69.7	0.7	2	10	20	0	32
Fiji	LD	UM	905.50	40.9[c]	67.5	73.6	57.9	60.5	22.9	0	1	2	0	3
Malaysia	LD	UM	31,624.26	54.3[c]	73.3	77.8	64.4	67.7	5.7	0	0	6	1	7
Mongolia	LD	LM	3,075.65	57.2	65.4	73.7	56.7	64.0	2.6	2	8	11	0	21
Thailand	LD	UM	69,037.51	67.2[c]	71.8	79.3	65.7	71.3	1.5	1	0	7	1	9
Vietnam	LD	LM	95,540.80	78.4	71.8	81.0	62.4	69.2	2.9	7	13	17	0	37

Source: Female labor force participation: ILO 2017 (2016, if 2017 data are not available; see note c); life expectancy: UNDP 2017; healthy life expectancy: GBD Results Tool 2017 (database), Global Data Health Exchange, http://ghdx.healthdata.org/gbd-results-tool; outmigration: KNOMAD 2017.

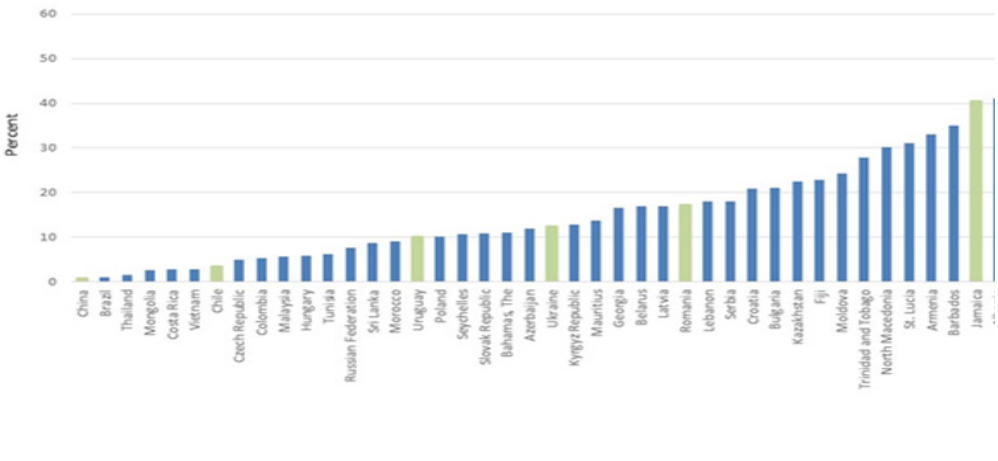
Note: The green field identifies the countries selected for field-based analysis. ASA = advisory services and analytics; H = high income; LD = late-dividend; LFP = labor force participation; LM = lower-middle income; PD = postdividend; RAS = reimbursable advisory services; UM = upper-middle income.
a. Outmigration is defined as the stock of emigrants as a percentage of the total population.
b. Lending, grants, and ASA (RAS and non-RAS) were identified through a multistage approach including keyword searches and manual review (appendix F). Period covered: fiscal years 2005–19. Lending and grants include projects approved during fiscal years 2009–19, whereas ASA includes both ongoing and delivered activities during fiscal years 2005–19.
c. 2016 data.

Figure C.3. Female Labor Force Participation



Source: International Labour Organization projections 2018.*Note:* No data are available for Bosnia and Herzegovina or Morocco. Data for the countries selected as field-based case studies are shown in green.

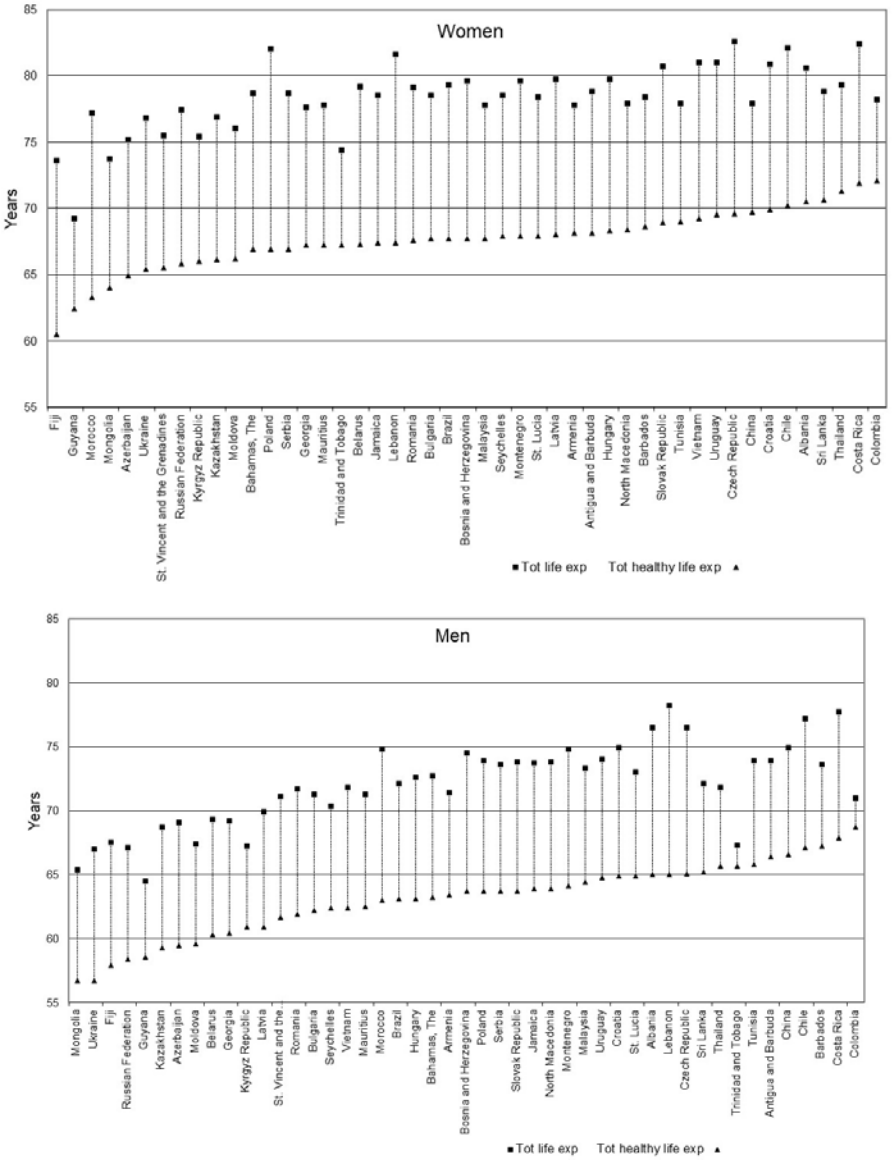
Figure C.4. Outmigration: Stock of Emigrants as Percentage of Total Population



Source: KNOMAD 2017.

Note: Data for the countries selected as field-based case studies are shown in green.

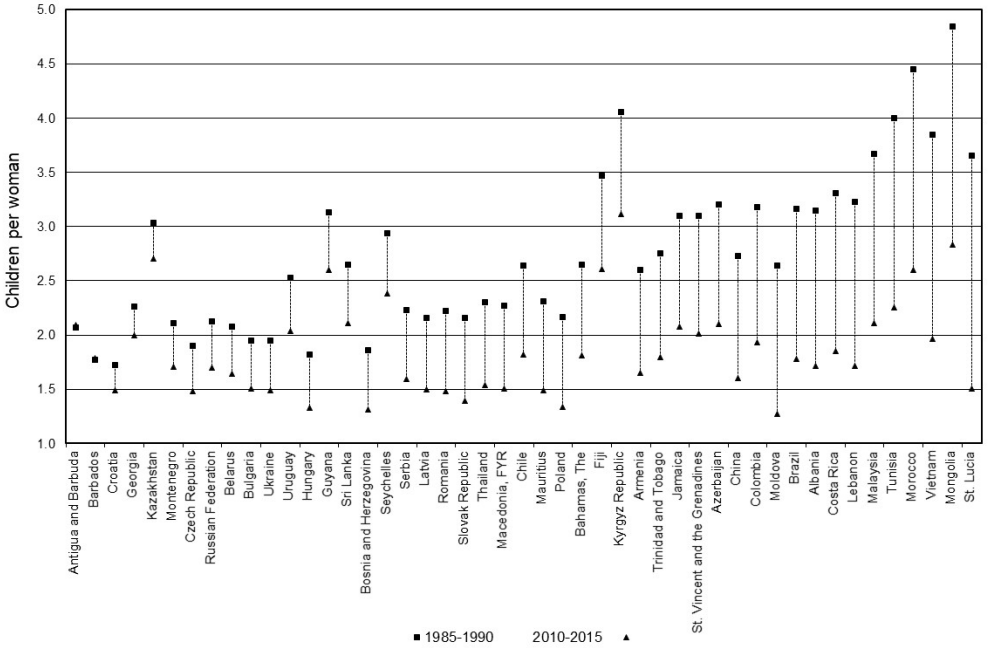
Figure C.5. Life Expectancy versus Healthy Life Expectancy



Source: UNDP 2017.

Note: The countries selected as field-based case studies are Chile, China, Jamaica, Romania, Ukraine, and Uruguay. Exp = expectancy; Tot = total.

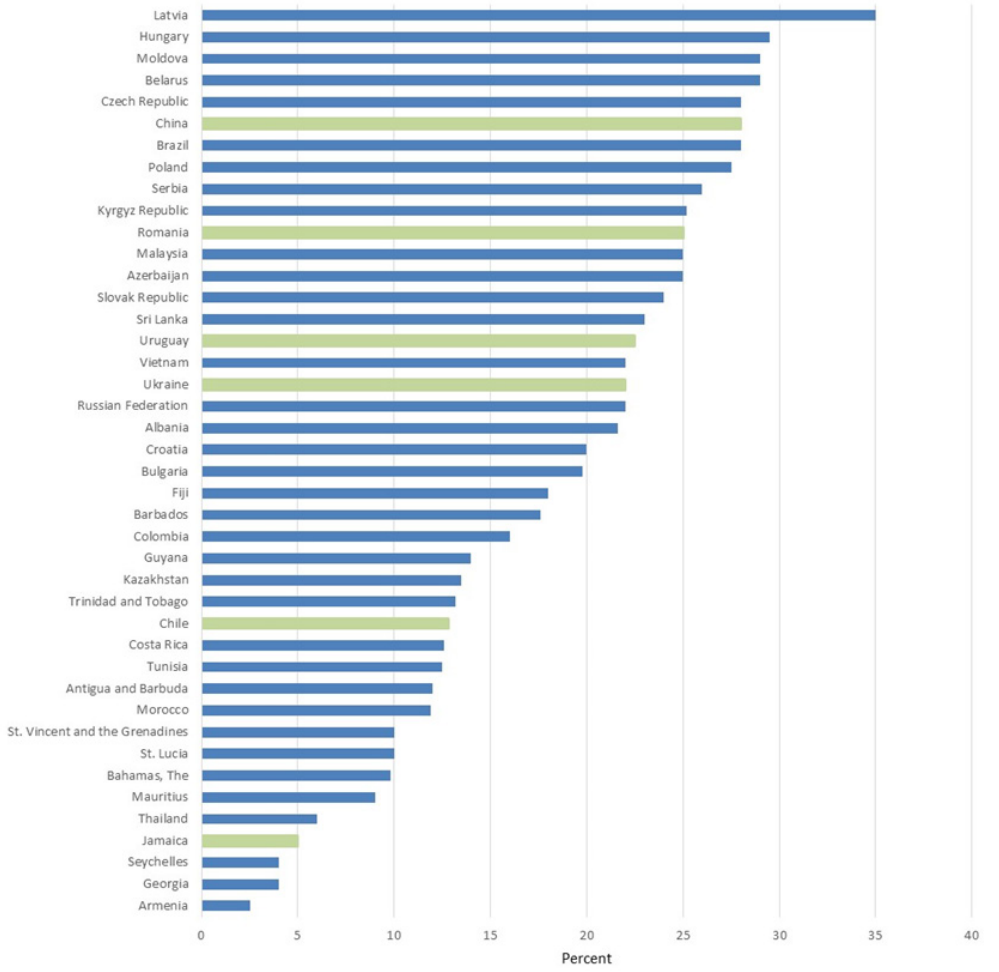
Figure C.6. Change in Fertility 1985–90 versus 2010–15



Source: UNDP.

Note: The countries selected as field-based case studies are Chile, China, Jamaica, Romania, Ukraine, and Uruguay.

Figure C.7. Income Security: Old Age, Disability, and Survivor Contribution Rates



Source: United States Social Security Administration 2017/2018.

Note: No data are available for Bosnia and Herzegovina, Lebanon, Mongolia, Montenegro, or North Macedonia. Data for the countries selected as field-based case studies are shown in green.

The field-based country case analysis involved a mission of an average two-week duration and six weeks of overall preparation time. For each case study, a country case report was completed based on (i) a structured document review of the World Bank lending and nonlending portfolio; (ii) a review of the main government documents (strategies, position papers, analysis, and so on) and other relevant literature, articles, and reports; (iii) interviews with World Bank staff and World Bank stakeholders at the World Bank's head-

quarters, at the Country Management Unit, and in the field. An average of 60 interviews were conducted for each field-based country case. During the field visits, the evaluation team engaged extensively with Country Management Unit and World Bank colleagues in the country office and included at least one local consultant who helped collect information and was instrumental in the identification of key stakeholders to interview. The mission agenda was flexible to allow for snowballing identification of additional stakeholders to interview. In all cases, academia, think tanks, civil society, and other international organizations were consulted in addition to government officials and World Bank staff.

The country case template and the structured document review of the World Bank lending and nonlending portfolio guided the preparation of the fieldwork and helped identify relevant stakeholders to interview and relevant material to analyze. The template was pilot tested by the evaluation task team leaders while conducting the first case study (Chile) and adjusted to respond to the challenges and opportunities experienced during the evaluation mission. Teams conducting case studies were trained in using the template to ensure consistency across teams. Summary findings are reported in table C.3.

The country case studies aimed to answer the following key questions:

1. What are the country priorities related to aging?

To identify the main aging-related challenges and opportunities, evaluators were asked to review the country priorities as articulated by the countries themselves in their country strategies, development plans, research reports, policy notes, and other relevant documents and as expressed in interviews with key government officials (in line with the evaluation conceptual framework, the areas and sectors of interest could be pensions, health, long-term care, labor market, female labor force participation, migration, transport, infrastructure, urban space, and so on). Evaluators were instructed to consider not only challenges but also positive developments.

Evaluators were also asked to explain on what ground the main challenges and opportunities were identified as such and to reflect on the counterfactual of what would happen if they were not addressed now. Evaluators had

to specify whether there was agreement among stakeholders that these were the main challenges and to explain any reasons for disagreement.

Evaluators were also asked to identify whether and how these challenges were reflected as priorities in country or sectoral strategies (past or in progress) and whether these main challenges and opportunities were also identified as such by the World Bank (in diagnostic work, advisory services and analytics (ASA), country strategies, and current policy discussions). In all cases, answers had to be supported by detailed documentation.

2. How is the World Bank supporting the country in addressing these challenges?

To respond to this question, evaluators needed to broadly consider all potential World Bank support, including ASA, strategic work, policy dialogue, and so on. The subquestions used to guide the identification of World Bank support included:

   a. Has the World Bank been involved in the past? How?

   b. Is the World Bank currently involved? How?

1. Which departments of the World Bank have been mostly involved? Is your perception that some departments, units, or Global Practices are more active than others?

   c. (If the World Bank is not involved): Why is the World Bank not involved?

3. How are other donors or organizations supporting the country in addressing these challenges?

To respond to this question, evaluators were asked to identify examples of coordination between the World Bank and other development partners. If no examples of coordination were found, evaluators were asked to find out the reasons.

4. What has been the added value of the World Bank?

To respond to this question, evaluators were asked to identify examples and substantiated evidence of any or all of the following: (i) solid analytical work or technical assistance or lending that resulted in significant advancement of

the aging agenda; (ii) major relevant reforms that the World Bank supported; (iii) work that would not have happened if not for the World Bank; and (iv) the World Bank's contribution to the policy discussion that was clearly influential, and so on.

5. Are there opportunities for the World Bank to get involved that have not materialized so far?

To respond to this question, evaluators were asked to further identify (i) the type of opportunities; (ii) the comparative advantage and added value of World Bank involvement; and (iii) the reasons why this engagement has not (yet) happened.

Desk-Based Country Case Analysis

The evaluation identified an additional nine countries (Albania, Armenia, Brazil, Bulgaria, Poland, the Russian Federation, the Seychelles, Sri Lanka, and Vietnam) for desk-based analysis. These countries were identified based on the existing ASA portfolio (the requirement was a sufficiently rich set of activities to review) and management suggestions. The desk-based country case analysis was conducted in the final stages of the evaluation to complement the findings of the portfolio review, structured document review, interviews, and field-based country cases (tables C.2 and C.3).

The objective of the desk review was to provide a quick bird's-eye view of aging challenges and World Bank response as reflected in various lending and nonlending documents. A two-step process was carried out that identified (i) aging challenges and (ii) World Bank response. In the first step, information on the aging challenges for each country was gathered based on a review of World Bank, International Monetary Fund, Economist Intelligence Unit, and United Nations country documents. Word searches of these documents included demographic indicators (such as fertility, mortality, longevity, elderly, and aging) and aging themes (such as pensions; labor market; labor force participation rates; gender; and health, noncommunicable diseases and long-term care). Both the Systematic Country Diagnostic and Country Partnership Framework were reviewed as part of the World Bank documents, the two most recent Article IV reports from the International Monetary Fund,

the country report from the Economist Intelligence Unit, and any relevant United Nations reports on aging for the country in question.

In the second step, the aging-related nonlending activities of the country were analyzed by reviewing project documents of technical assistance and ASAs (including reimbursable advisory services). This review coalesced around aging themes such as pensions, health, labor markets, and gender and mapped the activities onto the challenges identified in the first step of the desk review. In addition, the most recent CPF was consulted to highlight specific aging-related areas that were proposed in the country program. Table C.3 provides an overview of the main findings.

Table C.2. Overview of Key Aging Challenges and World Bank Support Areas in Selected Desk-Based Country Cases

Country	Main Challenges	World Bank Support Areas		
		ASA	Lending	Main GPs
Albania	The currently low dependency rates will increase substantially when the current cohort entering the labor market retires.	Age-related nonlending support has focused on the poverty alleviation objective of social assistance, especially pensions, with suggested reforms.	Eleven projects included policy levers for addressing population aging; of these, two (one HNP, one MTI) justified the use of some of these policy levers to mitigate effects of population aging. The HNP project aimed to establish capacity to effectively address the growing incidence of NCDs; the MTI project sought to improve the financial sustainability of a social insurance system challenged by a high dependency ratio bound to deteriorate with population aging.	HNP MTI

(continued)

Country	Main Challenges	World Bank Support Areas		
		ASA	Lending	Main GPs
Armenia	The shrinking and aging labor force presents a severe demographic challenge to economic growth and social spending.	World Bank nonlending support identified aging challenges for pensions (the focus of the World Bank's support) and for labor market, poverty, gender, and migration. The rise in NCDs was also examined.	Twenty-one projects included policy levers for addressing population aging. The most frequently identified policy levers included (i) support for increased labor force participation; (ii) support for pension systems and reforms; and (iii) social assistance for older people. None of the support provided by these projects was explicitly linked to population aging.	SPL HNP MTI
Brazil	Demographic transition is advanced but reduction in mortality rates has not been as rapid as the reduction in fertility rates.	Nonlending support emphasized fiscal challenges of an aging population for pensions as well as equity and coverage. Support also focused on healthy aging.	Twenty-seven projects included policy levers for addressing population aging. The most frequently identified policy levers included support for (i) human capital development; (ii) pension systems and reforms; (iii) NCDs. Six projects justified the use of policy levers to mitigate the effects of population aging. For instance, the Brazil Health Network Formation and Quality Improvement explicitly linked the need to address NCDs to the demographic changes that have occurred since the end of last century. Likewise, the Rio Grande Do Sul Fiscal Sustainability Loan supported a parametric reform to improve the sustainability of a pension system threatened by the effects of population aging (namely, longer life expectancies and high dependency ratios).	MTI GOV SPL HNP

(continued)

Country	Main Challenges	World Bank Support Areas		
		ASA	Lending	Main GPs
Bulgaria	Bulgaria is the third-oldest country in Europe. The old-age dependency ratio is highest among the bottom 40 percent.	World Bank nonlending support is predicated on promoting sustained and broad-based reforms in macro fiscal and labor productivity. Overreliance on family support systems to care for the older adults in the bottom 40 percent has consequences for female labor force participation.	Four projects included policy levers for addressing population aging, the most frequent being (i) increased labor force participation; (ii) human capital development; (iii) health systems reforms; and (iv) provision of childcare. Two projects, both development policy loans, justified the use of policy levers by the need to mitigate the effects of population aging and were consistent with recommendations from World Bank analytical and advisory work on aging.	SPL EDUC

(continued)

Country	Main Challenges	World Bank Support Areas		
		ASA	Lending	Main GPs
Poland	Demographic transition is at an advanced stage and headwinds challenge economic growth.	Nonlending work focused on structural reform areas, such as lifelong learning, female labor force participation, extending working lives and pensions coverage to increase future income replacement rates, and strengthening models of integrated care for the health sector and long-term care. A 2017 RAS supported the government in addressing challenges of fragmentation, accountability, and inefficiency in the health system.	Eight projects included policy levers for addressing population aging. The most frequent policy levers identified included support for (i) increased labor force participation; (ii) pension and health systems reforms; and (iii) provision of childcare. The need to address population aging was mentioned as justification in two development loans programmatic series (one series with three projects and the other with two projects) and one investment lending project.	MTI SPL SURR

(continued)

Country	Main Challenges	World Bank Support Areas		
		ASA	Lending	Main GPs
Russian Federation	A shrinking labor force and aging population in the Russian Federation pose challenges for future economic growth.	World Bank Group nonlending support focused on the pressures on public spending from an aging population and the challenge from a shrinking labor force and high rate of NCDs. Needed reforms in the pension system are highlighted, including the growing informality of work.	One project supported financial literacy interventions to raise awareness of personal financial risks associated with expected and unexpected life-event expenses. The project did not explicitly link the use of this policy lever to populating aging.	FCI

(continued)

Country	Main Challenges	World Bank Support Areas		
		ASA	Lending	Main GPs
Seychelles	The composition of social protection spending is skewed in favor of older people and away from the youth and poor, raising equity and efficiency concerns as the population ages.	The World Bank provides support through RAS to advance greater equity, efficiency, and long-term sustainability of social protection. An increasing rate of NCDs that threatens past gains calls for greater efficiency in public health expenditure. RAS supported strengthening the administration of social protection, pension reform, and the preparation of a strategy for the health sector.	Four projects included policy levers to address population aging. The policy levers identified included support for (i) long-term care and (ii) pension reform. Projects documents linked the use of policy levers to aging in two projects. One project supported a parametric reform of the pension system, and the other included support for better targeting of long-term care services. The rationale was the same in both cases: an unsustainable fiscal path driven by population aging. Both projects were part of the same programmatic development loans series.	MTI
Sri Lanka	Sri Lanka's demographic dividend is nearing its last stage as the population of dependents is on the rise.	A cross-sectoral approach to understanding aging draws on economic implications as they relate to economic growth, consumption, the labor market, and spending on social protection and health.	Seven projects included policy levers to address population aging. Four out of the seven projects linked their support to a changed demographic profile (three projects addressing a growing NCD burden and one project providing social assistance for older people). The rest of the projects (three out of seven) supported human capital accumulation and social assistance for vulnerable groups without a link to population aging.	HNP SPL

(continued)

Country	Main Challenges	World Bank Support Areas		
		ASA	Lending	Main GPs
Vietnam	Vietnam is one of the most rapidly aging countries in the world; the share of the working-age population peaked in 2014, and the share of those over 65 has grown rapidly.	The World Bank's support has focused on the need for reforms of the social protection and pension system (the largest component of social protection). Broader studies of the socioeconomic profile of the population provide information on the challenges of rapid aging in terms of the implications for the economy, living arrangements, and health.	Twenty projects included policy levers for addressing population aging. Three out of these projects explicitly linked some of these levers to population aging. For instance, one project sought to improve primary health care to better address a disease burden dominated by NCDs. The project document linked this disease burden to an aging population. Another project provided support for social assistance and services for children. The project document noted that the economic case for investing in children is amplified by the demographic transition.	HNP SPL

Source: Independent Evaluation Group desk review.

Note: Information on the aging challenges for each country was sourced from World Bank, the International Monetary Fund, the Economist Intelligence Unit, and United Nations country documents based on a word search targeting key aspects of aging (such as fertility, longevity, mortality, and migration), economic impacts (such as labor force participation rates and fiscal policy) and other aspects (such as pensions, social security, health, noncommunicable diseases, and long-term care). ASA = advisory services and analytics; EDUC = Education; FCI = Finance, Competitiveness, and Innovation; GOV = Governance; GP = Global Practice; HNP = Health, Nutrition, and Population; MTI = Macroeconomics, Trade, and Investment; NCD = noncommunicable disease; RAS = reimbursable advisory services; SPL = Social Protection and Labor; SURR = Social, Urban, Rural, and Resilience.

Table C.3. Summary of Findings in Desk- and Field-Based Case Studies

		Field-based country case studies						Desk-based country case studies								
		Chile	China	Jamaica	Romania	Ukraine	Uruguay	Albania	Armenia	Brazil	Bulgaria	Poland	Russian Federation	Seychelles	Sri Lanka	Vietnam
Identifying aging challenges																
aging-related challenges identified	SCD	**	**	NA	**	*	****		****	**	****	****	***	*	***	*
aging-related challenges identified	CPF	*	**	*	***	*	***	*		**	***	****	**		***	**
Generating knowledge																
awareness/knowledge increased	evidence	I	I		I	I	I	I		I		I	I	I	I	I
data gaps closed or identified	data		I				I					I			I	
Defining aging priorities																
policy priorities identified	SCD	I	I	NA		I	I		I	I	I	I	I		I	I
policy priorities identified	CPF		I		I		I		I	I	I	I	I	I	I	I
Influencing dialogue and promoting knowledge exchange																
facilitated policy dialogue	dialogue	I	I			I	I			I		I	I	I	I	I
knowledge exchange improved	knowledge exchange		I			I	I	I		I		I		I	I	
partnerships established	partnerships		I				I									
Supporting Institutional Change																
supported enabling regulations, reforms and formal policies	Policies	I	I		I	I	I	I			I			I		
inter-agency coordination improved	Institutional-ization	I														
government changes introduced	Institutional-ization	I	I			I	I									

Source: Independent Evaluation Group.

Note: Chile and Uruguay have country aging reports; China (forthcoming). CPF = Country Partnership Framework; SCD = Systematic Country Diagnostic.

References

ILO (International Labour Organization). 2016. [table C.2]

ILO (International Labour Organization). 2017. [table C.2]

ILO (International Labour Organization). 2018 [figure C.2]

KNOMAD (Global Knowledge Partnership on Migration and Development). 2017.

UNDP (United Nations Development Programme). 2017

United States Social Security Administration. 2017/2018.

World Bank and IMF (International Monetary Fund). 2016. *Global Monitoring Report 2015/2016: Development Goals in an Era of Demographic Change*. Washington, DC: World Bank.

Appendix D. Structured Document Review of Knowledge Products

The World Bank supports clients through advisory services and analytics to design and implement better policies, strengthen institutions, build capacity, inform development strategies and operations, and contribute to the global agenda. The overall objective of the structured document review of knowledge products was to identify and assess the coverage and quality of the core diagnostic work produced by the World Bank on aging. The review identified key areas or themes covered in knowledge products and assessed the quality of the work (including the attention to distributional impacts and policy implications at the level of the country and of the Region, where applicable). Knowledge products are, for the purposes of this evaluation, understood as reports and papers providing empirical, policy-actionable analysis that speak to the challenges and opportunities of aging countries. The coverage and quality of the discussion of aging in Systematic Country Diagnostics is presented separately because of its potential influence on Country Partnership Frameworks (see appendix E).

To assess the advisory services and analytics work on aging, the review was guided by the following questions:

- How well are demographic trends discussed in the knowledge products? Are the underlying drivers discussed? How are projections made?
- Does the discussion on aging follow a coherent theory of change? How robust is the underlying analysis?
- Are distributional impacts identified and discussed? Does the analysis differentiate impacts by gender, spatial setting, intergenerational effects, socioeconomic impacts?
- What are the policy implications? Are specific policies identified?

To answer the questions, the evaluation team conducted a structured document review of 157 knowledge products. The identification used, as a starting point,

all advisory services and analytics products available in Business Warehouse for the reference population of countries in October 2019. Excluded from this list were (i) reports produced as part of technical assistance and reimbursable advisory services; (ii) reports that only presented theoretical models; and (iii) reports that did not apply to the reference population. This sample was complemented with all the reports identified through a snowballing exercise from country case studies and key stakeholders' interviews. To ensure completeness, the evaluation team followed up with the Country Management Units in the reference population to confirm the identification results and request any additional knowledge products that could have been missing. Fifty-three documents were of regional or global scope and 104 related to a specific country. The time period ranged from 1992 to 2019. The majority of knowledge products reviewed were mapped to late- or postdividend countries (table D.1).

Table D.1. Sample of Knowledge Products Organized by Country and Region

Region	Time Period	Reports (no.)	Country (number of reports)	Regional Reports (no.)
AFR	2004–19	4	**Mauritius** (3), **Seychelles** (1)	0
EAP	2011–19	26	**China** (10), **Malaysia** (3), **Mongolia** (4), **Thailand** (3), **Vietnam** (3)	EAP (3)
ECA	1999–2020	73	**Albania** (2), **Armenia** (1), **Azerbaijan** (1), Belarus (1), Bosnia and Herzegovina (1), Bulgaria (4), Croatia (1), **Georgia** (2), **Kazakhstan** (1), **Kyrgyz Republic** (2), **Latvia** (2), **Moldova** (7), **Montenegro** (2), **Poland** (10), **Romania** (3), **Russian Federation** (9), Turkey (2), Ukraine (3), Uzbekistan (1)	Balkans (1), ECA (16), Western Balkans (1)
LAC	1998–2020	21	Argentina (3), **Brazil** (2), **Chile** (4), **Costa Rica** (1), Ecuador (1), **Uruguay** (1)	Argentina and Chile (1), Central America (1), LAC (7)
MENA	2006–18	4	**Lebanon** (1), **Morocco** (2)	MENA (1)
SAR	2008–19	7	**Sri Lanka** (7)	SAR (1)
World	1992–2017	21		World (21)

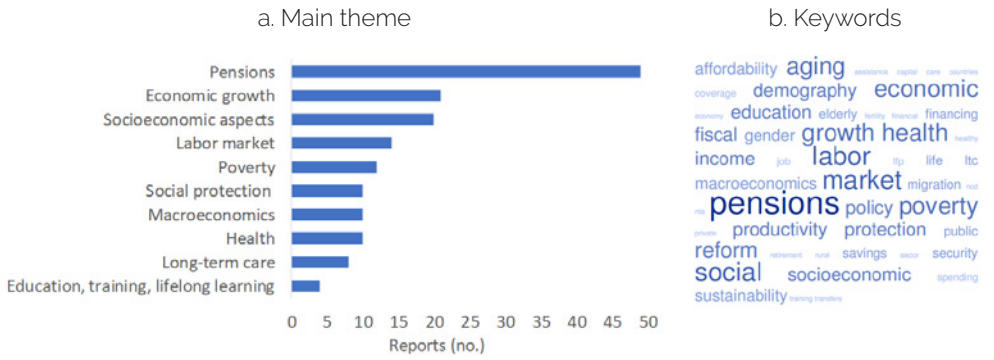
Source: Independent Evaluation Group. List was compiled from advisory services and analytics database and in consultation with Country Management Units.

Note: Early-dividend countries denoted by italics; late-dividend countries denoted by bold; postdividend countries denoted by normal typeface. AFR = Africa; EAP = East Asia and Pacific; ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SAR = South Asia.

Coding Exercise

The coding exercise involved first the definition of themes discussed in the 157 knowledge products. An attempt was made to define a singular theme: pensions, care, health, and so on. This proved quite restrictive, and therefore a broader set of themes was defined for each product with reference to the abstract, table of contents, and keywords defined by the document itself, among other things (figure D.1). For the analysis, a main theme (acknowledging the limitations that assigning a main theme involve) and a broader range of themes were used alternately, as described in the main text of this evaluation (see the Evolution of the World Bank's Diagnostic Work on Aging section in chapter 2).

Figure D.1. Content of World Bank Knowledge Products



Source: Independent Evaluation Group.

Note: The word cloud was created with TagCrowd, after assigning a string of keywords to each report; the free software is accessible at https://tagcrowd.com. Each document was then assessed for information that would contribute to five fields—demographic trends, theory of change, analysis, distributional impact, and policy implications—and rated on a three-point scale with a brief explanation of the rating assigned. In addition, the analysis included an overall rating based on the relevance of the report for aging.

» Demographic trends. The coding provides an assessment of how well the demographic trends are described: 0 = no description; 1 = poor description (quick reference with no or few numbers, no reference period, no sense of evolution, no explanation of what drives them); 2 = good description (key figures are provided with a discussion of the speed of the phenomenon and the drivers behind it, ideally with supporting graphs); 3 = excellent (very detailed description, with original analysis or projections).

» Theory of change and transmission channels. The coding provides an assessment of the explanation of the theory of change of the phenomenon being analyzed in the report (what causes what?): 0 = no theory of change provided; 1 = vague description (the expected impacts are mentioned, but there is no clear explanation of the theory of change); 2 = good description (clear explanation of the theory of change; data are reported from other sources); 3 = excellent (extensive explanation of the theory of change; the report provides an original contribution to a better understanding of aging or related phenomena, depending on the topic of the report, using original analysis).

» Analysis. The coding provides an assessment of the analysis undertaken to calculate the expected impact of a phenomenon on the variable of interest with respect to the added value of the report, in terms of new and original elements (not known before): 0 = no original analysis; 1 = some added value, some information is new, but generally the quality and the level of novelty is poor; 2 = good added value; the report adds new information or presents known information in novel and effective ways; 3 = critical added value; the report has excellent added value that is policy oriented.

» Distributional impacts. The coding provides an assessment of the discussion of distributional impacts (how different groups of the population are going to be affected by the phenomenon under consideration in different ways and how policy responses need to be tailored to different groups): 0 = no discussion of distributional impacts; 1 = some discussion or speculation about potential distributional impacts but no analysis; 2 = good analysis of distributional impacts; 3 = excellent analysis of distributional impacts, which is central to the report.

» Policy implications. The coding provides an assessment of whether policy implications are identified and discussed in the report: 0 = no discussion; 1 = some discussion or speculation about potential policy implications but no analysis; 2 = good discussion of policy implications; 3 = excellent discussion of policy implications, which is central to the report.

» Overall rating. The coding provides an assessment of the overall relevance of the report: 0 = not relevant (this rating would flag a wrongful inclusion in the knowledge product sample); 1 = the report has some general information about aging and its implications but is not particularly relevant or adds little

value; 2 = the report has good and relevant information about aging and its implications; 3 = the report has excellent value in providing information and policy options.

The distribution of knowledge products across these various categories is shown in table D.2 (for country-level reports) and table D.3 (for regional reports).

Table D.2. Ratings of Country Products

Scale		Demographic Trends		Theory of Change		Analysis		Distributional Impact		Policy Implications		Overall Rating	
		(no.)	(%)	(no.)	(%)	(no.)	(%)	(no.)	(%)	(no.)	(%)	(no.)	(%)
No discussion	0	43	41	16	15	4	4	32	31	24	23	30	29
Poor discussion	1	19	19	12	11	12	11	25	24	18	17	21	20
Good discussion	2	22	21	43	41	39	37	25	24	24	23	28	27
Excellent discussion	3	21	20	34	32	50	48	23	22	39	37	26	25
Total		105	100	105	100	105	100	105	100	105	100	105	100

Source: Independent Evaluation Group analysis.
Note: Percentages may not total 100 due to rounding.

Table D.3. Ratings of Regional Products

Scale		Demographic Trends		Theory of Change		Analysis		Distributional Impact		Policy Implications		Overall Rating	
		(no.)	(%)	(no.)	(%)	(no.)	(%)	(no.)	(%)	(no.)	(%)	(no.)	(%)
No discussion	0	16	30	10	19	2	4	18	34	13	25	8	14
Poor discussion	1	9	17	6	11	8	15	19	36	10	19	13	25
Good discussion	2	7	13	17	32	16	30	6	11	10	19	15	28
Excellent discussion	3	21	40	20	38	27	51	10	19	20	38	17	32
Total		53	100	53	100	53	100	53	100	53	100	53	100

Source: Independent Evaluation Group analysis.
Note: Percentages may not total 100 due to rounding.

The rating and analysis of the knowledge products was not aimed at assessing the *correctness* of the information provided, and the *rigor* of the analysis undertaken (for example, whether the "right" data and the "right" models were used to come to the "right" conclusions), but rather aimed at assessing how relevant, convincing, complete, and coherent the report was, along the dimensions presented earlier in this section.

The output was stored in an Excel spreadsheet, and the rating for each field was annexed with a brief justification based on direct quotes, summary statements, or both from the document. The output also included a distributional impact field, which identified the nature of the distributional impact: gender (male versus female); intergenerational (young versus older people); type of workers (formal versus informal); regional (urban versus rural); socioeconomic status (poor versus rich; level of education); and "other." A two-point scale was employed to track each specific dimension: 0 = distributional impact not discussed; 1 = distributional impact discussed. Examples of policy were noted, and an additional field stored notes to justify the overall rating, the ratings for the other fields, or both.

A second coding exercise sought to map the knowledge products to the restricted set of main themes or policy areas identified in the analytical framework: pensions, health, migration, long-term care, financial inclusion, macrofiscal, lifelong learning, education, labor markets, gender, accessibility, and poverty (see appendix B for details on analytical framework). The main purpose of the exercise was to construct country-level variables (as opposed to report-level variables) indicating whether knowledge was provided to the country on specific themes or policy areas related to aging, irrespective of how many knowledge products contributed to it. This exercise generated three sets of variables for each country: (i) dummies 0 or 1 indicating whether knowledge on each specific theme or policy area listed above was or was not available; (ii) dummies 0 or 1 indicating whether knowledge on each specific theme or policy area whose overall quality was rated 2 or 3 was or was not available; (iii) dummies 0 or 1 indicating whether knowledge on each specific theme or policy area whose overall quality was rated 3 was or was not available. This information was used to assess the correspondence between the country aging context and the quality of diagnostic work (tables D.4 and D.5).

Table D.4. Correspondence between the Country Aging Context and Quality of Diagnostic Work: Urgency Level

Type of Challenge	Urgency Level				
	1	2	3	4	5
Old-age dependency *(percent)*	<10	10–19	12–19	19–24	24+
Countries *(no.)*	15	13	14	10	7
Countries with pensions evidence *(no.)*	6	4	10	8	4
Quality of the evidence	0.83	0.50	0.90	0.75	0.75
Female labor force participation *(percent)*	70	60–70	50–60	30–50	<30
Countries *(no.)*	6	16	21	7	6
Countries with gender evidence *(no.)*	4	9	13	4	2
Quality of the evidence	0.75	0.87	0.69	0.5	0
Outmigration *(percent)*	10	10–20	20–30	30–50	50+
Countries *(no.)*	25	12	9	8	5
Countries with migration evidence *(no.)*	12	9	4	2	0
Quality of the evidence	0.97	0.78	1	0.50	n.a.

Source: Independent Evaluation Group calculations.

Note: The old-age dependency ratio is the ratio of population ages 65 and older per 100 population ages 15–64. The female labor force participation is the percentage of women aged 15–65 who are in the labor force, based on International Labour Organization definitions. Outmigration is the estimated stock of people who have emigrated as a percentage of the population (United Nations Population Division). Urgency level: the cut-offs to define the five categories for each indicator have been determined based on observed discontinuities in the distribution for the 59 countries. Quality of the evidence measures the percentage of countries (out of those where evidence exists) that have evidence on the topic that has been rated very good or excellent. n.a. = not applicable.

Table D.5. Correspondence between the Country Aging Context and Quality of Diagnostic Work: Gap Level

Type of Challenge	High Level–Low Gap	High Level–High Gap	Low Level–Low Gap	Low Level–High Gap
Life expectancy/healthy life expectancy men				
Countries (no.)	8	32	11	8
Countries with health evidence (no.)	4	16	6	4
Quality of the evidence	1	0.81	0.50	0.50
Life expectancy/healthy life expectancy women				
Countries (no.)	9	33	9	8
Countries with health evidence (no.)	3	16	3	4
Quality of the evidence	1	0.75	0.30	0.50

Source: Independent Evaluation Group calculations.

Note: Life expectancy has been defined as low or high (cut-off point: 70 years with a gap of 8 years) and combined with the gap between life expectancy and healthy life expectancy (gap low or high, cut-off point: 77 years with a gap of 10 years) to generate four categories. Calculations have been carried out separately for men and women. The number of countries with evidence on a certain topic is the number of countries for which substantial evidence exists irrespective of the number of reports where it is found. Quality of the evidence measures the percentage of countries (out of those where evidence exists) that have evidence on the topic that has been rated very good or excellent.

Appendix E. Structured Document Review of SCDs and CPFs

The overall objective of the review was to assess the coverage and quality of the discussion of aging in World Bank Systematic Country Diagnostics (SCDs) and Country Partnership Frameworks (CPFs). SCDs are knowledge products conducted by World Bank Group staff, in close consultation with national authorities and other stakeholders; their main objective is to identify the most critical constraints and opportunities that countries are facing as they work to end extreme poverty and promote shared prosperity in a sustainable manner. The CPF identifies the key objectives and development results of Bank Group support. Used in conjunction with the SCD, the CPF guides the Bank Group's support to a member country.

To assess the quality of the discussion included in these documents, the review was guided by the following questions:

1. What is the quality and coverage of the demographic discussion? Does the document identify drivers of aging with data and analysis? Are there any original analysis or projections of the country's demography in the context of aging?
2. What is the quality and coverage of aging-related themes? Does the document provide good evidence and analyses for these themes? Is there a coherent discussion of these themes in the context of aging?
3. Are there any policy priorities that follow the discussion of aging? Are these policy priorities directly linked to aging or aging-related themes?
4. Are there any data gaps identified associated with aging? If so, which ones?

To answer these questions, the evaluation team conducted a desk review using a combination of deductive and inductive coding in NVivo (qualitative software) and Microsoft Excel.

Discussion of Aging in SCDs

The evaluation team analyzed the most recent SCD available for the reference population. Overall, 45 countries (out of 59; 77 percent)[1] had an SCD available (the following countries did not have an SCD available: Algeria, The Bahamas, Barbados, the Czech Republic, Grenada, Guyana, Hungary, the Islamic Republic of Iran, Jamaica, Latvia, Malaysia, the Slovak Republic, Suriname, Trinidad and Tobago, and Turkmenistan). The availability of SCDs by Region and demographic transition stage is shown in table E.1.

Table E.1. Availability of SCD by Region and Demographic Transition Stage

	Late- or Postdividend Countries			Early-Dividend Countries		
Region	Total	With SCD *(no.)*	With SCD *(percent)*	Total	With SCD *(no.)*	With SCD *(percent)*
Europe and Central Asia	22	18	82	4	3	75
Latin America and the Caribbean	13	8	62	5	4	80
East Asia and Pacific	6	5	83	1	1	100
Middle East and North Africa	3	3	100	2	0	0
Africa	2	2	100	0	0	n.a.
South Asia	1	1	100	0	0	n.a.
Total	47	37	79	12	8	67

Source: Independent Evaluation Group calculation based on the Systematic Country Diagnostic database.

Note: n.a. = not applicable; SCD = Systematic Country Diagnostic.

Coding Exercise

The evaluation team used a coding protocol and NVivo qualitative software to assess the coverage and quality of the discussion of aging in the SCDs. The team used the preliminary version of the aging conceptual framework to form an initial codebook for deductive coding (see the evaluation Approach Paper for this preliminary version of the conceptual framework [World Bank

2019d]); the codebook was (marginally) adjusted as the conceptual framework was revised during the preparation of the evaluation. The first step of the coding exercise was the creation of four categories: drivers of aging, impacts of aging, issues related to aging, and policy implications. These categories were further expanded to include subcategories like "increased care needs" as potential impacts of aging. Moreover, the team used inductive coding to identify any impacts or issues discussed in SCDs but not present in the framework. A combination of deductive and inductive coding ensured that a structure as faithful as possible to the conceptual framework was retained while allowing for the identification of new themes. This process, in turn, helped validate the revised aging conceptual framework. Inductive coding also helped identify policy priorities from the SCD.

First, the evaluator used NVivo to qualitatively classify any aging-related discussion into various nodes (codes). Specifically, the evaluator identified any aging-related discussion—demographic discussion, drivers of aging, implication of aging, issues of aging, data on aging themes, differential impacts of aging, and policy priorities—using NVivo tools. The evaluator also categorized the discussion into subnodes, which aided categorization on a more granular level. For instance, the node "drivers of aging" is a compilation of three subnodes for the main drivers of aging (decrease in fertility, increase in longevity, and outmigration).

Second, to summarize and code the SCD content captured in NVivo, the evaluator constructed an Excel data set using the scale below, which served as the basis for analyzing the quality of the discussion of aging in SCDs.

1. What is the quality and coverage of demographic discussion in the SCD?

   The evaluation team used the following scale to rate the discussion: 0 = no description; 1 = poor description (quick reference with no or few numbers, no reference period, no sense of evolution, no explanation of what drives them); 2 = good description (key figures are provided with a discussion of the speed of the phenomenon and the drivers behind it, ideally with supporting data or graphs); 3 = excellent description (very detailed description, with original analysis or projections). Table E.2 shows the distribution of the quality of the aging discussion in SCDs.

2. What is the quality and coverage of aging-related themes in the SCD?

   The evaluation team used two criteria to rate the discussion of aging:

   a. Evidence provided for the themes: 0 = no evidence; 1 = poor evidence (quick reference with no or few numbers, no reference period, no sense of evolution, no explanation of the implications); 2 = good description (key figures are provided, with a discussion of the phenomenon in the context of aging, ideally with supporting data or graphs); 3 = excellent (very detailed description of implications, with original analysis or projections).

   b. Coherence within themes and between themes and aging: 0 = no description; 1 = poor description (quick reference with no or few numbers, no reference period, no good analysis connecting themes to aging); 2 = good description (key figures are provided, with a discussion of themes in the context of aging and logically connected to each other, ideally with supporting data or graphs); 3 = excellent (very detailed description, with original analysis or projections).

   Figure E.1 shows the coverage and quality of themes in SCDs.

3. Are there any policy priorities that follow the discussion of aging in the SCD?

   The evaluation team used the node "policy priorities" to identify the presence or absence of policy priorities discussed in the SCD. Nineteen SCDs had a policy priority related to aging.

4. What is the overall quality of aging discussion in the SCD?

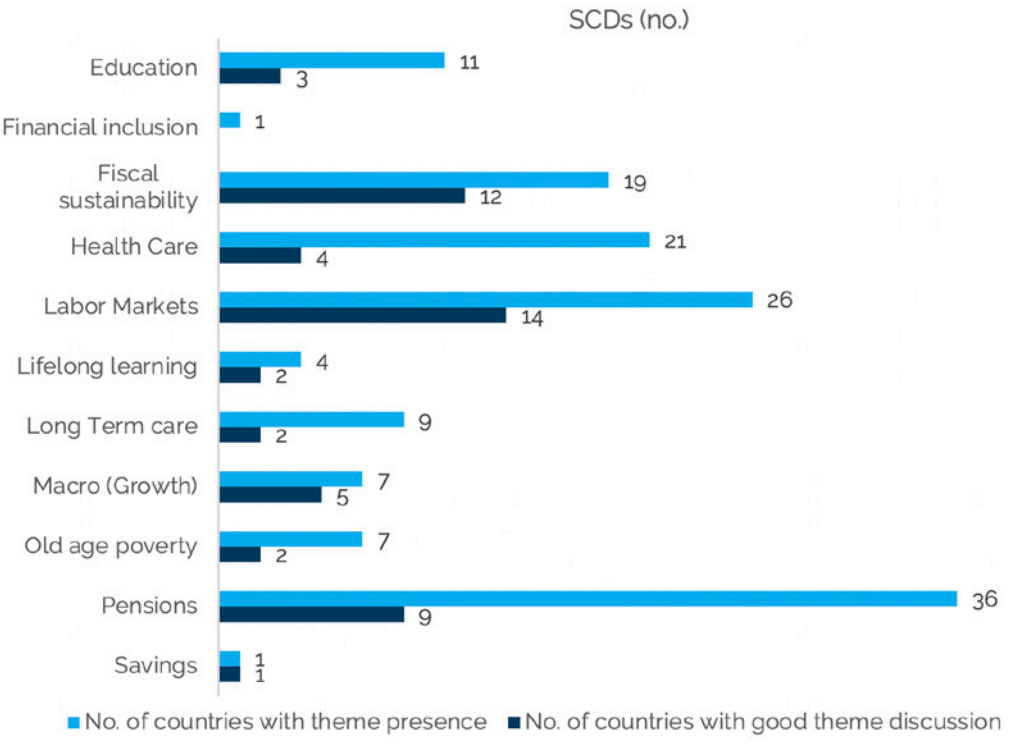
   Using the prior ratings, the evaluation team rated the SCD for overall discussion of aging. Four SCDs were rated as having a comprehensive discussion (Armenia, Bulgaria, Poland, and Uruguay). Six countries have a good aging discussion in their SCDs (Croatia, Georgia, Moldova, Montenegro, the Russian Federation, and Sri Lanka). Table E.3 shows the overall quality of aging discussion of SCDs.

Table E.2. Quality of Demographic Discussion in Systematic Country Diagnostics

Demographic Discussion	Scale	Countries (no.)	Percent
None	0	22	49
Little	1	9	20
Good	2	10	22
Comprehensive	3	4	9
Total		45	100

Source: Independent Evaluation Group analysis.

Figure E.1. Coverage and Quality of Themes in Systematic Country Diagnostics



Source: Independent Evaluation Group analysis.

Note: SCD = Systematic Country Diagnostic.

Table E.3. Overall Quality of Aging Discussion in Systematic Country Diagnostics

Overall Aging Discussion	Scale	Countries (no.)	Percent
None	0	21	47
Little	1	6	13
Some	2	8	18
Good	3	6	13
Comprehensive	4	4	9
Total		45	100

Source: Independent Evaluation Group analysis.

Discussion of Aging in CPFs

The evaluation team analyzed the universe of the latest CPFs available for the reference population of countries using NVivo. For this analysis, the latest CPF for each country (or group of countries, in the case of the Organisation of Eastern Caribbean States) was read in full and coded in NVivo when aging discussion or aging-relevant areas were found. To complement this review, the documents were systematically searched using the keywords listed in table E.4.

Table E.4. Keywords Used in Country Partnership Framework Coding

Active aging, Healthy ~	Family policies	Pension, Social ~, ~ scheme, ~ reform, ~ reform
Aged care services	Family support	Population profile
Ageing	Fiscal sustainability	Retiree
Age-related risks	Intergenerational	Retirement
Aging, ~ population, Rapid ~	Lifelong learning, life-long ~	Shrinking, ~ population
Caregivers	Longevity	Social care
Demographic issues, ~ challenges, ~ transition, ~ change	Long-term care, LTC	Social insurance
Dependency ratio	Noncommunicable, Non-communicable, NCD	Social security
Elderly, Elder support	Old age	
Entitlements	Older population	

Source: Independent Evaluation Group.

A codebook was developed to systematize the coding across different documents. This codebook laid out the node structure used in NVivo and the definitions followed to warrant coding in the documents. Each coded document was subsequently summarized in a Word document and transferred into an Excel file that was independently (and randomly) checked by another evaluator.

The NVivo coding was used to form a structured database with ratings for different elements of aging discussion in CPFs. The following criteria were used to rate the aging discussion:

- What is the quality and coverage of demographic discussion in the CPF?
  The evaluation team used the following scale to rate the discussion: 0 = no description; 1 = poor description (quick reference with no or few numbers, no reference period, no sense of evolution, no explanation of what drives them); 2 = good description (key figures are provided with a discussion of the speed of the phenomenon and the drivers behind it, ideally with supporting data or graphs); 3 = excellent description (very detailed description, with reference to original analysis or projections).

- What is the quality and coverage of aging-related themes in the CPF?
  The team used the following criteria to rate the aging discussion: (a) evidence provided for the themes: 0 = no evidence; 1 = poor evidence (quick reference with no or few numbers, no reference period, no sense of evolution, no explanation of the implications); 2 = good description (key figures are provided with a discussion of the phenomenon in the context of aging, ideally with supporting data or graphs); 3 = excellent (very detailed description of implications, with original analysis or projections). Results are presented in figures E.2 and E.3.

- Are there policy implications identified and discussed in the CPF?
  The team used the following criteria to provide an assessment of whether policy implications are identified and discussed in the report: 0 = no discussion; 1 = some discussion or speculation about potential policy implications but no analysis; 2 = good discussion of policy implications; 3 = excellent discussion of policy implications. Results are presented in figure E.4.

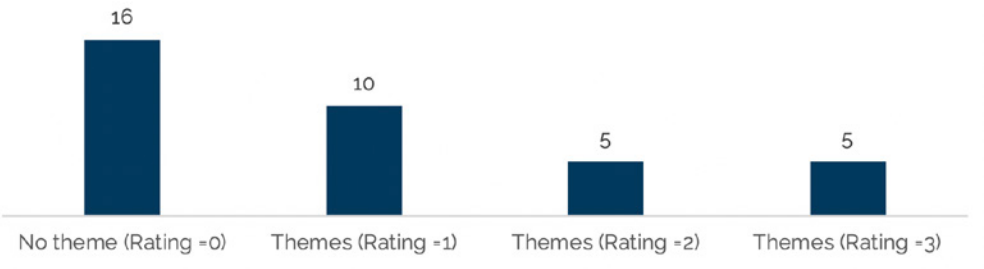
» Overall rating of aging in the CPF: The team used the previous coding to provide an assessment of the overall quality of the aging discussion in the CPF: 0 = no demographic discussion; 1 = some general information about aging and its implications, but not very detailed or specific; 2 = the report has good demographic discussion, good coverage of at least one aging-related theme; 3 = the report has good demographic discussion, good coverage of at least one aging-related theme, and concrete policy implications. Results are presented in figure E.5.

Quality and Coverage of Demographic Discussion in CPFs

Overall, 16 CPFs (44 percent) were silent with regard to aging and 10 CPFs (28 percent) mentioned aging as a quick reference, with no or few numbers, no reference period, no sense of evolution, and no explanation of the implications (figure E.2). Five CPFs (14 percent) discussed aging-related themes with key figures and a discussion of the phenomenon in the context of aging. For example, in the Armenia CPF, shrinking labor force due to aging was discussed with the need to increase female labor force participation (World Bank 2019a). The document also provided estimates for changes in gross domestic product due to low female participation. The CPF also discussed demographic pressures due to high mortality and drew connections with the noncommunicable disease burden.

Five CPFs (14 percent) discussed aging-related themes with detailed descriptions of implications and original analysis or projections and placed a strong emphasis on aging in the document (Bulgaria, China, Poland, Sri Lanka, and Vietnam). For example, the Bulgaria CPF provided good links between themes: the shrinking population due to aging was discussed with the need for productivity gains and reskilling via education (socioemotional skills, lifelong learning), and investment in health. The CPF also provided good data, such as old-age poverty figures for women (World Bank 2016b).

Figure E.2. Country Partnership Frameworks by Quality of Aging-Related Themes (number)

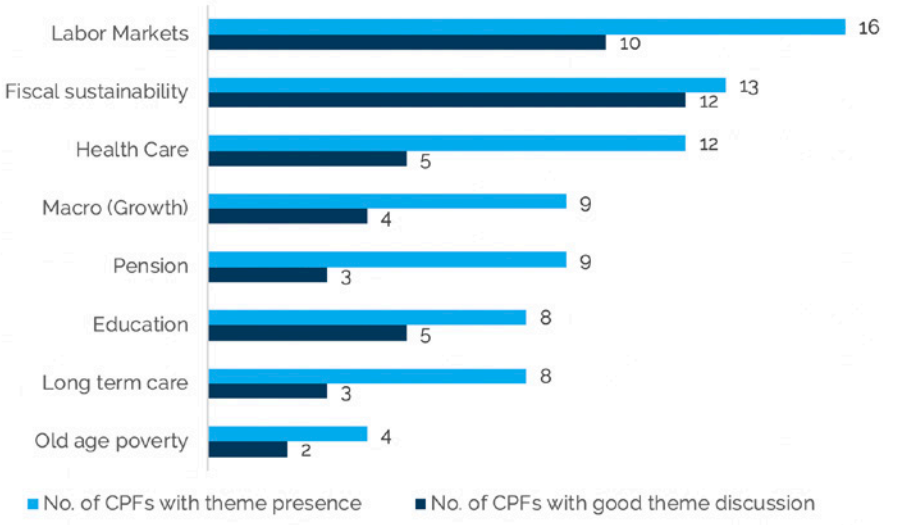


Source: Independent Evaluation Group analysis.

Though CPFs with good aging discussion overall covered a wider range of aging-related themes (figure E.3), the overall quality of the aging discussion in CPFs was independent of the number of topics covered. Croatia identified four areas or themes connected to aging (labor force, growth, education, and long-term care), but there were no data or good links between the themes (World Bank 2019c). Uruguay discussed only two themes in relation to aging: education (to strengthen skill sets) and labor force participation (to increase productivity), but the discussion was underpinned with good evidence (World Bank 2015d).

Like SCDs, CPFs were much more likely to focus on traditional subjects, such as fiscal sustainability, labor markets, health, and pensions. Variance of quality was low for some topics compared with others. Among the 13 CPFs that discussed fiscal sustainability issues in the context of aging, 12 CPFs provided evidence and good discussion. Eight CPFs discussed long-term care in the context of aging, but only 3 CPFs provided a good discussion.

Figure E.3. Aging-Related Themes in Country Partnership Frameworks

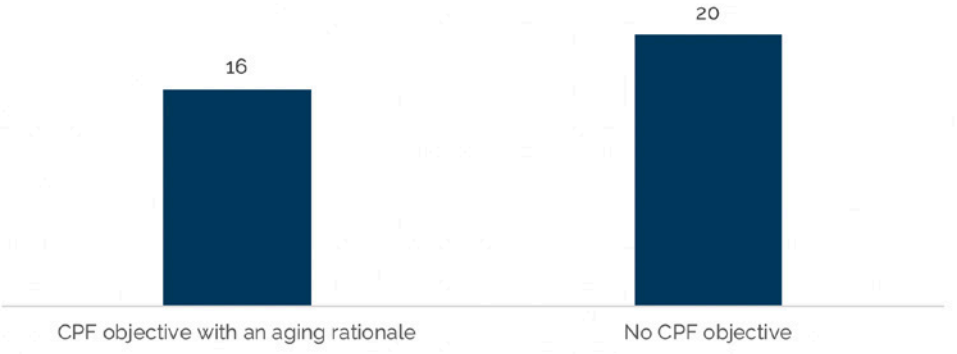


Source: Independent Evaluation Group analysis.

Note: CPF = Country Partnership Framework.

Sixteen CPFs (44 percent) had a CPF objective with an aging rationale (figure E.4). The Poland CPF was the only case where aging was articulated as a separate objective (World Bank 2018).

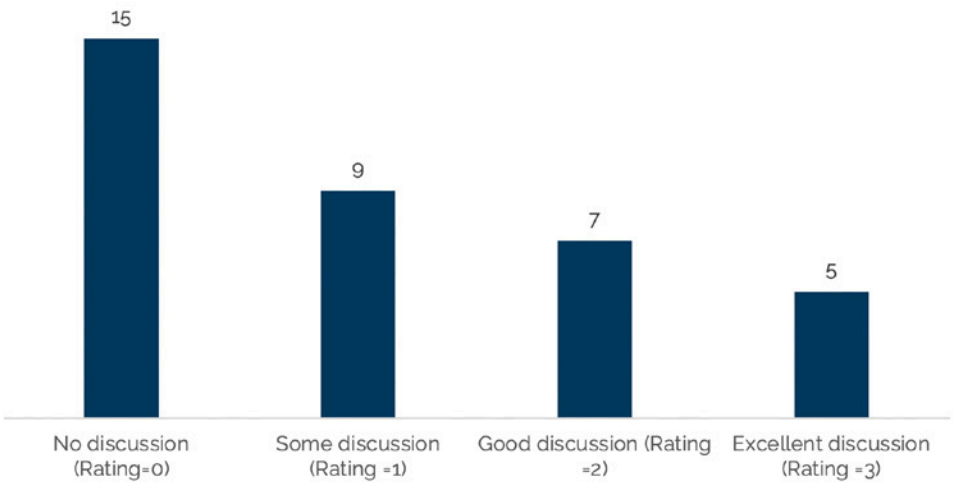
Figure E.4. Country Partnership Frameworks with an Aging-Related Objective



Source: Independent Evaluation Group analysis.

Note: CPF = Country Partnership Framework.

Figure E.5. Overall Quality of Aging Discussion in Country Partnership Frameworks (number)



Source: Independent Evaluation Group analysis.

Overall quality rating of CPFs. Based on the assessment of demographic discussion, theme coverage, and policy implications, the Independent Evaluation Group rated the overall quality of the aging discussion in CPFs (figure E.5). Fifteen CPFs (42 percent) had no aging discussion, 9 CPFs had some discussion (25 percent), 7 CPFs (19 percent) had a good discussion, and 5 CPFs (14 percent) had an excellent discussion. The China CPF (rating = 3) provided a good demographic discussion, with data such as expected population by 2050, and identified drivers of aging (fertility, life expectancy). The CPF also discussed several issues in the context of aging with good links. The issue of old-age poverty was linked to the need for an aged-care system and expanded coverage of pensions while ensuring fiscal sustainability. Though there were not data for all issues, the CPF included a policy objective—objective 3.1: increasing access to quality health and aged care services (World Bank 2019b).

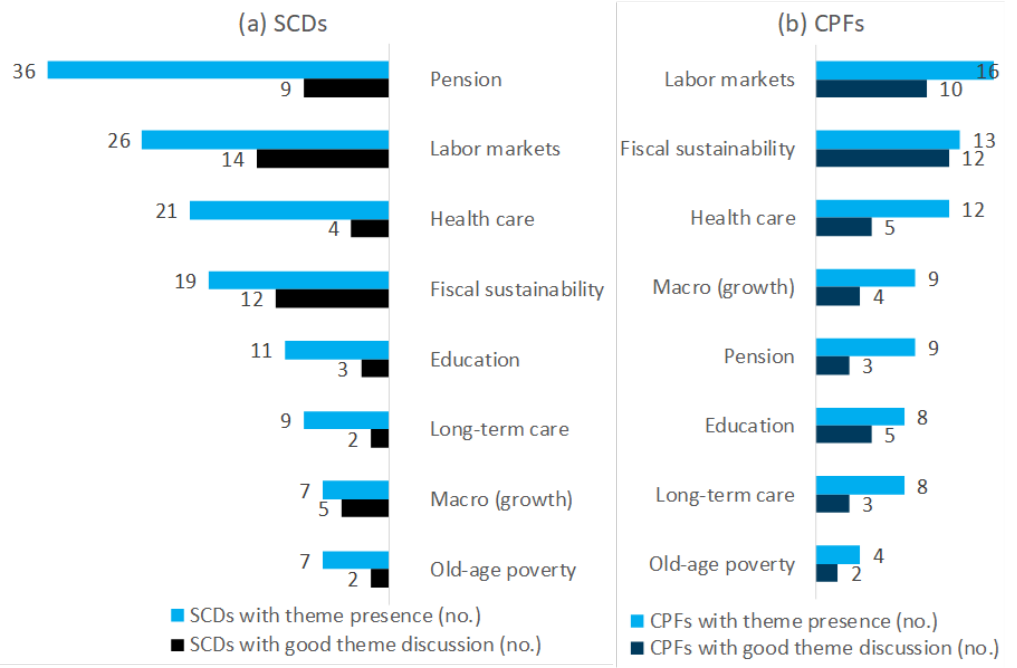
Coherence between SCDs and CPFs

To assess the coherence between SCDs and CPFs, the evaluation team compared the coding of CPFs and SCDs, which used the same underlying methodology. The universe for the analysis consisted of 31 SCDs and CPFs. Two

countries with CPFs (Guyana and Jamaica) did not have available SCDs. Additionally, three CPFs and SCDs were removed to ensure temporality. The SCDs of Mongolia, Russia, and the Organisation of Eastern Caribbean States were formulated after the most recent CPF.

Themes covered in SCDs were also covered for the most part in CPFs (figure E.6). The topics with the most coverage in SCDs—labor markets, fiscal sustainability, pensions—are also those with the most coverage in CPFs. The variance in quality observed in the health care discussion in SCDs (only 4 out of 21 had a good discussion) was also seen in CPFs (5 out of 12 had a good discussion).

Figure E.6. Aging-Related Themes in SCDs and CPFs



Source: Independent Evaluation Group analysis.

Note: The categories "fiscal sustainability" and "pensions" are mutually exclusive; that is, if the pension issue raised in the SCD or CPF was mostly about the fiscal sustainability of the pensions system, it is classified under fiscal sustainability and not under pensions. The "health" category is treated similarly. CPF = Country Partnership Framework; SCD = Systematic Country Diagnostic.

Overall, 21 (68 percent) countries had alignment between SCD and CPF policy priorities: 9 SCDs and CPFs had no policy priorities connected to aging, and 12 SCDs and CPFs had at least one policy priority connected to aging (table E.5). For example, the Brazil SCD had a priority to "review . . . expen-

diture for efficiency, effectiveness and incidence on the poor and nonpoor" (World Bank 2016a, xlix), with an aging rationale, and the CPF articulated a related objective: "Increase fiscal sustainability and fairness of pension system, and effectiveness of social protection system" (World Bank 2017a, 17). The Bulgaria SCD had a priority to "boost the skills and employability of all Bulgarians" as the dependency ratio rises (World Bank 2015a, 16), and the Bulgaria CPF had a related policy objective: "Enhanced school outcomes for better employability" (objective 4) (World Bank 2016b, 24).

Table E.5. Coherence Matrix for Policy Priorities in SCD and CPF Policy Objectives

	SCD: Yes	SCD: No
CPF: Yes	12	4
CPF: No	6	9

Source: Independent Evaluation Group desk review.

Note: CPF = Country Partnership Framework; SCD = Systematic Country Diagnostic.

In 10 countries (32 percent) this was not the case: 4 CPFs had a policy priority with an aging rationale even when the SCDs did not identify any aging-relevant policy priority. There were, however, 6 SCDs with an aging-related priority that were not followed by intended policy support in the CPFs.

Among the 14 SCDs with little to no aging discussion, 11 CPFs (79 percent) also had little to no discussion; 3 CPFs (21 percent) had good or excellent discussion. Among the 9 SCDs that had good or comprehensive discussion, 6 CPFs (67 percent) also had good or excellent discussion, and 3 CPFs (33 percent) had little to no discussion (table E.6).

Table E.6. Country Partnership Framework and Systematic Country Diagnostic Ratings

	CPF Rating				
SCD Rating	No discussion (rating = 0)	Some discussion (rating = 1)	Good discussion (rating = 2)	Excellent discussion (rating = 3)	Total
No discussion (rating = 0)	6	2	1	0	9
Little discussion (rating = 1)	0	3	1	1	5
Some discussion (rating = 2)	4	1	2	1	8
Good discussion (rating = 3)	1	2	1	1	5
Comprehensive discussion (rating = 4)	0	0	2	2	4
Total	11	8	7	5	31

Source: Independent Evaluation Group desk review.

Note: CPF = Country Partnership Framework; SCD = Systematic Country Diagnostic.

Though we see a general pattern of correlation between SCD and CPF ratings, sensitive to significance levels (0.5; 0.004), there are several outliers. For example, the Costa Rica SCD was completely silent on aging (World Bank 2015c), but the CPF had a good demographic discussion with population projections; discussion of health care, fiscal sustainability, and long-term care in context of aging; and a CPF objective (World Bank 2015b). The Moldova SCD discussed issues of pensions, fiscal sustainability of the pension system, old-age poverty, and labor force differentials in the context of aging underpinned by good links and evidence, like replacement rates and labor force participation in different demographic scenarios (World Bank 2016c). Yet the CPF was completely silent on aging (World Bank 2017b).

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World Bank. 2015b. *Costa Rica—Country Partnership Framework, FY16–20*. Washington, DC: World Bank.

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World Bank. 2018. *Poland—Country Partnership Framework, FY19–24*. Washington, DC: World Bank.

World Bank. 2019a. *Armenia—Country Partnership Framework, FY19–23*. Washington, DC: World Bank.

World Bank. 2019b. *China—Country Partnership Framework, FY20–25*. Washington, DC: World Bank.

World Bank. 2019c. *Croatia—Country Partnership Framework, FY19–FY24*. Washington, DC: World Bank.

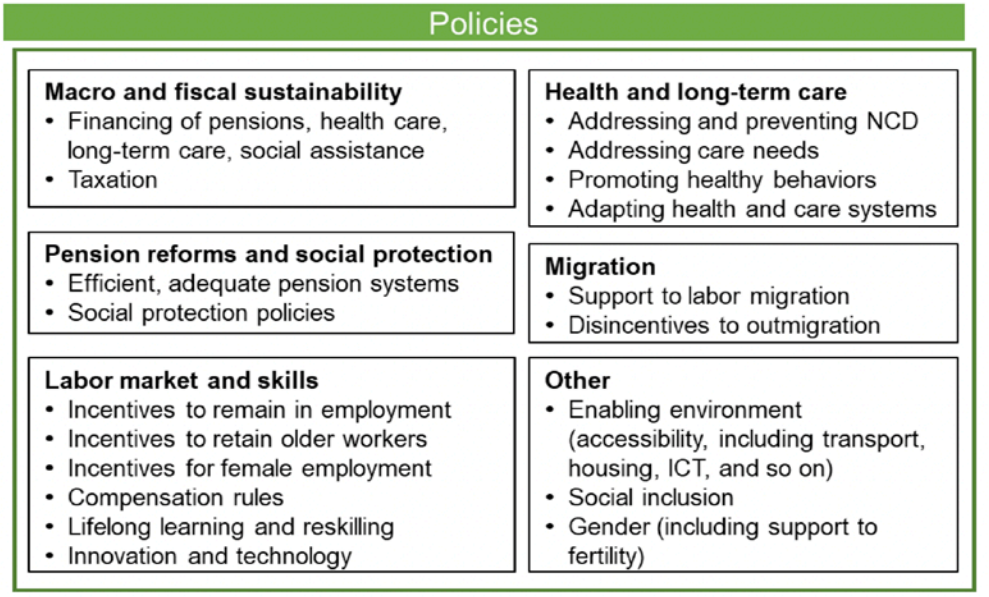
World Bank. 2019d. *World Bank Support to Aging Countries*. Approach Paper. Independent Evaluation Group. Washington, DC: World Bank.

[1] The count is based on the number of countries that had a Systematic Country Diagnostic, out of which three countries had a joint Systematic Country Diagnostic.

Appendix F. Portfolio Review of Aging Elements in Lending Projects

The overall objective of the portfolio review was to assess the coverage of aging-related policy interventions in the World Bank portfolio of 47 client countries identified as late- or postdividend by the Global Monitoring Report 2015/2016 (World Bank and IMF 2016). The conceptual framework identifies the channels through which population aging can affect a country's development outcomes and the potential policy interventions needed to respond to these structural changes (see figure F.1 and appendix B for the conceptual framework).

Figure F.1. Policy Interventions for Addressing Aging



Source: Independent Evaluation Group.

Note: ICT = information and communication technology; NCD = noncommunicable disease.

Methodology

The portfolio identification and review followed a multistage approach.[1] The first step was to identify the total universe of lending projects approved during fiscal years (FY)2005–19 in the 47 client countries that the Global Monitoring Report identified as late- or postdividend countries. The total number of projects identified through this approach was 1,370 International Bank for Reconstruction and Development (IBRD) or International Development Association (IDA) or blended projects.[2] The following instruments were included: investment project financing, Program-for-Results, and development policy financing.

The second step involved screening the identified universe of projects for keywords that may indicate inclusion of a relevant aging policy lever. The list of keywords was developed using insights from the analytical framework and key informant interviews (box F.1). To carry out the screening, the Independent Evaluation Group (IEG) extracted the following key information fields for each project from the operations portal: project name, project development objective, project summary or description, components, and indicators. For the 1,370 IBRD IDA projects, the team applied a keyword search to the extracted information fields. The exercise yielded 159 IBRD IDA projects.

The third step was to check for the possibility of exclusion errors (namely, that relevant projects were not captured in the keyword search). The team manually reviewed all IBRD IDA projects from three Global Practices that were deemed to have a high likelihood of false negatives: (i) Health, Nutrition and Population; (ii) Jobs and Social Protection; and (iii) Macroeconomics, Trade, and Investment. The manual screening identified an additional 184 IBRD IDA projects, which brought the number of projects to 343 IBRD IDA projects.

Box F.1. Keywords Used for Project Identification

First round: active aging, healthy aging; aged-care services; ageing; age-related risks; aging, aging population, rapid aging; caregivers; demographic issues, demographic challenges, demographic transition, demographic change; dependency ratio; elderly, elder support; entitlements; family policies; family support; fiscal sustainability; intergenerational; lifelong learning, life-long learning; longevity; long-term care; LTC; noncommunicable, non-communicable, NCD; old age; older population; pension, social pension, pension scheme, pension reform, pension program; population profile; retiree; retirement.

Second round: Retirement products; Saving for old age; Saving for retirement; Retirement saving; Incentives to save; Private savings; Reverse mortgage; Annuity; Annuities; Financial literacy; Financial education; Financial capability; Second earner; Secondary earner; Family income; Family policies; Family friendly policies; Fertility; Childcare; Child care; Parental leave; Flexible work arrangements; Part-time work; Age discrimination; Care insurance; Migrant labor; Migrant workers; Foreign workers; Adult learning; Adult education; Continuous learning; Continuous education; Lifelong; On the job learning; Age discrimination; Crime and violence; Public safety; Public security; Elderly; Disabled; Old people; Disabilities; Paratransit; Housing affordability; Safe transport.

Source: Independent Evaluation Group.

The fourth step involved manually reviewing project documents for the final set of 343 projects to code policy levers and tag whether the motivation provided for adopting those policies was related to structural changes induced by population aging.[3] The team grouped policy levers into six main headings: (1) employment and productivity; (2) health and long-term care; (3) aging-related public spending pressures; (4) fertility; (5) migration; and (6) savings and consumption (table F.1).

The last step involved further rounds of coding to develop analytical categories for selected policy levers. The following policy levers were coded using a hybrid of deductive and inductive approaches: (i) health; (ii) support for long-term care; (iii) reforming pensions systems; (iv) migration; (v) financial literacy; and (vi) disability. In addition, the team also relied on existing IEG

and World Bank evidence to review and analyze the following policy levers: (i) increase provision of childcare and (ii) accessibility in urban transport.

Table F.1. Policy Levers to Address Structural Changes Induced by Population Aging

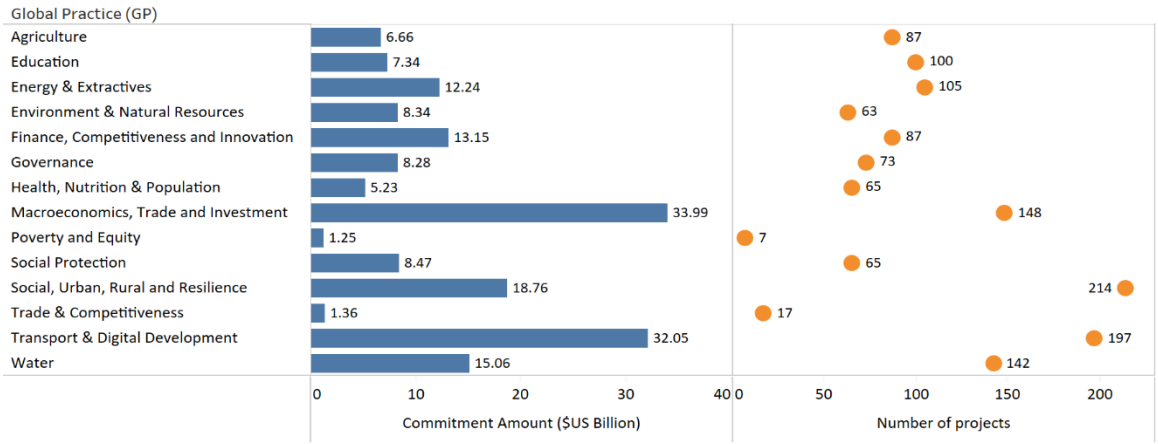
Main Heading	Potential Policy Levers
1. Employment and productivity	» Support for increased labor force participation for women and older adults » Invest in human capital of upcoming cohorts; raise education performance of the young to higher levels » Increase employability of older jobseekers and maintain productivity of older workers; lifelong learning » Other
2. Health and long-term care	» Support for long-term care » Support behavioral changes for prevention and wellness » Noncommunicable disease screening and early detection » Other
3. Aging-related public spending pressures	» Reform pensions systems (expenditure side) » Reform health and long-term care systems (expenditure side) » Taxation (revenue side) » Other » Increase provision of childcare
4. Fertility	» Increase provision of childcare » Flexible workplace arrangements to support families » Progressive tax benefits policies to support families » Other
5. Migration	» Immigration policies to attract and integrate migrants into the labor market » Disincentives for outmigration » Other
6. Savings and consumption	» Financial literacy (for increased savings) » Increased accessibility to financial retirement products » Other

Source: Independent Evaluation Group literature review.

Portfolio Description in Late- and Postdividend Countries (FY05–19)

Four Global Practices capture roughly 50 percent of the universe of the 1,370 IBRD IDA projects in late- and postdividend countries (figure F.2.). These are (i) Social, Urban, Rural, and Resilience (214 projects; 15 percent); (ii) Transport and Digital Development (197 projects; 14 percent); (iii) Macroeconomics, Trade, and Investment (148 projects; 10 percent); and (iv) Water (142 projects; 10 percent). On a commitment basis, the pattern is similar (figure F.2). In terms of lending instrument, most of the IBRD projects are funded through investment project financing (figure F.3).

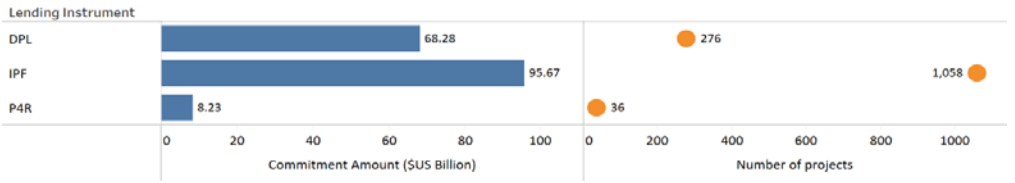
Figure F.2. Distribution of the Universe of IBRD/IDA Lending Projects in Late- and Postdividend Countries by Global Practice, FY05–19



Source: Independent Evaluation Group review.

Note: N = 1,370. FY = fiscal year; IBRD = International Bank for Reconstruction and Development; IDA = International Development Association.

Figure F.3. Distribution of Universe of IBRD/IDA Lending in Late- and Postdividend Countries by Lending Instruments, FY05–19



Source: Independent Evaluation Group review.

Note: N = 1,370. DPL = development policy financing; FY = fiscal year; IBRD = International Bank for Reconstruction and Development; IDA = International Development Association; IPF = investment project financing; P4R = Program-for-Results.

A trend analysis reveals that, over the past 10 years, late- and postdividend countries received the largest number of projects and commitments during the height of the global financial crisis (FY09 and FY10), with a decreasing trend on a commitment basis during FY11–15 that was interrupted in FY16, when commitments spiked to $15.91 billion. After this latter year, a decreasing trend can be observed in terms of both projects and commitments (figure F.4).

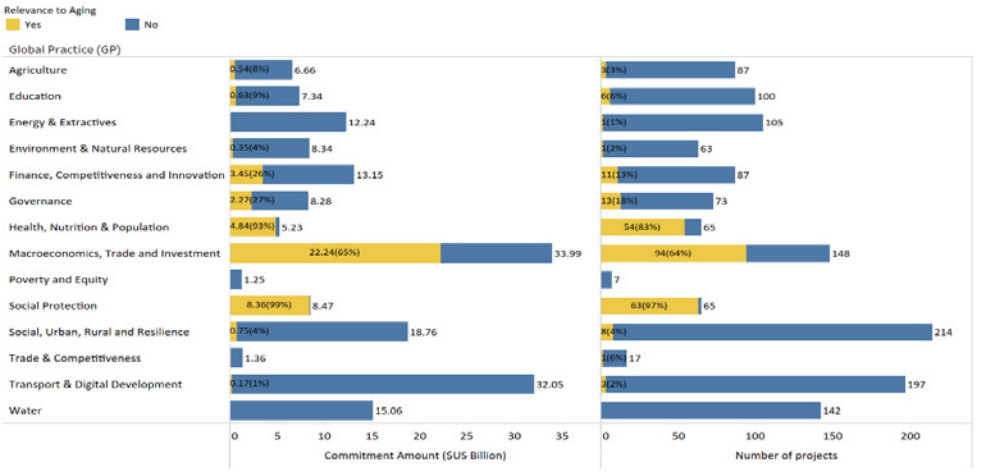
Figure F.4. Evolution of the Universe of IBRD/IDA Lending in Late- and Postdividend Countries, FY05–19

Source: Independent Evaluation Group review.

Note: N = 1,370. FY = fiscal year; IBRD = International Bank for Reconstruction and Development; IDA = International Development Association.

Of the universe of 1,370 IBRD IDA projects, 258 included aging-related policy interventions identified in the evaluation's conceptual framework. These 258 projects represent 18 percent of the IBRD IDA projects approved in late- and postdividend countries between FY05 and FY19 (1,370 projects) and 75 percent of the IBRD IDA projects identified for manual review (343 projects). Figure F.5 shows the share of projects with aging-related policy interventions by Global Practice. Figure F.6 shows the share of projects with aging-related policy interventions by Region.

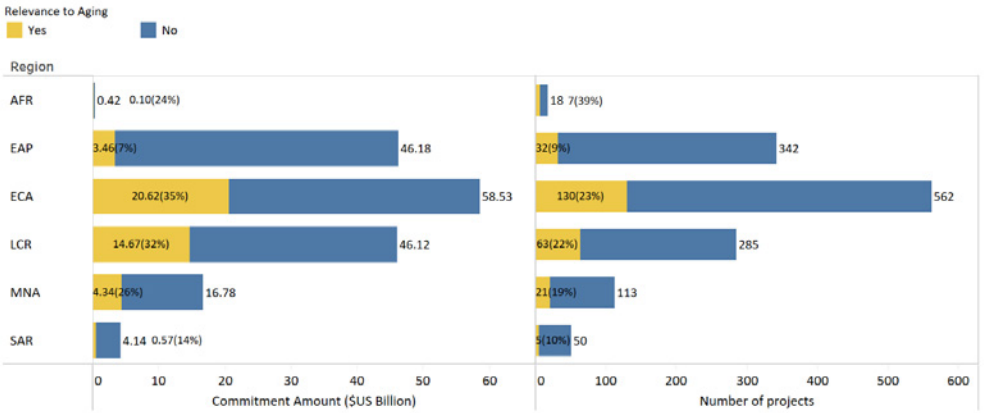
Figure F.5. Share of Relevant Projects in Total IBRD/IDA Lending in Late- and Postdividend Countries by Global Practice, FY05–19



Source: Independent Evaluation Group review.

Note: A project is considered relevant to aging if it supports policy interventions for addressing aging (see figure F.1). N = 1,370. FY = fiscal year; IBRD = International Bank for Reconstruction and Development; IDA = International Development Association.

Figure F.6. Share of Aging-Related Projects in Total IBRD/IDA Lending in Late- and Postdividend Countries by Region, FY05–19



Source: Independent Evaluation Group review.

Note: A project is considered relevant to aging if it supports policy interventions for addressing aging (see figure F.1). N = 1,370. AFR = Africa; EAP = East Asia and Pacific; ECA = Europe and Central Asia; FY = fiscal year; IBRD = International Bank for Reconstruction and Development; IDA = International Development Association; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SAR = South Asia.

Summary of Findings by Selected Sectors

Pensions

The evaluation team identified 79 projects with support for pensions approved during FY05–19 in late- and postdividend countries using a combination of keyword searches and manual inspection of projects in key Global Practices (Jobs and Social Protection; and Macroeconomics, Trade, and Investment), as previously described. Seventy-three percent of all pensions projects were financed through development policy loans and 27 percent through investment project financing; 51 percent of the projects are mapped to the Macroeconomics, Trade, and Investment, followed by Jobs and Social Protection (25 percent) and Governance (11 percent).

The evaluation team coded the projects to identify the main rationale for the inclusion of pension support (including population aging). Of the 79 projects reviewed, the evaluation team found that 29 percent linked the inclusion of pension-related objectives or activities to the need to address population aging. The rationale cited most often for the inclusion of pension support in

projects is to achieve financial sustainability or to create fiscal space (59 percent), followed by "capacity building" (51 percent). The former are mainly development policy loans (87 percent; 41 projects) whereas the latter are half investment project financing (18 out of 40) and half development policy loans (22 out of 40) (table F.2).

Table F.2. Pension Projects by Rationale

Rationale for Inclusion of Pension Support	Number	Percent
Achieve financial sustainability / create fiscal space	47	59
Capacity building / support for designing policy reform options / administrative efficiency	40	51
Improve benefits adequacy / equitability	15	19
Increase pension coverage	10	13
Total	79	

Source: Independent Evaluation Group desk review. A project can have more than one rationale.

Noncommunicable Diseases

The evaluation team identified 45 projects with noncommunicable disease (NCD) interventions approved between FY05 and FY19 in late- and postdividend countries using a combination of keyword searches, manual review of projects in key Global Practices,[4] and relevant theme codes.[5] Once projects were identified, the evaluation team coded the project documents to identify if "population aging" was provided as a rationale for NCD interventions and whether older people were identified as a beneficiary category of project activities.

The team also categorized the projects by approach to reduce NCD burden to identify support aimed at prevention of NCD risk factors. Projects were further coded for (i) NCD screening and early detection, (ii) behavioral changes for prevention and wellness, (iii) health system strengthening to better address NCDs (table F.3).

Table F.3. NCD Lending Projects by Approach

Project Approach	Number	Percent
NCD screening and early detection	23	51
Behavioral changes for prevention and wellness	15	33
Health system strengthening	41	91
NCD screening and early detection + health system strengthening	20	44
Behavioral changes + health system strengthening	15	33
All three	12	27

Source: Independent Evaluation Group analysis.

Note: Projects can contribute to more than one category. NCD = noncommunicable disease.

Long-Term Care

The evaluation team identified 22 projects with long-term care interventions approved between FY05 and FY19 in late- and postdividend countries using a combination of keyword searches and manual review of projects under relevant Global Practices, as previously described. Projects were further coded based on the nature of long-term care: (i) direct support for community-based long-term care; (ii) policy reforms to help meet the growing demand for long-term care; (iii) long-term care services; (iv) direct support for a three-tiered long-term care system (home-based care, community-based care, and institutional care); (v) capacity building for long-term care stewardship and service delivery; (vi) policy reforms to improve efficiency of long-term care services; (vii) technical advice on options to improve efficiency of financing for long-term care; (viii) direct support for day care services for older people (table F.4).

Table F.4. Long-Term Care Projects by Type of Support

Long-Term Care Type of Support	Number	Percent
Direct support for community-based long-term care	11	50
Policy reforms to help meet the growing demand for long-term care services (hospital rationalization to address long-term care needs)	4	18
Direct support for a three-tiered long-term care system (home-based care, community-based care, and institutional care); capacity building for long-term care stewardship and service delivery	2	9
Policy reforms to improve efficiency of long-term care services	2	9
Technical advice on options to improve efficiency of financing for long-term care	2	9
Direct support for day care services for older people	1	5
Total	22	100

Source: Independent Evaluation Group desk review.

Childcare

The evaluation team identified 25 projects with childcare-related interventions approved between FY05 and FY19 in late- and postdividend countries using a combination of keyword searches, manual review of projects in key Global Practices, and an existing portfolio review of childcare projects carried out by the Gender Group for FY10–18 (Haddock, Raza, and Palmisano 2019). The keyword searches and the manual review of projects in key Global Practices yielded 12 relevant projects, whereas the World Bank Gender Group portfolio review identified 16 relevant projects in late- and postdividend countries. The evaluation team overlapped these two sets of projects to create a list of 25 unique childcare-relevant projects in late- and postdividend countries during FY05–19. Finally, using the analytical categories generated by the Gender Group in their portfolio review, the evaluation team coded the projects to identify the rationales for addressing childcare and the different approaches to childcare provision (tables F.5 and F.6).

Table F.5. Rationales for Addressing Childcare in World Bank Projects

Rationale for Addressing Childcare	Number	Percent
Improving child development or education outcomes for children	10	40
Improving labor market or economic outcomes for women	7	28
Improving public service delivery	3	12
Increasing female participation in project activities	4	16
Safeguards compliance	1	4
Total	25	100

Source: Independent Evaluation Group desk review using analytical categories developed by the Gender Group.

Table F.6. Rationale for Addressing Childcare in World Bank Projects by Country

Country	Improving Child Development for Children	Improving Economic Outcomes for Women	Improving Public Service Delivery	Increasing Female Participation in Project Activities	Safeguards Compliance	Total
Brazil	4	0	1	0	0	5
Vietnam	1	2	0	2	0	5
Poland	1	3	0	0	0	4
Sri Lanka	1	0	1	0	1	3
Georgia	2	0	0	0	0	2
Tunisia	0	1	1	0	0	2
Antigua and Barbuda	0	0	0	1	0	1
Bulgaria	0	1	0	0	0	1
Chile	1	0	0	0	0	1
St. Vincent and the Grenadines	0	0	0	1	0	1
Total	10	7	3	4	1	25

Source: Independent Evaluation Group desk review using analytical categories developed by the Gender Group.

Urban Transport

The purpose of this analysis was to assess the extent to which urban transport projects are sensitive to the needs of those with disabilities and older people. To carry out this analysis, the evaluation team relied on already existing evidence from IEG's urban transport evaluation (World Bank 2017), which identified and reviewed 276 ongoing and approved World Bank urban transport projects during FY07–16.[6]

As part of the urban transport evaluation, IEG assessed social inclusion for three disadvantaged groups in the urban transport context (poor people, women, people with disabilities and older people) and found that, across these groups, poor people received the largest share of targeted support, while less attention was paid to the needs of women and people with disabilities and older people (table F.7).[7]

Table F.7. Share of Urban Transport Projects Supporting Universal Access for People with Disabilities and Older People by Country Demographic Type

Country Demographic Type	Yes (percent)	No (percent)	Number
Late- and postdividend	17	83	109
Pre- and early-dividend	4	96	167

Source: Independent Evaluation Group, using data from the Urban Transport evaluation database.

The urban transport evaluation reviewed the targeted interventions to enhance access for those with disabilities and older people and found that many of them had yet to be broadly applied and that achievements were limited to a few cases. Case studies and interviews conducted for the urban transport evaluation revealed that many clients had not yet adopted universal access features in their transport system designs. Projects in the East Asia and Pacific and the Latin America and the Caribbean Regions stood out as most frequently incorporating universal access design features.

With respect to results, the urban transport evaluation found that only four projects that measured improved access for those with disabilities and older people had closed by the time the evaluation was conducted; three of them

(75 percent) were successful. Chile's Santiago Urban Transport Project implemented specific measures for people with reduced mobility, such as audio signaling for blind people, ramps to access stations, and reserved seats in buses. Because of these actions, 80 percent of the Transantiago fleet is now accessible to people with disabilities. In Colombia's Integrated Mass Transit System, the project constructed pedestrian overpasses and access ramps at stations and trunk buses that are completely accessible for persons with disabilities. Peru's Lima Transport Project, however, showed poor results in improving accessibility for persons with disabilities. Several obstacles limiting autonomous and safe access to buses and bus stations were reported, despite the installation of elevators and the equipping of buses with a boarding mechanism to match floor height to platform height.

Migration

The evaluation team identified three projects with relevant migration-related activities approved between FY05 and FY19 in late- and postdividend countries using a combination of keyword searches, manual review of projects in key Global Practices,[8] and relevant theme codes.[9] The goals of these projects were to (i) integrate immigrants into the local economy and social services (Colombia Second Fiscal Sustainability, Competitiveness, and Migration Development Policy Loan); and (ii) promote outmigration from countries with excess idle labor force to countries where demographic changes have shrunk the labor force (Accessing Overseas Employment Opportunities for Moroccan Youth Project and Tunisia Employment Development Policy Loan).

Financial Inclusion

The evaluation team identified nine projects providing support for financial inclusion using the following identification approaches: keyword searches, manual review of projects under targeted Global Practices,[10] and relevant theme codes.[11] Financial inclusion is defined as access to and use of a range of appropriate and affordable financial services, including savings, insurance, payments, and credit. Financial consumer protection and financial capability (also referred to as literacy) are considered essential to ensure safe and beneficial financial access and inclusion.

To classify the type of financial inclusion support provided by the World Bank, the evaluation team developed two analytical categories: (i) whether the project supported access to financial services; and (ii) whether the project supported use of financial services through financial literacy activities (table F.8).

Table F.8. Financial Inclusion by Type of Support

Type of Support	Number	Percent
Access to financial services	3	33.4
Use of financial services (through financial literacy)	4	44.4
Both access and use	2	22.2
Total	9	100.0

Source: Independent Evaluation Group desk review.

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World Bank and IMF (International Monetary Fund). 2016. *Global Monitoring Report 2015/2016: Development Goals in an Era of Demographic Change*. Washington, DC: World Bank.

[1] Initially, the evaluation team attempted to use theme code 64 (demographics and aging) to identify a relevant portfolio, but only one project was identified through this approach.

[2] The team identified 5,760 advisory services and analytics in the 47 late- and postdividend countries (805 reimbursable advisory services and 4,950 nonreimbursable advisory services).

[3] The team reviewed Project Appraisal Documents for investment project financing and program document for development project financing.

[4] Health, Nutrition, and Population; Jobs and Social Protection; and Macroeconomics, Trade, and Investment.

[5] Theme code: noncommunicable diseases (625).

[6] This included projects financed by the International Bank for Reconstruction and Development and International Development Association only, and excluded Recipient Executed Trust Funds.

[7] The Independent Evaluation Group Urban Transport evaluation identified five basic types of projects: four types associated with distinctive transportation modes (roads, conventional buses, bus rapid transit, and metro or rail), and one type focused on upstream activities intended to build policies and sectoral oversight capacity.

[8] Health, Nutrition, and Population; Jobs and Social Protection; and Macroeconomics, Trade, and Investment.

[9] Theme code: migration, remittances and diaspora engagement (136).

[10] Health, Nutrition, and Population; Macroeconomics, Trade, and Investment; and Jobs and Social Protection.

[11] Theme code: financial inclusion (324).

Appendix G. COVID-19 and Aging Populations: What Do We Know? What Can Be Expected Based on Evaluation Findings?

Several of this evaluation's central messages acquire new resonance under the current coronavirus pandemic (COVID-19). This appendix highlights those points, providing key information and lessons about adaptation of resource allocation and services to the needs of older adults and to aging populations. Because the pandemic happened as the evaluation was concluding, the Independent Evaluation Group did not collect primary data in this area; this appendix is based on the emerging scientific and policy literature.

Message 1: Older people are disproportionately vulnerable; health systems must adapt and prepare for greater care needs with consideration for their population's age structure and chronic disease profile.

The IEG evaluation found that the World Bank helped client countries adapt their health systems to their changing demographic structure through projects aimed at improving primary health care. However, much work still needs to be done when it comes to addressing the specific needs of older populations and strengthening public health programs and health promotion and prevention policies that incentivize healthy behaviors for a healthier old age.

Older people are most at risk for severe illness and death from COVID-19. Globally, the case fatality rate for those under age 60 has been measured at 1.4 percent, jumping to 4.5 percent for those over 60 and 13.4 percent for those over 80. In general, the older the age cohort, the higher the fatality rate, though reported rates vary significantly by country (Verity et. al. 2020; Santesmasses et. al. 2020; Ferguson et. al. 2020; McNeil Jr. 2020; Cummings et. al 2020). In the United States, from February 12 through March 16 of 2020, according to the Centers for Disease Control and Prevention, the high-

est percentage of severe outcomes was among those ages 85 and older. Only 31 percent of total US cases over that time period occurred among those older than 65, but the 65+ age group made up 45 percent of hospitalizations, 53 percent of admissions to intensive care, and 80 percent of deaths (Resnick 2020; Garg et. al 2020). As of late November, in the United States, people age 75-84 were eight times more likely to have been hospitalized and 220 times more likely to have died due to COVID-19 than those age 18-29; for those age 85+, hospitalization is 13 times more likely, and death 630 times more likely (Centers for Disease Control and Prevention 2020). From August through mid-November, the same dynamic continued to hold across Europe, where 90 percent of COVID-related fatalities were among people over 60 (Douglas 2020). Richer countries tend to have older population age structures than poorer ones. This pattern helps explain the extent to which more economically developed countries have, thus far, suffered disproportionately from the pandemic (Economist 2020b).

The biological mechanism of COVID-19 infection has been shown to affect older people more severely than those in younger age cohorts. The scientific community's understanding of coronavirus is still evolving. It is commonly assumed, however, that immune system functioning declines with age, making older people more vulnerable to initial infection (Lloyd-Sherlock and Bachmann 2020). Furthermore, the gene expression of angiotensin-converting enzyme 2 (ACE2), the SARS-CoV-2 receptor, has been found to grow in the lung with age (with the exception of subjects on a ventilator) (Santesmasses et. al. 2020; Koff and Williams 2020). In addition, after an infection sets in, the antibodies created naturally by the body can go into overdrive, causing white blood cells to produce molecules called cytokines. The resulting "cytokine storm" may impact one person severely and another hardly at all, but in many older people it promotes an acute inflammatory response – basically, an overreaction to the virus -- attacking the lungs and causing acute respiratory distress syndrome, low blood pressure, circulation collapse, and multi-organ failure (Begley 2020).

The prevalence of risk factors and co-morbidities associated with increased severity of illness and death from COVID-19 increases with age. Preexisting high blood pressure, obesity, and diabetes appear to increase the severity of illness and risk of requiring hospitalization; similar but weaker effects

are noted for heart disease, kidney disease, and chronic respiratory illnesses (Garg et. al. 2020; Wang et. al. 2020; Kluge et. al. 2020; Jordan and Adab 2020). A study of hospitalized patients in New York between March 1 and April 4 found that nearly all hospitalized COVID-19 patients had at least one major chronic health condition, and 88 percent had at least two (Rabin 2020). Only 6 percent had no underlying comorbidity. Of the 105 patients in Italy who had died by March 5, two-thirds had three or more preexisting conditions (Irfan and Belluz 2020). These co-morbidities are more prevalent among older people (Aranco and Garcia, forthcoming), and some studies suggest that comorbidity factors—especially obesity—are even more powerful than age as predictors of complications and death among COVID-19 patients (Gjerstad and Molle 2020; Christensen 2020). Some evidence is emerging that the age-mortality curve is flatter in developing countries due to residential crowding, labor informality, higher prevalence of preexisting conditions, and more limited access to hospital intensive care (Chauvin, Fowler, and Herrera 2020). There is also emerging evidence of longer-term health damage faced by COVID-19 survivors. Permanent effects have already been observed to the lungs, heart, liver, kidneys, and other organs. It is unclear how these effects will interact with existing health conditions in older patients.

Older women appear to be less severely medically impacted by COVID-19 than older men. In the New York study, fewer women were hospitalized, and of those that were, survival was more likely. Age increased the risk of dying for all patients, but that risk "climbed faster and higher for men" (Rabin 2020). The reasons for this sex differential are not yet well understood, though one study suggests that variation between men and women in the number of cytokine-producing cells may be partly responsible (Begley 2020).

Age-related considerations have presented policy makers, health care providers, and regulators with difficult ethical challenges. Human rights concerns emerged early in the pandemic. The imperative for triage in some health systems overloaded with COVID-19 patients has led to ethically controversial calls for automatically excluding some patients from care based on age (United Nations 2020; Coker 2020; Summers 2020; D'cruz and Banerjee 2020). Some government strategies for managing the pandemic have implicitly devalued the lives of older persons, favoring keeping economies open over the safety of vulnerable older populations (Donnelly 2020). At least 48

countries have adopted discriminatory age-based measures that maintain restrictions only for those over a set age threshold as their economies reopen, even in moderate- and low-risk areas for COVID-19 (Sleap 2020). As coronavirus vaccines start to become available, countries are faced with politically charged decisions about prioritizing scarce vaccine access for older people. A focus on mortality reduction would prioritize older adults, but an immediate goal of slowing transmission of the virus would put younger adults at the front of the line (Neimark 2020).

Overall, COVID-19 presents a unique set of age-related challenges to health care systems and providers. A growing body of evidence suggests that presentation of COVID-19 symptoms may vary by age, with older patients exhibiting delirium, falls, fatigue, lethargy, low blood pressure, among other issues, in addition to – or even instead of – the standard markers like fever, dry cough, and shortness of breath (Graham 2020). Furthermore, age-related decline in ability to fight infection means that, even with development of an effective vaccine, older adults may not be able to mount a strong immune response; effective countermeasures to the COVID-19 pandemic must also find ways to improve the immune function of older people (American Federation for Aging Research 2020). Vaccine developers have recognized these issues of age-related immunosenescence (the gradual deterioration of the immune system as individuals get older) and frailty by conducting clinical trials specifically among older people (Mahase 2020; Andrew and McElhaney 2020).

The evaluation found, however, that too many health systems still fail to invest adequately and effectively in measures that could prevent and manage obesity, high blood pressure and diabetes—risk factors that increase with age and have been associated with increased severity of illness and death from COVID-19. More emphasis on prevention, promotion of healthy behaviors, and increased use and access to primary care would help people age healthier and address these conditions when they're younger, which would make them less vulnerable as they age, keep them out of hospitals (or hospitalized for shorter periods of time), decrease their exposure to infectious diseases like COVID-19 and improve their overall well-being.

Message 2: Loneliness and other mental health challenges are common among older people—as discussed by the IEG evaluation. COVID-19-driven

physical distancing measures have unique and disproportionate impacts on older adults. Health and social support systems must anticipate these needs and respond.

Older people may suffer disproportionately large impacts from isolation and physical distancing measures put in place to prevent the spread of coronavirus. A host of demographic factors, including families having fewer children, an increase in childlessness, and young adult migration to urban areas, have increased the extent to which aging parents no longer live near adult children and grandchildren. Even when family members live nearby, older people, especially older women, increasingly reside alone (United Nations 2020; National Institute on Aging 2007). Separation from loved ones and caregivers who cannot visit regularly under physical distancing restrictions can lead to or exacerbate prior patterns of loneliness and depression. Confinement and the resulting disruption of regular routines and social support networks add to this tension. Regular places of socialization, including parks, neighborhoods, community meetings, places of worship, and day centers, may have become suddenly inaccessible. Older people who live with their families may be relatively better off in this respect, but younger family members may also shoulder additional strains during the pandemic and therefore lack sufficient time or resources to devote to elder care (Girdhar, Srivastava, and Sethi 2020). Physically separated family and friends are increasingly relying on video connections to maintain social relationships, but older people are less likely to take advantage of such avenues for socialization; in the United States, the share of people reporting in late March 2020 that they had used an internet-connected device to talk by video with others over the previous two weeks was 71 percent for those ages 30-49, but only 38 percent for those over age 65 (Cubanski 2020). Overall, mental health conditions are often underdiagnosed and undertreated among older adults, and social and psychological isolation among older people during the pandemic can contribute to worsening mental health, though there is some emerging evidence that from a mental health perspective, older adults have been more resilient during the pandemic than other age groups (El Hayek et. al. 2020; Vahia, Jeste, and Reynolds 2020).

Stress related specifically to COVID-19's disproportionate physical health impact on older people and their status as high-risk individuals may cause

additional anxieties, especially if they are exposed repeatedly to disturbing news about the pandemic, or if friends or family have fallen ill or died (Moutier 2020; Lee, Jeong, and Yim 2020). Where older people live together with younger family members, it may be necessary to implement physical distancing within households to prevent the spread of infection to those of more vulnerable age, causing inconvenience and added stressors; this is particularly challenging in low and middle-income countries, where living conditions are often cramped and overcrowded (United Nations 2020; Lloyd-Sherlock et. al. 2020b). Older people may experience fear of contracting the infection, fear of quarantine or hospitalization, fear of abuse by caregivers (in home or residential facility settings), or fear of being isolated in a health facility after becoming infected or ill. Calls to helplines from older people reporting domestic abuse during quarantine have increased in multiple countries (Sleap 2020).

Older people's physical health may be disproportionately affected by non-clinical interactions between co-morbid conditions and COVID-19, driven in part by isolation. Isolation may make older adults less likely to access medical care for chronic conditions, adhere to prescribed regimens of medication, or seek help for non-COVID-19-related acute health problems that may arise (Khimm 2020). Constraints on older people's ability to engage in physical exercise are particularly noteworthy, given that people in older age cohorts may be expected to continue to self-isolate even as lockdown measures are relaxed. Evidence is mounting of increased illness and death due to conditions other than COVID-19 because people are reluctant to access health services, or because those services have become less available (Lloyd-Sherlock and Bachmann 2020; Kaiser Family Foundation 2020; Center for Infectious Disease Research and Policy 2020). One account referred to these excess deaths as a result of people being "not COVID positive, but COVID phobic"; another called coronavirus a "virus of fear" because of the number of people who are dying at home due to reluctance to seek formal medical care (McFarling 2020). Health systems face the challenge of helping older people access treatment and medications for non-COVID-19 conditions, including management of chronic disease, without exposing them to the risk of infection in health facilities.

Food security and access to essential medications is a particular concern for isolated older persons. For those older people who live alone, home and community services have likely been disrupted. Public agencies (senior centers and food banks) and service providers who deliver meals and other goods may be experiencing interrupted or reduced operations. Older people may have limited funds or transportation options to access alternative suppliers. Food insecurity also heightens health risks, especially for older adults, many of whom require special diets to maintain their general health (Goger 2020; Bencivenga, Rengo, and Varricchi 2020).

Older people may face challenges obtaining accurate information about ways to protect themselves from COVID-19 and access relevant services. These challenges may include age-related cognitive limitations, language barriers for speakers of minority languages, illiteracy, or technological issues. Many older people rely disproportionately on television, newspapers, and even radio as their primary sources of information (Zhang and Song 2020). A study of people over age 60 living by themselves in Minas Gerais, Brazil, found that being male, being 80 years of age or older, and having fewer years of schooling were associated with having less knowledge about COVID-19 preventive measures (Tavares, et. al. 2020). Effective pandemic-related communication with older people requires clear messaging, pitched carefully to their level of understanding and technological sophistication, delivered through channels easily accessible to them. Older people are also disproportionately vulnerable to online counterfeits and scams; the US Food and Drug Administration has warned, for example, about fake online pharmacies claiming to sell prescription medicines at discounted prices (Alliance for Aging Research 2020).

As the internet and digital technologies become a primary channel for connection with family, friends, and essential services under pandemic-related restrictions on physical interaction, many older people are at risk of exclusion. As the pandemic has continued, several studies have demonstrated that the use of technology to maintain social connections has helped some older adults withstand strains on mental health (McLean Hospital 2020). In the United States, however, one-third of adults over age 65 say they have never used the internet, and half do not have home broadband services. In the United Kingdom, more than half the adults who have never used the internet are age 75 or older (United Nations 2020; Cubanski 2020). The technologi-

cal challenges for older people are even more pronounced in less developed countries. This age-related digital gap puts older people at disadvantage as online shopping, telemedicine, and the use of technology for social engagement and even facilitation of physical activity become increasingly important (Vahia et. al. 2020). Even in situations where telehealth visits can be established, older patients may require monitoring via specific equipment such as blood pressure cuffs, heart rate monitors, and pulse oximeters; distribution and training patients on the use of these devices presents another set of challenges.

Message 3: COVID-19 exposed multiple weaknesses of facility-based long-term care—including issues of service quality, government regulator and stewardship roles, and elder abuse—and calls for improved approaches that the Bank needs to internalize. The IEG evaluation noted that aging countries need to start planning for the rapidly increasing care needs of their population. Older people have specific social vulnerabilities and care needs that, depending on their living conditions, may be intensified by COVID-19 and require special attention from caregivers.

Many long-term care (LTC) facilities, few of which were intended to provide care or treatment for something like COVID-19, have become incubators of coronavirus infection. Even before COVID-19, infection control was a problem for LTC facilities; an estimated 1.6 million to 3.8 million infections have occurred annually in the 16,000 nursing homes in the United States alone (Pyrek 2017). Studies of care homes in the United Kingdom have shown that respiratory tract infection outbreaks have been more frequent than other types of infections and have spread more quickly across resident populations (Kishkouei, Abel, and Pilbeam 2020). However, LTC facilities are neither designed nor equipped to treat patients with moderate to severe respiratory infection or COVID-19. Their staff are not trained in this area. They do not have the necessary equipment, including personal protective gear, or the physical capacity to isolate patients properly (Gardner, States, and Bagley 2020; Lai et. al. 2020). In low and middle-income countries, long-term care facilities are often unregulated, even operating on the fringes of legality, and often provide care of suboptimal quality (Lloyd-Sherlock et. al. 2020b; Redondo 2020; background paper). Their access to information and resources related to infection control and pandemic response is limited. Never-

theless, as COVID-19 has swept through some LTC facilities, and the surge has overloaded local hospital capacities, some LTC institutions have had to provide palliative care to COVID-19 patients for whom hospital beds have not been available, or who have chosen not to transfer to a hospital. In the United States, as of June 2020, 11 percent of all reported COVID-19 cases and more than 43 percent of fatalities were linked to LTC facilities; in 24 states, a majority of deaths were in or associated with nursing homes (Conlen et. al 2020). As of November 2020, more than 100,000 residents and staff in United States LTC facilities had died of COVID-19, representing 40 percent of all COVID-19 deaths (Chidambaram, Garfield, and Neuman 2020). A Brazilian study estimated that 44.7 percent of all COVID-related deaths in that country, totaling over 107,000 people, would occur in care homes in 2020 (Machado et. al. 2020). The emergence of LTC institutions as COVID-19 "hot spots" has placed their residents and staff at the top of most priority lists as vaccines become available. Some regulators, however, have raised concerns about the lack of clinical trial data specifically for people who are in long-term care; LTC residents have a high rate of medical events under any circumstances, but if these events are perceived as side effects from vaccination, overall confidence in the vaccines could be undermined (Branswell 2020).

Maintaining adequate staffing in LTCs during the COVID-19 pandemic is uniquely challenging. Staff are at high risk when those under their care become infected with coronavirus. Many of these low-paid staff work at more than one facility, creating cross-contamination. If workers become infected, they must be quarantined. They face heightened stress, anxiety, and other mental health challenges due to the pandemic. Some staff members may refuse to continue reporting for their shifts for fear of becoming ill. Others have parenting or other caregiving responsibilities at home that may prevent them from coming to work. The staffing shortages resulting from all of these factors may produce declining levels of care for residents, further raising the risk of spread of infection or neglect of non-COVID-related needs (Sedensky and Condon 2020).

Residents of LTC facilities may present heightened care needs during the pandemic. Older people who were already experiencing cognitive decline or dementia, or who were highly care-dependent, may become more "anxious, angry, stressed, agitated, and withdrawn" during isolation (United Nations

2020). Residents may be distraught or confused about changes in visitation or by the sudden and ubiquitous wearing of masks among staff. Facility policies on visitation and care face the challenge of balancing the protection of residents with the need for social connection with family and loved ones. Restrictions on visitation may present a "medical problem in its own right" due to residents' feelings of abandonment and confusion, and concomitant depression, weight loss, or disruptive behavior (Gardner, States, and Bagley 2020).

LTC facilities are now faced with the immediate task of enhancing infection control procedures to cope with the pandemic, and government regulators must respond to intensified needs for control. These measures include designation and training of additional infection control officers; enhancing training and equipment for hand hygiene (including hand sanitizers) and use of barrier precautions and personal protective equipment (gloves, gowns, and masks); increased and more intensive disinfection of surfaces; limitations on staff entry and reentry, including nurses and aides working across a number of locations; and provisions for physical isolation of potentially infected residents and staff (Koshkouei, Abel, and Pilbeam 2020; Crotty, Watson, and Lim 2020).

The World Bank has drawn lessons from the immediate crisis in long-term care with an eye toward longer-term strengthening of social and older people care systems and a focus on the important role of the state. It has highlighted, for instance, the needs to strengthen the health and safety of the social and aged-care systems for the frail older people and for persons with disabilities; to improve government stewardship of the care market; and to use technological solutions to ensure continuity of care and combat isolation (Rutkowski 2020). An analytic note reviews measures that have been taken internationally in the areas of prevention, control, resources, coordination, management, reporting, communication, and planning to safeguard older people living in residential facilities during COVID-19, with specific attention to implications for Malaysia having to do with strengthening of cross-sectoral links, resource mobilization, clarity of guidelines and procedures, and capacity development (World Bank 2020). Such measures are particularly important in developing countries, where long-term care facilities are predominantly operated by the private sector, and many remain

inadequately covered by coherent, coordinated regulation and quality assurance (Lloyd-Sherlock, et. al 2020).

Message 4: The economic impact of the COVID-19 pandemic will reverberate for a long time. In particular, the negative impact for pension systems and implications for those who need to collect their pensions soon should not be underestimated.

The IEG evaluation underscored that many aging countries have labor markets with a significant share of workers who are in informal and precarious jobs or have intermittent work histories (such as women), and therefore unable to save for later in life. Ensuring coverage and adequacy of pensions will require promoting longer working lives, incentivizing private savings, and establishing social assistance and noncontributory pensions to complement traditional contributory pension systems. COVID-19 will further disrupt pension accumulation and likely widen economic inequalities.

Older adults are particularly vulnerable to the economic impacts of the COVID-19 pandemic. Because the risk of severe illness from the disease increases with age, older workers may experience a relatively large incidence of pandemic-related sick leave compared with younger age groups. This was the case in the United States from January through September 2020, with the greatest losses at the lower end of the occupational earnings distribution (building and grounds cleaning and maintenance, food service, and personal care services) (Li 2020). Pandemic-related shutdowns have forced businesses to close and lay off workers, reducing tax revenues and shrinking public finances. A HelpAge India survey of over 5,000 people age 60 and above in 17 states and four Union Territories of India, for example, found that 65 percent had experienced income loss due to lockdown during the first half of 2020 (HelpAge India 2020). As financial markets around the world contract, aging investors are financially vulnerable if the pandemic leads to a sustained drop in their income and retirement savings (Neuman and Koma 2020). Older adults with savings in stocks or other volatile investments have fewer years than younger counterparts to recover lost savings after this economic downturn, and their retirement funds are more likely to be negatively impacted. In addition, older workers who lose their jobs as a result of business shutdowns – especially the large number of older workers in informal, temporary, irreg-

ular jobs -- may have a more difficult time than their younger counterparts finding alternative or replacement employment, especially at their previous level of pay. Many may be forced to collect public pension payments at an earlier age than they had planned, to offset lost wage earnings, but this may (depending on the structure of the pension scheme) result in lower benefit payments for the rest of their lives. Many may turn to jobs with unsafe working conditions and inadequate infection control procedures. Retirees may have more difficulty accessing emergency financial protection schemes if those measures target current workers, or if they require the use of bank accounts for depositing payments. All of these problems are exacerbated in developing countries with higher levels of informality.

COVID-19's unprecedented stress on local and national economies may impact the sustainability of public pension plans. Reductions in tax revenue have pushed public pension plans in many countries and localities to low funding levels even as demand for health, welfare, and public safety services have increased, "requiring more government resources at a time when states and localities can ill afford it" (Biggs and Norcross 2020). The World Bank has highlighted four key policy questions for governments dealing with the pandemic's impact on pension systems: how to alleviate the impact of a sharp drop in returns on financial assets; how to provide immediate support to pensioners; whether or not to maintain pension contributions in the immediate term; and whether or not to use pension savings to support younger workers (Rutkowski and Mora 2020). Questions around the sustainability of public pension schemes have increased anxiety among older people about future benefits. In Argentina, for example, an announcement in early April that banks would temporarily reopen for just a few hours to enable pensioners to collect benefits resulted in long queues, exposing older people to coronavirus infection among those crowds (Redondo 2020).

Message 5: The COVID-19 pandemic magnifies existing inequalities, including those related to gender. Older women may be experiencing lower mortality rates directly from COVID-19, but they are more exposed along other dimensions. Caregivers are mostly women, most often working in low-paid, informal, or nonpaid capacities. Younger women are particularly impacted from a socioeconomic perspective and due to existing gender norms.

These consequences carry across women's entire lifetimes, into their older years. The IEG evaluation highlighted that population aging unevenly impacts different groups of people. Women in particular are negatively impacted because of vulnerabilities that COVID-19 has deepened even further.

Older women are disproportionately vulnerable to the social risks COVID-19 presents to older adults. On average, women live longer than men. Older women are therefore more likely to live alone than older men, less likely to be cared for by a co-resident family member as they lose the capacity to care for themselves, and more likely to become resident of a care home. As a result, older women are at heightened risk of isolation and loneliness during pandemic-related restrictions on mobility and social interaction. They also have less access to the technologies commonly being used to replace face-to-face interactions during government-mandated lockdowns.

The COVID-19 pandemic exacerbates multiple dimensions of women's economic vulnerability across their life spans. Women are already more likely than men to be in jobs with lower pay and less security, and less likely to have access to financial tools such as credit and banking. In contrast to other recent financial crises (such as the 2008 financial crisis that hit construction and manufacturing hardest), COVID-19-related confinement and distancing measures are disproportionately impacting female-dominated industries, including retail, hospitality, travel/tourism, and food/beverage services. Over the longer term, women's employment in industries farther down the supply chain, especially the garment industry, may be slow to recover (Queisser, Adema, and Clarke 2020). Women also make up about two-thirds of the health workforce worldwide, affecting them differently depending on their specific circumstance: those directly involved with COVID-19 patient care are considered to be essential workers and therefore face long work hours, child care challenges in an environment where many day cares have closed, and ongoing risk of infection; many more not directly involved with pandemic-related health care are experiencing job loss due to contraction in demand for nonessential health services (Torry and Evans 2020). Job disruption and loss among younger women during the pandemic affects not only their current earnings but also their savings and pension contributions and therefore their longer-term financial security as they reach old age.

Women's health is negatively affected by COVID-19. As governments and health systems reallocate policy priority and resources to addressing the immediate needs of the pandemic, other health care needs, including sexual, reproductive, and maternal health, may become marginalized (United Nations 2020). Furthermore, isolation measures are increasing reported incidence of gender-based violence, as women may be confined in the same spaces with their abusers, and support services for survivors are disrupted or inaccessible.

The COVID-19 pandemic may stall or reverse hard-won progress on gender roles. Women already bear disproportionate responsibility for child and family care and household upkeep. With school closures forcing many families into unexpected round-the-clock child care and home schooling tasks, as well as possible increased needs for elder care, women's hours spent on this unpaid labor are increasing, already leading many to exit the paid labor force (Grown and Sánchez-Páramo 2020). High levels of informality had rendered women's unpaid labor relatively invisible in the developing world even prior to the pandemic, taking a toll on their economic, physical, and emotional health (Menon 2021). Unless caregiving occupies a central role in plans for social and economic recovery from COVID-19, it is not an exaggeration to speculate that "across the world, women's independence will be a silent victim of the pandemic" (Lewis 2020; see also Gates 2020).

Challenges related to long-term care disproportionately impact women. Women are highly overrepresented among those who provide both paid and unpaid care for older adults, "often under inadequate and exploitative conditions" (UN Women 2017). The unpaid care work done by women – including the "spouses, daughters, or daughters-in-law who form the backbone of all LTC systems" – is enormous, valued for the United Kingdom alone, when calculated at market rates, at over $70 billion in 2014 (UN Women 2017). Many of these unpaid caregivers experience socioeconomic stress as they cut back on paid work to tend to family members. The paid LTC workforce encompasses a wide variety of circumstances, from domestic workers with no formal training to highly skilled geriatric professionals employed in hospitals and LTC facilities. Across this spectrum of skill, status, and remuneration, women account for the majority of personnel, making up 90 percent of the workforce in OECD countries (OECD 2020). Many caregivers are themselves

older people. Under pandemic conditions, these women face compounding challenges and risks, including to their physical health; in the United States, as of early May, one-third of all COVID-19 deaths have been among nursing home residents or workers (Yourish et. al. 2020).

Message 6: The COVID-19 pandemic highlights the importance of data for better preparedness. Data gaps complicate country responses and planning.

The IEG evaluation highlighted important gaps in available data on the health and overall well-being of older people, especially in developing countries. The evidence on the links between aging and health is especially thin on: (i) the determinants of healthy aging; (ii) the evolution of health and functionality as people age; (iii) the changes in health inequalities among older adults over time and across and within countries; and (iv) the needs and preferences of older adults regarding health care and long-term care services. More granular and specialized data are needed on disability, functional dependency, cognitive status, mental health, and use of health care services. The World Bank has a role to play to improve collection, standardization, access, and use of these data to support countries to better plan for population aging, including responding to health emergencies like the current pandemic.

Although some data collection efforts are ongoing, there are significant holes and inconsistencies in the available information on aging adults' experiences during the pandemic and the multiple, intersectional impacts of the pandemic on aging populations. The impact of coronavirus on older people's physical and psychological health, on delivery of geriatric health care and social services, and on survivors' health in the longer term is far from well understood (OpenSAFELY Collaborative 2020). Data on the pandemic's social and economic effects should be disaggregated by age so that the specific impact on older adults can be analyzed. It will also be important to collect behavioral data on how older populations have complied and coped with lockdown and physical distancing requirements, and what health care services they have foregone (Lawson 2020).

Data gaps are particularly pronounced in LTC facilities. For a variety of reasons, many COVID-19 deaths in care homes have gone unreported (Economist 2020a). Key data collection efforts will center around LTC facilities' infection control and preparedness efforts before, during, and after the

pandemic, including patterns of physical access and staffing, availability and accuracy of coronavirus testing, communications with residents and families, and interactions with health and regulatory authorities.

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