Approach Paper

World Bank Support to Aging Countries

May 28, 2019

1. Introduction

1.1   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 toolkit to provide an adequate response? This proposed evaluation is the first at IEG to assess the World Bank contribution to diagnosing client countries' demographic issues related to population aging;[1] 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.

2. Background and Context

2.1   Population aging is rapidly becoming a prominent issue in many developing countries. Thanks to dramatic improvements in nutrition, sanitation, health, education and, more generally, economic well-being, longevity has increased everywhere in the world while fertility has decreased in most countries, especially in Asia.[2] As a result, aging, which seemed to be until recently 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. 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 cycle in the coming decades. In fact, according to the United Nations, population aging is one of the most significant trends of the 21st century (UNFPA 2012).

2.2   The pace at which this phenomenon is unfolding in the developing world is striking. United Nations estimates show that the number of people aged 60 and above increased from 607 million in 2000 to 901 million in 2015 (an increase of 48 percent) and it is projected to increase to 1.4 billion in 2030 and to 2.1 billion in 2050 (UN 2015a). Most middle-income countries in East Asia are aging at record speed, much faster than Europe and the United States did last century (transitioning from young to old in 20–25 years instead of 50–100 years) (see "aging" definitions in box 2.1).[3] Vietnam, for instance, entered the aging phase in 2017, when the share of persons aged 60 and above reached 10 percent (UNFPA 2011); the projected growth of its elderly population between 2015

and 2030 – over 90 percent – is one of the highest in the world (UN 2015a).[4] The map in figure 2.1 clearly shows the magnitude of aging as a growing global phenomenon.

Box 2.1. When Is a Country "Aging"?

The United Nations refers to the share of the population over 60 to define how old a country is. For developed countries a line drawn at age 65 is preferred, because this is normally when people can claim social security. Thus, a country is defined as "aging" when the share of people aged 65+ is above 7 percent, "aged" when it is 14 percent or more, and "super-aged" when it exceeds 20 percent. Both cut-offs are arbitrary, however, because they do not consider how healthy and functional the so-defined elderly are. Other definitions are used, such as the median age, or the old-age dependency ratio, that is the ratio of older dependents (people older than 64) to the working-age population (people aged 15–64). The Global Monitoring Report (GMR) 2015/2016 (World Bank 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 in four stages of the "demographic transition": pre-dividend countries (where fertility is greater than 4 births/woman); early dividend countries (with fertility lower than 4, but still increasing working age population); late dividend countries (with shrinking working-age population, but where fertility fell only recently); and post-dividend countries (with shrinking working-age population and where fertility fell below replacement level, or 2.1 births/woman, three decades earlier). The last two stages characterize aging countries. This evaluation adopts the GMR definition to select aging countries.
*Source: IEG*

2.3   Population aging is a great achievement of development, but its implications for growth, individual well-being, intragenerational equity, and the inclusiveness of the development process need to be understood and addressed. Economic growth may be affected via changes in the labor markets, productivity, consumption, savings, and investments. Population aging may threaten the fiscal and social sustainability of the social assistance and pensions systems. It has implications for gender equality and the social contract across generations. Aging societies need to re-think how the elderly access services and how cities are organized. In sum, population aging presents the opportunity for longer and more prosperous lives, but "to turn this challenge into an opportunity requires a significant change in a society's mindset and policies" (Holzmann 2013, p. 3).

2.4   Population aging can put downward pressures on growth, because some of the fast-aging countries are key contributors to global GDP, such as China, Russia and Brazil.[5] 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).[6] 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 assets accumulation (Lee 2016) and how public policy reacts and behaviors adjust (Lee and Mason 2017).[7]

Figure 2.1. Proportion of population aged 60 or over in 2015 and 2050
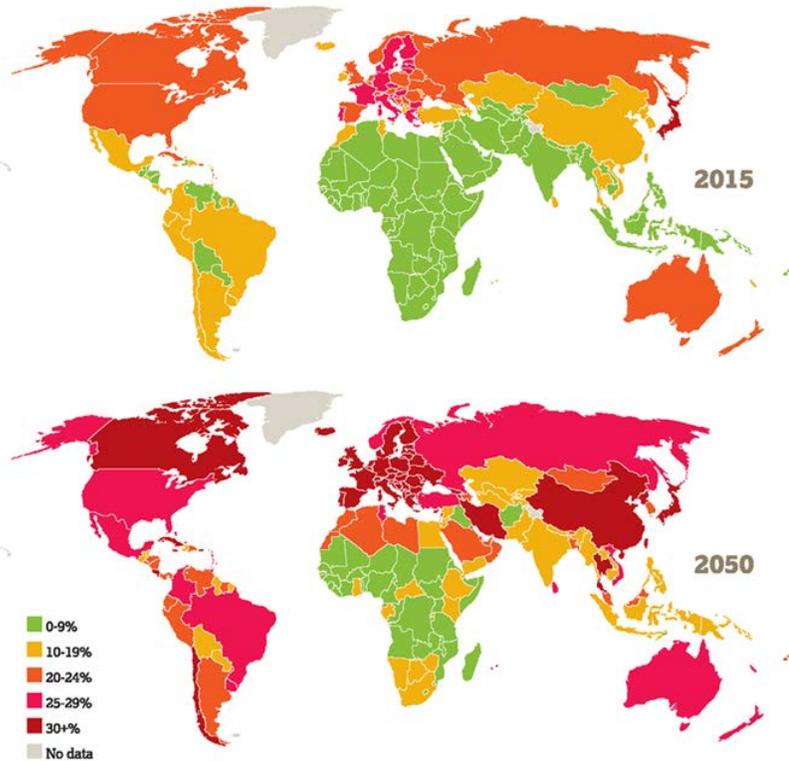
Source: UN 2015b

2.5   Population aging may also 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 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 the elderly 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 depending on the coverage of the pension and health systems; the pervasiveness of informality; the magnitude of rural-urban migration; and preferences and attitudes towards co-residence, intergenerational support, and female labor force participation. In China, for

instance, despite impressive economic growth during the past three decades, the rural elderly, accounting for about 60 percent of all elderly, remained poorer and more vulnerable than the urban elderly, owing to the large rural-urban disparities, low savings, lack of pension, and heavy reliance on family support (Cai et al. 2012).

2.6   Population aging can also affect intergenerational inequalities. An increasing share of elderly 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 the younger cohorts (to address the fiscal burden of aging) affect the implicit social contract across generations and may be a source of social tensions.[8] Ultimately, intergenerational inequalities depend on how support for the elderly is provided for in a given society, including the extent of social programs, the prevalent familial systems and patterns of co-residence, and the allocation of savings and consumption across the life cycle (see Lee and Mason 2011, Lee 2016).

2.7   Population aging has important implications for gender equality. Older women face a higher risk of poverty than men because of many factors. Because women have 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 working age. Promoting female employment is therefore essential to close gender gaps in both working age and old age (World Bank 2012a). It is also a potential solution to support employment in aging societies. Yet, in aging societies there is more demand for women's care work, 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 Group 2015). Adequate public policies are needed to provide elderly care and support female paid employment, thus addressing the specific vulnerabilities that an aging society entails for women (OECD 2017).

The World Bank Group's Role and Contribution

2.8   Aging is increasingly becoming an important area of strategic interest in the World Bank Group. Although there is no explicit "aging strategy," many strategic documents refer to the urgency of addressing demographic issues related to aging. The implementation update of the World Bank Group's Forward Look document (World Bank Group 2018a) 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. It also refers to middle-income countries' (MICs') "unresolved development challenges" and signals that "…many MICs have lost their demographic dividend or will soon, and their pension and social protection systems are a rapidly rising financial burden…." (World Bank Group 2018a, p. 4). The Bank Group Capital Package (World Bank Group 2018b) highlights ensuring healthcare for an aging population and preventing noncommunicable diseases (NCDs) as a prominent part of the "Improving Human Endowment" pillar of the gender strategy (World Bank 2018 p. 20).

2.9   Efforts have been made to gain a deeper understanding of the implications of aging for growth, equity, and poverty reduction. The 2015/16 *Global Monitoring Report* (GMR) (World Bank and International Monetary Fund 2016) discusses population aging as part of a broad, comprehensive framework that defines the interplay of demographic patterns and their implications for development. The report proposes a four-category typology of countries based on their stage in the demographic transition (see box 2.1) and identifies policy measures for each category. It argues that, for the world to stand a better chance of ending extreme poverty and lifting the well-being of the lower-income people (that is, to achieve the Bank Group's twin goals) aging countries need to adapt their policies and institutions. This report comes 20 years after the first report on aging, *Averting the Old Age Crisis* (World Bank 1994), which had taken a narrower focus on the policy options, that is, reforming old age financial security systems to meet the goal of protecting the old while avoiding negative impacts on growth.[9]

2.10   At the regional and country levels, several World Bank reports have identified specific challenges related to aging (box 2.2 and Appendix D and Appendix E).[10]

Box 2.2. Examples of Regional and Country Work

Three regional flagship reports present in-depth analysis of the respective regions' aging situation and challenges. *Population Aging: Is Latin America Ready?* (Cotlear, ed., 2011), *Live Longer and Prosper* (World Bank 2016a), and *Golden Aging* (Bussolo and others 2015) highlighted the importance of enacting policies in a timely manner in Latin America and the Caribbean, East Asia and the Pacific, and Europe and Central Asia to anticipate any potential negative effects of population dynamics and to transform challenges into opportunities.

Several country-specific reports and Systematic Country Diagnostics have analyzed the main challenges related to aging; consequently, aging has been addressed in many country strategies. Half of the most recent country strategies approved in aging countries (as per GMR definition) recognize "aging" as an issue; almost all of them refer to the importance of World Bank support to address it. See Appendix D and Appendix E for more details.
Source: IEG.

2.11   The World Bank has a long tradition of providing support to help client countries face specific aging challenges. Lending and technical assistance have been provided during the past decades for implementation of pensions reforms and for preventing and addressing NCDs and, more recently, addressing long-term care needs. In the period 1984–2005, the World Bank assisted 68 countries reforming their pension systems through more than 200 loans and credits (IEG completed an evaluation of this portfolio in 2006, OED 2006). Seventy-five additional lending operations with a Social Insurance and Pensions theme code were approved in the period FY05–19 in 45 countries. In addition, in the period FY05–19 91 operations were approved in 44 countries with a NCD thematic code.[11]

2.12   World Bank support other than for pension reforms, NCD, and long-term care is hard to unequivocally ascribe to a strategic "aging approach"; yet it is relevant in addressing issues affecting aging countries. For example, fiscal incentives and other policies designed to boost female labor force participation are often promoted to close gender gaps in employment,[12] while also addressing aging-related issues. Increasing the efficiency of social spending may be motivated by the increasing fiscal pressures in resource-constrained environments but may also help alleviate the fiscal cost of aging. Supporting lifelong learning is often aimed at active workers who need to re-orient their professional careers, but it can also help the elderly to remain active and productive.

2.13   The World Bank has also conducted policy dialogue centered on aging issues at the regional and country levels, underpinned by analytical work and complemented by advisory work. A stocktaking of active and completed regional, subregional and country Advisory Services and Analytics (ASAs) with analytical focus on aging during the period 2005–16 identified 39 activities and more than 130 World Bank publications.

2.14   IEG evaluation of issues related to aging has been very limited. Apart from an evaluation of pension reforms (OED 2006) some recent evaluations cursorily assessed how well Bank Group operations responded to the needs of elderly populations (Appendix C).

3. Purpose, Objectives, and Users

3.1   This evaluation will inform the World Bank Group's Board and Management on the relevance, coherence, and operationalization of the World Bank support to aging countries and contribute to the future refinement of this line of work. The World Bank is increasingly called to offer comprehensive solutions to the deep and systemic socioeconomic challenges its clients are facing because of population aging.[13] Providing adequate responses to aging countries will become more of a priority as the phenomenon is accelerating.

3.2　　This evaluation has both an accountability and a learning objective. On the accountability side, the evaluation will assess how the past and current analytical, advisory, and operational work in aging countries meet the needs of an aging society. The need for such an assessment was first highlighted by management in response to the recommendations of the IEG Health, Nutrition, and Population evaluation (World Bank 2009).[14] This importance was subsequently confirmed during IEG work program consultations with management. On the learning side, the evaluation will discuss how the World Bank can mobilize its resources in a timely way to provide relevant and comprehensive responses to the needs of aging countries, based on the evaluation findings. Improving the World Bank's capacity to respond to its clients' most sophisticated requests related to their aging challenges is especially relevant today as the World Bank has committed to ramp up its engagement with lower middle-income countries under the World Bank Policy Package Proposal and to increase its support to sharing development solutions for greater impact.

3.3　　The evaluation findings are expected to serve as a learning opportunity for World Bank teams working in a wide range of countries. Although the topic is of direct relevance to country directors and other staff working in regional Vice Presidency Units (VPUs) with high numbers of aging countries (Europe and Central Asia) and regional VPUs where aging is rapidly becoming a major issue (East Asia and Pacific and Latin America and the Caribbean), the lessons derived from this evaluation are of interest to other regions (Sub-Saharan Africa, the Middle East and North Africa, South Asia) as the aging process accelerates worldwide.

3.4　　Given the multisectoral nature of the subject and broad set of policies it elicits, intended users of this evaluation include several Global Practices (Health, Nutrition and Population; Social Protection and Jobs; Education; Macro Trade and Investment; Poverty and Equity; and Social Urban Rural and Resilience) and Global Solutions Groups (Population and Development; Healthy Societies; Pensions and Social Insurance; Social Inclusion; Gender; and Skills). The evaluation team will engage with a wide array of relevant technical groups, teams, and experts during the preparation of the report.[15]

3.5　　The external audience includes client countries themselves; international Population and Aging Institutes; agencies working on aging such as the Organisation for Economic Co-Operation and Development (OECD), the European Commission, specialized United Nations agencies such as the United Nations Population Fund (UNFPA) and the United Nations Commission for Europe (UNECE); the World Health Organization (WHO); the International Monetary Fund (IMF); and other donors active in this agenda such as the European Union, Japan, and the Netherlands.

4. Conceptual Framework

4.1   Based on the discussion presented in the first section, it is possible to map the channels through which population aging can affect a country's development outcomes (figure 4.1). The conceptual framework will be refined as part of the evaluation's work based on the findings of a structured literature review (see next section) aiming at a broader understanding of the potential impacts and opportunities of the aging process. Figure 4.1 identifies the World Bank's main entry points.

4.2   Population aging is the result of falling fertility rates, declining mortality, and increased longevity (yellow box). This has implications for gross domestic product (GDP) growth, overall well-being and economic and social equity (purple box), through the channels discussed in the previous background section (such as 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 – light blue box).

Figure 4.1. Preliminary Conceptual Framework
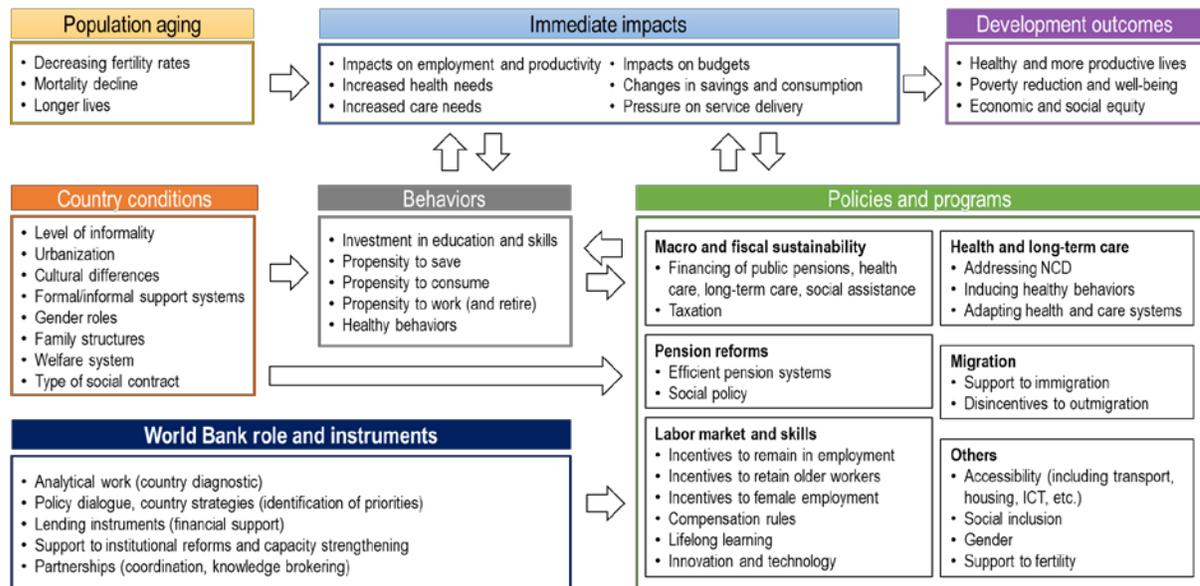
Source: IEG

4.3   The cumulative effects can be positive or negative depending on how behaviors change and policies adjust. First, the increase in the elderly 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 (gray box).[16] 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.

4.4   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 (green box). How deep and widespread these interventions should be depends on countries' conditions, such as the degree of formalization, structure of support systems, the existing level of urbanization and spatial disparities, and societal expectation regarding care provision and gender roles (red box) and the stage of the demographic transition (including how fast the society is moving from "aging" to "aged").

4.5   Potential policy responses identified by the 2015 GMR and other regional reports are here classified under five main headings, and a miscellaneous category (green box). At the *macro level*, fiscal reforms and adjustments in social protection systems are necessary to increase efficiency, possibly without increasing taxes. Decisions on whether to opt for unfunded or funded PAYG *pension systems* have to be made, including on how to deal with their implications in terms of fiscal liabilities, investment of pension assets, labor market distortions, and distributional equity – among other aspects. Pension reforms should maintain an effective social safety net, while avoiding an increase of labor costs and downward pressures on competitiveness and job creation. They should also aim at providing coverage for the large informal sector characteristic of most client countries. *Health care systems* need to focus on preventing and managing NCDs 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 to innovation and technology to support productivity in a context of declining employment should be considered. Pro-*immigration* policies can counteract the decrease in working population. Other programs can aim at increasing fertility. And, improving "accessibility" (a broad category including access to information, accessible building, urban planning, affordable housing and services, and public transport), and ensuring social inclusion of the elderly need to be addressed. Gender considerations should be pervasive when designing and implementing any policy and program related to aging.

4.6   The World Bank has been using multiple entry points to support client countries undertake the various policies and programs referred to in figure 4.1 (dark blue box). First, it has contributed to generating knowledge through analytical work. The regional- and country-level reports focusing specifically on aging (and referred to in the background section) typify 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 Bank Group has assisted countries in defining priorities for policy and program interventions, as reflected in policy dialogue and country partnership frameworks. Third, the World Bank has provided financing and technical assistance to clients – through its different lending instruments – to undertake reforms (including institutional reforms) and implement programs. The World Bank has also promoted strategic partnerships to advance specific policy issues with other institutions engaged in the aging agenda, such as WHO, UNFPA, OECD, EU, and various bilateral donors.

5. Evaluation Questions and Scope

5.1   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 sub-questions, each covering three underlying questions:

1. How well does the World Bank diagnose aging-related challenges in client countries? Specifically:

    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? Specifically:

    a. How comprehensive and timely are the solutions (policy options as well as operational work) 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 GPs?

    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?

5.2   The evaluation won't exclude any sector a priori, although it can be expected – based on the preliminary work conducted for this approach paper – that some sectors will be more prominently represented than others (namely the human development sectors). The evaluation will therefore start by mapping the World Bank's analytical,

advisory, and operational work on aging, which may be "buried" in a variety of sector-specific work.

5.3   The evaluation will not assess the work of IFC. The evaluation acknowledges that the private sector may be providing services to the elderly, and that age discrimination in the workplace is addressed in IFC performance standards. However, the evaluation will limit its focus on the work of the World Bank to keep the scope manageable. Yet, it will highlight situations where the diagnostics or strategic programming point to opportunities for the private sector.

6. Evaluation Design

6.1   The evaluation will use 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 one or two decades. The evaluation has selected as primary focus all the client countries that the 2015 GMR identified as being in the late or post-demographic transition phase. These include 38 "late-dividend" countries and 9 "post-dividend" countries, of which 22 in are in Europe and Central Asia, 13 are in Latin America and the Caribbean, six are in East Asia and the Pacific, 3 in the Middle East and North Africa, 2 in Sub-Saharan Africa, and 1 in South Asia (see Appendix B). In addition to these 47 countries, the population of interest will also include about 10 "early-dividend" countries where the aging process is accelerating and that are the next in line to become "late-dividend" countries based on the GMR data.[17] This group of (tentatively) 57 countries will be the reference population for the evaluation. Including countries where the aging process is not yet pressing is important to assess how well-timed the World Bank's support is to help anticipate and preempt aging issues and to transfer lessons from countries that have already aged.[18] Where appropriate, the evaluation will consider a regional or sub-national focus (when issues or policies are better understood at this level – as may be the case for migration, for example).

6.2   The evaluation will use a multilevel design. Data collection and analysis will occur at two levels: (i) for the whole reference population and (ii) for selected countries. The country case analysis is the bedrock of the evaluation, because it is at the country level that the World Bank tailors its support. The evaluation will select a group of 8–12 countries from the reference population to maximize variation along the following three dimensions: (a) the nature and magnitude of the World Bank's portfolio (so as to represent countries with little World Bank engagement and those with strong World Bank engagement); (b) specific macro-characteristics, prominently, how advanced a country is in the aging process, and other relevant characteristics, such as in- and outmigration, healthy life expectancy, female labor force participation, and old age

income security; and (c) regional representation. To the extent that a certain level of convergence of findings across countries will be observed, such heterogeneity can allow for some degree of generalizability. The team will also consider testing emerging findings from case studies on other countries in the reference population to assess convergence and increase generalizability of findings.

6.3   The evaluation will use a mixed-methods approach that relies on both quantitative and qualitative methods. It rests on the following building blocks: structured literature review; structured document review; data analysis; portfolio review; semi-structured key informant interviews and focus groups; and client surveys. Specific methods are described below under each of the main data collection and analysis methods. Appendix A highlights which method will be used to answer which question.

6.4   A **structured literature review** will be used to identify the main policy areas associated with aging. It will focus on policies and interventions aimed at attenuating the potential negative socio-economic impacts of aging or leveraging its opportunities. It will follow clear search criteria and inclusion and exclusion rules based on relevance and quality parameters. The team will synthesize the evidence from the structured literature review and use it to refine the conceptual framework (figure 4.1) and construct a "benchmark" to position the World Bank's approach (question 1b).

6.5   The **structured document review** will take stock of the World Bank's diagnostic work on aging in relevant regions and countries; technical assistance and Reimbursable Advisory Services; strategic work (including Systematic Country Diagnostic and Country Partnership Framework) for the reference population and at the country level; and of activities related to ongoing partnerships. At the level of the reference population, the structured document review will consider the main flagship reports, while it will be more granular at the level of countries selected for the case-based analysis.[19] The structured document review will be an input to all evaluation questions.

6.6   **Data analysis** will be conducted to profile different groups of countries and country contexts. Countries will be categorized based on their specific characteristics, especially with respect to their aging stage, but also relevant features such as in- and outmigration, healthy life expectancy, female labor force participation, and old age income security; this exercise will support the selection of country cases and will complement the analysis of client needs and priorities (question 1a). Relevant (aggregate) data will be identified through the structured literature review.

6.7   A **portfolio review analysis** will detect and analyze **"aging-sensitive" operations.** For the reference population, the exercise will allow for an overall mapping

and description of an aging-sensitive 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). More detailed portfolio review analysis will be conducted at the country case level to assess how internally coherent the solutions proposed by the World Bank are – that is, whether its country-level diagnostics, country strategies, operations, and advisory work logically derive from each other (to respond to question 2b).[20]

6.8   **Semi-structured key informants' interviews and focus groups** will be used strategically throughout the evaluation to guide the literature review, support portfolio reviews and analysis, and complement findings from other sources. Key informant interviews will help identify relevant operations and advisory work that may escape a more traditional scanning of the portfolio. At the country level, key informant interviews and focus groups will help answer questions associated with the identification of country needs and priorities (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 and priorities (questions 2a and 2b). They will also be used to assess the positioning of the World Bank with respect to other actors (question 2c).

6.9   **Client surveys** will be used, at the country level, to assess client needs, priorities, and demand for World Bank support (question 1a). Moreover, client surveys will be 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 and priorities (questions 2a and 2b).

6.10   Several sampling and selection issues will be systematically addressed during the evaluation. They pertain to the criteria for selection of countries, sectors, products, and key informants as described in Appendix A.

Strength and limitations of design

6.11   The combination of methods and the multilevel design proposed will allow robust lessons to be derived; yet, limitations from choices regarding the evaluation scope and from the availability and quality of existing data and documentation are present. Case studies allow for a deeper analysis of the World Bank's support, yet they may not provide the full picture of its work in this area. Case selection will partially rely on external data, which may not be complete for the full range of countries, and on World Bank documentation, which is not always either available or consistent. Excluding the analysis of the private sector portfolio makes the scope more manageable, yet the evaluation recognizes the importance of retaining potentially all sectors as solutions to

aging challenges are systemic. To manage the absence of a defined aging-relevant or 'aging-sensitive World Bank portfolio, the evaluation proposes an identification strategy that may not always be accurate and, thus, the team will engage with management to validate the identification of relevant portfolio to minimize inclusion and exclusion errors. In in some cases, not enough time may have lapsed to assess the outcomes of some recent initiatives.

7. Quality Assurance Process

7.1   This evaluation will be subject to IEG's standard quality assurance process. This Approach Paper has been peer-reviewed by experts and discussed informally with management to ensure relevance of the evaluation questions, scope, and issues covered. Detailed comments received during preparation will guide the evaluation's work. The detailed methodology plan will be finalized in close consultation with IEG's methods advisory team.

7.2   The peer reviewers are: Hervé Boulhol, Senior Economist Pensions and Population Ageing, Directorate for Employment, Labour and Social Affairs at OECD; David Canning, Professor of Population Sciences, and Professor of Economics and International Health at the Harvard T.H. Chan School of Public Health; Louise Fox, USAID's Chief Economist and former World Bank Lead Economist (for final report); and Ronald Lee, Professor of Demography and Jordan Family Professor of Economics, and Director, Center for the Economics and Demography of Aging, University of California at Berkeley.

7.3   Extensive exchange with external experts is part of the evaluation methodology. The team will interact regularly with peer reviewers and a reference group of seasoned professionals with expertise in aging to bring in diverse perspectives.

8. Expected Outputs, Outreach, and Tracking

8.1   The main output will be an evaluation report. This will be complemented by literature reviews, background papers summarizing case studies, and potential learning engagements, to be identified.

8.2   Extensive engagement with technical groups and management is expected. Colleagues in relevant Communities of Practice and Global Solutions Groups will be engaged throughout the evaluation to ensure relevance and comprehensiveness of the analysis. Program Leaders will be the main channel to regularly engage with World Bank colleagues working in this area across different practices. The evaluation team expects extensive interaction with staff to validate instruments and approaches

throughout the evaluation process and will share preliminary findings to ensure relevance and buy-in.

8.3   Strong interest from countries themselves and from other donors and agencies is also expected. Country Directors and staff working in relevant country offices will be continuously engaged throughout the evaluation. The evaluation team aims to partner with interested Country Management Units and relevant stakeholders in selected country cases to ensure good understanding of the diagnostics and prioritization process, dialogue around country needs and demand, and assessment of the World Bank's capacity to respond. Similarly, the evaluation team will engage with key counterparts in other agencies to ensure complementarities with other efforts.

9. Resources

Timeline and budget

9.1   The final evaluation report is expected to be submitted to the Committee on Development Effectiveness on January 31, 2020. The budget for delivering the study will be about $800,000, excluding the cost of dissemination ($50,000).

Team and Skills-Mix

9.2   The evaluation will be led by Elena Bardasi and Gisela Garcia (IEGHC). The evaluation will include a team of IEG staff, and consultants who will prepare structured literature reviews and case studies. The core team includes Anahit Aghumian, Eduardo Fernandez Maldonado, Ann Elizabeth Flanagan and Estelle Raimondo (IEG staff). Expert consultants and ad-hoc support will be sought as needed during the evaluation within and outside IEG to cover the multidimensionality of the topic. The work was conducted under the general supervision of the IEGHC former Manager Emanuela di Gropello, and under the overall direction of Auguste Tano Kouamé, former Director IEGHE and Sophie Sirtaine, acting Director IEGHE .

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Appendix A. Evaluation Design Matrix and sampling approach

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

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 Bank's analytical work. Sources include country and regional diagnostic and sector work (e.g. regional and country reports on aging, Poverty Assessments, Public Expenditure Reviews, Country Economic Memorandum, Job Diagnostic, Systematic Country Diagnostics, etc.)	Structured document review of ASA work; Data analysis; Semi structured interviews; Client Surveys.
	(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 socio-economic databases; (At the country level: client surveys and country-level interviews.)	
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 Bank's analytical work. Broader literature on aging.	Structured document review of ASA work; SLR
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 Bank's analytical and strategic work. Sources include country and regional diagnostic and sector work (e.g. regional and country reports on aging, Poverty Assessments, Public Expenditure Reviews, Country Economic Memorandum, Job Diagnostic, Systematic	Structured document review (ASA and SCD/CPF review); Semi structured interviews

Country Diagnostics, etc.), review of country strategies, and (at the country level) key informant interviews.

2. How comprehensively, timely, and coherently is the World Bank operationalizing 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 Bank's strategic and operational work and client perception.	Portfolio review; Structured document review; Semi structured interviews and focus groups; Client surveys.
2b. How internally coherent are the solutions proposed by the World Bank with respect to the instruments mobilized and across GPs?	(for selected countries): Information on analytical work produced or supported by the 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 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; Semi structured interviews and focus groups; Client surveys.
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; internal and external repositories of knowledge, fora, events; etc.	Semi structured interviews and focus groups; Structured document review.

Source: IEG

The evaluation will adopt the following *sampling approach*:

Reference population

The reference population will include all the client countries that the 2015 GMR identified as being in the late or post demographic transition phase. These include 38 "late dividend" countries and 9 "post dividend" countries, of which 22 in ECA, 13 in LCR, 6 in EAP, 3 in MNA, 2 in AFR, and 1 in SAR. Part of the reference population are also about 10" early dividend" countries where the aging process is accelerating and that are the next in line to become "late dividend" countries based on the GMR data (the final decision on the number will be determined based on the actual distribution of the combined scored used by the GMR).

Selection of countries for case-based analysis

The evaluation will sample 8-12 countries from the reference population for case-based analysis. These countries will be selected to maximize variation along the following three dimensions: (a) the nature and magnitude of the Bank's portfolio (both countries with little and strong Bank's engagement will be represented); (b) specific macro-characteristics (different stages in the aging process, in- and outmigration, healthy life expectancy, female labor force participation, and old age income security); and (c) regional representation. The team will consult with management to confirm the validity of the selection criteria.

Sector selection

The evaluation won't exclude any sector *a priori*, although it can be expected – based on the preliminary work conducted for this approach paper– that some sectors will be more prominently represented than others (namely the human development sectors).

Selection of key stakeholders

A matrix will be developed that maps different stakeholder groups (including potential key informants). Purposive sampling of predetermined key informants in combination with limited 'snowballing' will be used to work toward a point of saturation and arrive at a carefully consolidated interview-based perspective on the evaluative issues.

Selection of ASA, strategy documents, and lending portfolio

The selection of flagship ASAs for in-depth review (Including analytical work: regional and country reports on aging, Poverty Assessments, Public Expenditure Reviews, Country Economic Memorandum, Job Diagnostic, Systematic Country Diagnostics, etc.; technical assistance and Reimbursable Advisory Services) will be done using a combination of key word search in the World Bank Group publication databases and operation portal, key informant

interviews, and the results of the SLR. The current and previous two country strategy documents (and associated SCDs since available) for all the countries in the reference population will be selected.

From the universe of the portfolio approved in relevant countries between FY05 and FY19, the team will use a combination of criteria to identify the portfolio of interest. These include: (a) theme codes (theme code 64, 522, 524, 621 and 625 on aging, pensions and social assistance, disability, ICT solutions, and noncommunicable diseases, respectively); (b) key word search; (c) identification of targeted beneficiaries; and (d) key informant interviews. Collaboration with Bank colleagues in country offices, GPs and CMUs will be key to identify relevant products which could escape a more traditional scan of the portfolio. A preliminary relevant portfolio has been identified for this approach paper using a key word search. This exercise has identified 133 operations that are potentially relevant (out of 1331 projects approved in FY05-FY19 in the group of aging countries), and 294 ASA (out of 5114 for the same group of countries over the same period). Abstracts, PDO and components of ASA and WB projects approved between FY05-FY19 were scanned for the following words: 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; shrinking, shrinking population; social care; social insurance; social security; voluntary savings. The other criteria will need to complement the key word search to generate the final portfolio.

Appendix B. Proposed Focus Countries

Country name	Region	Income level	IBRD/IDA	Stage in demographic transition
Albania	Europe & Central Asia	UMI	IBRD	Late-dividend
Antigua and Barbuda	Latin America & Caribbean	HIC	IBRD	Post-dividend
Armenia	Europe & Central Asia	LMC	IBRD	Late-dividend
Azerbaijan	Europe & Central Asia	UMI	IBRD	Late-dividend
Barbados	Latin America & Caribbean	HIC	..	Post-dividend
Belarus	Europe & Central Asia	UMI	IBRD	Post-dividend
Bosnia and Herzegovina	Europe & Central Asia	UMI	IBRD	Post-dividend
Brazil	Latin America & Caribbean	UMI	IBRD	Late-dividend
Bulgaria	Europe & Central Asia	UMI	IBRD	Post-dividend
Chile	Latin America & Caribbean	HIC	IBRD	Late-dividend
China	East Asia & Pacific	UMI	IBRD	Late-dividend
Colombia	Latin America & Caribbean	UMI	IBRD	Late-dividend
Costa Rica	Latin America & Caribbean	UMI	IBRD	Late-dividend
Croatia	Europe & Central Asia	HIC	IBRD	Post-dividend
Czech Republic	Europe & Central Asia	HIC	..	Post-dividend
Fiji	East Asia & Pacific	UMI	IBRD	Late-dividend
Georgia	Europe & Central Asia	LMC	IBRD	Late-dividend
Guyana	Latin America & Caribbean	LMC	IDA	Late-dividend
Hungary	Europe & Central Asia	HIC	..	Post-dividend
Jamaica	Latin America & Caribbean	UMI	IBRD	Late-dividend
Kazakhstan	Europe & Central Asia	UMI	IBRD	Late-dividend
Kuwait	Middle East & North Africa	HIC	..	Late-dividend
Kyrgyz Republic	Europe & Central Asia	LMC	IDA	Late-dividend
Latvia	Europe & Central Asia	HIC	..	Late-dividend
Lebanon	Middle East & North Africa	UMI	IBRD	Late-dividend
Macedonia, FYR	Europe & Central Asia	UMI	IBRD	Late-dividend
Malaysia	East Asia & Pacific	UMI	IBRD	Late-dividend
Mauritius	Sub-Saharan Africa	UMI	IBRD	Late-dividend
Moldova	Europe & Central Asia	LMC	Blend	Late-dividend
Mongolia	East Asia & Pacific	UMI	Blend	Late-dividend
Montenegro	Europe & Central Asia	UMI	IBRD	Late-dividend
Morocco	Middle East & North Africa	LMC	IBRD	Late-dividend
Poland	Europe & Central Asia	HIC	IBRD	Late-dividend
Romania	Europe & Central Asia	UMI	IBRD	Late-dividend
Russian Federation	Europe & Central Asia	HIC	IBRD	Late-dividend
Serbia	Europe & Central Asia	UMI	IBRD	Late-dividend
Seychelles	Sub-Saharan Africa	HIC	IBRD	Late-dividend
Slovak Republic	Europe & Central Asia	HIC	..	Late-dividend
Sri Lanka	South Asia	LMC	IBRD	Late-dividend
St. Lucia	Latin America & Caribbean	UMI	Blend	Late-dividend
St. Vincent and the Grenadines	Latin America & Caribbean	UMI	Blend	Late-dividend
Thailand	East Asia & Pacific	UMI	IBRD	Late-dividend
Trinidad and Tobago	Latin America & Caribbean	HIC	IBRD	Late-dividend
Tunisia	Middle East & North Africa	UMI	IBRD	Late-dividend
Ukraine	Europe & Central Asia	LMC	IBRD	Post-dividend
Uruguay	Latin America & Caribbean	HIC	IBRD	Late-dividend
Vietnam	East Asia & Pacific	LMC	IBRD	Late-dividend

Source: Global Monitoring Report 2015/16
Note: a number of 'early dividend' countries will be added to this list and included in the evaluation sample.

Appendix C. Existing IEG evidence

IEG reviewed Bank's support to pension reforms during the period 1984-2004, when most of the Bank's operational and analytical work was conducted in ECA and to a lesser extent in LAC (OED 2006). That evaluation recommended to better tailor assistance to country conditions and provide consistent policy prescriptions; increase assistance in building capacity to ensure sustainable reforms; and, expand safety nets in countries not covered by pension systems. The evaluation found that '*analyses of the living conditions of the aged tended to be perfunctory, and few studies empirically investigated the limits of formal pension coverage or ways to increase it'* (OED 2006, p. ix). It consequently recommended the Bank to conduct additional research on the living conditions of the aged. No IEG evaluation has reviewed Bank's work related to health promotion to prevent or manage non-communicable diseases (common in aging countries), or issues of social care, social assistance or long-term care.

Recent IEG evaluations provide some evidence of limited attention of Bank Group operations in addressing specific needs of aging populations. The IEG evaluation of Urban Transport (World Bank 2017b), for instance, found that only 11 percent of Bank's urban transport projects approved between FY07–16 supported universal access for the disabled and elderly persons. This limited attention was explained by lack of resources and team knowledge, and different client priorities. However, projects in the EAP and LAC Regions stood out as those that most frequently incorporated universal access design features. IEG's synthesis review of Bank's support in middle income countries (World Bank 2017c) notes that the issue of aging population is a typical second-generation challenge in these countries; yet, there is scarce available evidence on results achieved in this area. The IEG synthesis of findings on inclusive growth (World Bank 2018b) notes that only 30 percent of job competitiveness interventions identify the target beneficiaries, one third of which being youth or elderly. The most recent IEG evaluation of World Bank support to health services (World Bank 2018c) found that although the World Bank's portfolio is overall aligned with the country health priorities it tends to under prioritize noncommunicable diseases and injuries.

Appendix D. Areas of emphasis in regional and country reports

Table D.1. Regional reports

Region	Areas of emphasis
LAC: **Population Aging: Is Latin America Ready?** (Cotlear, ed., 2011)	The report raised three social policy concerns for the region associated to population aging: care and support to aging populations, including poverty in old ages; the changes in health status and healthcare demand; and, increasing public expenditures and associated fiscal pressures.
EAP: **Live Longer and Prosper** (World Bank 2016a)	The report discussed the diverse societal and public policy challenges and reform options for East Asia and Pacific countries as they address aging.
ECA: **Golden Aging** (Bussolo and others 2015)	The report examined obstacles for societies to reap the full benefits of increased longevity. This latter report takes the view that, while many challenges are real and urgent, adequate policies can mitigate the possible negative impacts of a smaller and older workforce on growth and savings, the labor force, innovation, poverty and inequality, and intergenerational solidarity.

Source: IEG

Table D.2. Select country reports

Country	Areas of emphasis
Brazil (2011)	Fiscal pressures on the public health and pensions systems; opportunities to increase labor market and public education effectiveness
Bulgaria (2013)	Threats on labor supply and productivity growth; fiscal pressures on key public services; high incidence of poverty among the elderly population.
China (2018)	Efficiency of informal and formal arrangements for aged care services across income groups and urban vs. rural areas
Latvia (2015)	Maintaining employment and productivity; high health inequalities; disparities in employment rates and underdeveloped education for elderly workers.
Moldova (2017)	Maintaining adequate economic security and living standard of the elderly; high out-migration.
Sri Lanka (2012)	Functioning of the labor markets and the social safety net system
Uruguay (2016)	Impacts on the social protection system, demand for health care and education; functioning of the labor market; macroeconomic environment

Source: IEG from World Bank 2011, World Bank 2013a; World Bank 2018a; World Bank 2015; World Bank 2017a; World Bank 2012b; World Bank 2016b.

Appendix E. Preliminary SCD and CPF review

The universe of country strategy documents and associated SCDs approved since FY2000 for the 47 focused countries were scanned for the same keywords used to identify the potentially relevant lending and ASA portfolio (i.e. 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; shrinking, shrinking population; social care; social insurance; social security; voluntary savings). Two hundred and 10 country strategy related documents were scanned in total, including 58 SCD (table E.1).

The latest available CPF for each country (or group of countries, in the case of the Organization of Eastern Caribbean States) was read in full and coded in NVivo. A total of 37 CPFs were analyzed, searching for a preliminary answer to question 2. A codebook was developed to systematize the coding across different documents. This codebook laid out the node structure used in NVivo, as well as definitions followed to warrant coding in the documents. Each coded document was subsequently summarized in a Word document.
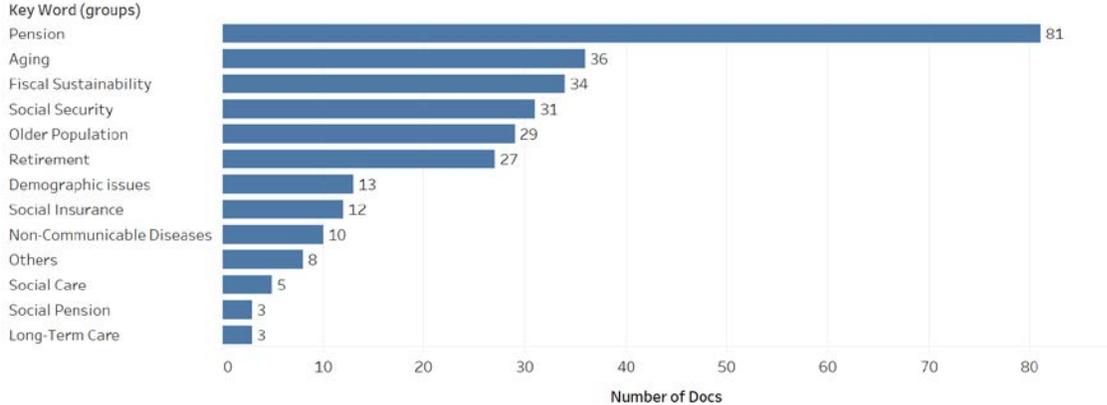
Preliminary results of the CPF review are presented in table E.2 below. A lot of nuance brought to the analysis by using NVivo has been lost in presenting an overview of the results. A CPF mentioning aging once, in passing (e.g. Moldova), and a CPF that significantly engages with the topic (e.g. Poland) both have been marked with an 'x' for 'aging diagnosis'. The same is true for the potentially relevant support. A question mark in the table indicates that the CPF document refer to potential support focusing on aging-related topics, but no specific activities were identified.

Overall, while 21 CPFs (including Dominica as part of the OECS CPF) mentioned aging, there is great diversity in the extent to which the topic is presented. In Poland, Bulgaria, Mauritius, Sri Lanka, China, and Vietnam, for instance, the topic takes up a significant portion of the CPFs' development challenge diagnosis. While in other cases, it is only mentioned in passing.

We found several instances of Bank support directly linked to aging. In Bulgaria's CPF, for example, the intervention logic on educational support states: "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." (p. 36) The same can be found in Uruguay's CPF: "[T]here 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." (p. 27) Poland's CPF puts health care reform directly in the realm of aging through its intervention logic: "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." (p. 44)

Figure E.1. Frequency of relevant key words in country strategy documents

Key Word (groups)

Key Word	Number of Docs
Pension	81
Aging	36
Fiscal Sustainability	34
Social Security	31
Older Population	29
Retirement	27
Demographic issues	13
Social Insurance	12
Non-Communicable Diseases	10
Others	8
Social Care	5
Social Pension	3
Long-Term Care	3

Source: IEG
Note: "Others" includes the following key words: entitlement, shrinking, and intergenerational.

Table E.1. Most recent country strategy documents in focus countries

Country	Years of Document Date (Fiscal Year)
Albania	02, 06, 10, 15, 16
Armenia	01, 04, 09, 14, 16, 17, 18
Azerbaijan	00, 03, 07, 11, 15
Belarus	02, 08, 13, 18
Bosnia and Herzegovina	00, 05, 08, 12, 16
Brazil	00, 04, 08, 12, 16, 17
Bulgaria	02, 06, 11, 16
Chile	02, 07, 11, 17
China	03, 06, 13, 18
Colombia	03, 08, 11, 15, 16
Costa Rica	04, 09, 11, 15
Croatia	05, 09, 13, 18
Fiji	17
Georgia	04, 06, 10, 14, 18
Guyana	02, 09, 16
Jamaica	01, 05, 10, 14
Kazakhstan	01, 05, 12, 18
Kyrgyz Republic	03, 07, 11, 13, 19
Latvia	02
Lebanon	06, 08, 11, 15, 16
Macedonia, FYR	02, 04, 07, 11, 15, 19
Mauritius	02, 07, 15, 17
Moldova	05, 09, 14, 17
Mongolia	04, 09, 12, 19
Montenegro	07, 11, 16
Morocco	01, 05, 10, 14, 18, 19
Poland	03, 05, 09, 14, 18
Romania	01, 06, 09, 14, 18
Russian Federation	00, 02, 07, 12, 16, 17
Serbia	01, 03, 04, 05, 08, 12, 15
Seychelles	10, 12, 18
Slovak Republic	01, 04
Sri Lanka	03, 08, 12, 16
Thailand	03, 11, 16, 17, 19
Tunisia	00, 04, 10, 12, 15, 16
Ukraine	01, 04, 08, 12, 17
Uruguay	00, 05, 11, 15, 16
Vietnam	03, 07, 12, 17

Year axis: 1999, 2001, 2003, 2005, 2007, 2009, 2011, 2013, 2015, 2017, 2019

Year of Document Date Fiscal Year

Document Type
- Country Assistance Strategy Document
- Country Engagement Note
- Country partnership framework
- Country Partnership Strategy Document
- Interim Strategy Note
- Joint Country Support Strategy
- Systematic Country Diagnostic
- Transitional Support Strategy

Source: IEG

Table E.2. Preliminary Review of Most Recent Country Strategies in focus countries

Country	Dividend	% Pop. 65+	CPF Years	Aligned diagnosis	Aligned support	Education	General	Health care	Labor Force Participation	Linked to Gender	Long term care	NCDs	Pensions	Public Transport	Social Protection
Albania	Late	13%	2015-2019		X								X		
Antigua and Barbuda	Post	7%	2015-2019		X					X		X	X		
Armenia	Late	11%	2014-2017		X					X		X	X		
Azerbaijan	Late	6%	2016-2020	X	X								X		
Belarus	Post	14%	2018-2022	X	X					X	?	X	?		
Bosnia and Herzegovina	Post	16%	2016-2020	X	X							?	X		
Brazil	Late	8%	2018-2023	X	X							X	X		
Bulgaria	Post	20%	2017-2022	X	X	X		?		X	?				
Chile	Late	10%	2011-2016		X								X		?
China	Late	10%	2013-2016	X	X			X		X		X	X		
Colombia	Late	7%	2016-2021		?								?		?
Costa Rica	Late	9%	2016-2020	X	X			?				?	X		
Croatia	Post	19%	2014-2017	X	X						X		X		
Dominica	N/A	N/A	2015-2020	X	X					X		X	X		
Georgia	Late	15%	2019-2022	X	?					X		?	?		
Grenada	Early	7%	2015-2021		X					X		X	X		
Guyana	Late	5%	2009-2012		X							?	X		
Jamaica	Late	9%	2014-2017		?							?	?		?
Kazakhstan	Late	7%	2012-2017		X					X		?	X		
Kyrgyz Republic	Late	.	2019-2022		?							?			
Lebanon	Late	8%	2017-2022		X			?					X	?	
Macedonia	N/A	N/A	2015-2018		X								X		
Mauritius	Late	10%	2017-2021	X	X								X		
Moldova	Late	10%	2018-2021	X	X					X		?	X		
Mongolia	Late	4%	2013-2017		X					X			X		
Montenegro	Late	14%	2016-2020	X	X				X				X		
Morocco	Late	6%	2014-2017		X								X		
Poland	Late	16%	2019-2024	X	X			X	X	X			X		
Romania	Late	17%	2019-2023	X	X			X					X		
Russia	Late	13%	2012-2016	X	X					X			X		
Serbia	Late	16%	2016-2020		X								X		
Seychelles	Late	8%	2018-2023		X					X		?	X		
Sri Lanka	Late	9%	2017-2020	X	X					X		X	X		
St. Kitts and Nevis	N/A	N/A	2015-2022		X					X		X	X		
St. Lucia	Late	9%	2015-2023		X					X		X	X		
St. Vin. a/t Gren.	Late	7%	2015-2024		X					X		X	X		
Thailand	Late	11%	2019-2022	X	X		X			X					
Trinidad & Tobago	Late	9%	1999		?								?		
Tunisia	Late	8%	2016-2020		X								X		
Ukraine	Post	16%	2017-2021	X	X					X			X		
Uruguay	Late	14%	2016-2020	X	X	X						X	X		
Vietnam	Late	7%	2018-2022	X	?		?			X			?		

Source: IEG

Endnotes

[1] IEG conducted an evaluation on demographic issues in 2009 (World Bank 2009), which focused mostly on issues of high fertility.

[2] According to the projections of the United Nations, Population Division (UN 2017), significant gains in life expectancy have been achieved in recent years in all regions of the World. Globally, life expectancy at birth rose by 3.6 years between 2000-2005 and 2010-2015, or 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. Life expectancy in Africa in 2010-2015 stood at 60.2 years, compared to 71.8 in Asia, 74.6 in Latin America and the Caribbean, 77.2 in Europe, 77.9 in Oceania and 79.2 in Northern America. The World Health Organization presents even largest gains, but very similar trends (World Health Organization 2016).

[3] Notable is the case of South Korea, where – according to the 2017 Census – the working age population aged 15-64 showed a drop for the first time. In the meantime, the proportion of the population aged 65 or more increased to 14.2 percent, marking South Korea's transition from an aging to an aged society as per UN definition. This transition happened in just 17 years – the fastest ever recorded so far. Indeed, it was only in 2000 when the percentage of citizens aged 65+ surpassed 7 percent (Statistics Korea 2017).

[4] Forty countries that in 2015 were in the early transition phase (as per GMR classification) are projected to have more than 7 percent of the population aged 65+ in 2050 (in 3 of them the share of those aged 65+ will be more than 14 percent). Many of these countries will be in Asia (Indonesia, Bangladesh, India, Bhutan, Nepal, Myanmar, Cambodia, Philippines), in Latin America and the Caribbean (Mexico, Peru, Bolivia, Dominican Republic, Ecuador, Nicaragua, Paraguay), and in ECA (Tajikistan, Mongolia, Turkmenistan), but several will be also in the Middle East (Egypt, Algeria, Jordan, Libya) and even in Sub-Saharan Africa (Botswana, Cabo Verde, South Africa).

[5] 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 (UN 2017).

[6] These calculations are based on the decomposition of the 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 component reflect future projections in demographic changes instead of the current figures. Note that the per capita GDP growth rate would be less (0.4 percent per year) because of the fall in total population. (While population aging likely lead 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.

[7] 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 old people dissave after retirement), although with a declining population savings can decline to maintain the same capital/labor ratio (plus individual may increase their savings propensity, in consideration of a longer life expectancy). All these effects are compounded by an increased spending for social programs. Empirically, the macro-economic effect on aging is not clear-cut. Aiyar and others (2016) find that workforce aging in Europe reduced growth in labor productivity via its negative effect on Total Factor Productivity (TFP) growth (the estimated impact being 0.2 percentage point reduction in TFP every year over the next two decades). A negative relationship between aging of the working population and TFP is also found for Japan (Westelius and Liu 2016). For the US, Maestas and others (2016) estimated that 10 percent growth in the percentage of the population aged 60+ decreased GDP growth per capita by 5.5 percent; two thirds of this variation were due to a reduction in labor productivity, while one third to slowing labor force growth. A review of the literature of macroeconomic effects of aging in the US 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) run regressions of the change in (log) GDP per capita from 1990 to 2015 on the change in the ratio of the population above 50 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).

[8] The 2019 World Development Report on 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 the elderly in a sustainable manner (World Bank Group 2018).

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

[10] The examples provided in Box 2.2 and Appendixes D and E are not exhaustive. Many reports will be an input for this evaluation, including pensions reports (such as Schwartz and Arias 2014) and reports that have analyzed how specific developments may be at play in aging societies (such as the contribution of digital technologies to lifelong learning and supporting productivity in the labor market, World Bank 2017 and World Bank 2018).

[11] According to a portfolio review commissioned by the Aging Community of Practice, seventy-seven lending operations with aging components were active or completed during the period 2005-2016. This stocktaking includes projects in pensions and NCDs and was not validated during the preparation of this Approach Paper. .

[12] Incentives for married women to participate in the labor market include, for example, moving from joint to separate taxation of earnings (which lower the tax burden on the secondary earner, typically the wife, within a married couple), and increasing the availability of publicly subsidized childcare.

[13] Examples of this demand includes: China's Health Reform Program for Results (P154984, $600M, approved in FY17), designed to respond to pressing issues related to chronic diseases, ageing and affordability; the Anhui Aged Care System Demonstration Project (P154716, $118M, approved in FY18) supports the developing and managing of a diversified, three-tiered aged care service delivery system for the elderly, particularly those with limited functional ability; and a P4R (P162349, $220M) under preparation for Ghizou province to provide equitable access to a basic package of aged care services, and to strengthen the quality and efficiency of the aged care system. The Bank is increasingly offering RASs in this area in many ECA countries, as evidenced by examples in Estonia (P158968), Latvia (P149711), Romania (P147650) but also elsewhere like Chile (P159331), Seychelles (P157794). Policy dialogue around the topic is ongoing in several other countries, including Russia and Poland, but also Colombia, Vietnam and Sri Lanka.

[14] In its comments, management remarked on the importance for evaluation to focus also on emerging issues such as aging of the population in developing countries, as "…in countries that are significantly advanced through the demographic transition, clients increasingly request advice and financing, financial protection, labor markets, and long-term care needs to address the ongoing demographic and epidemiological shifts resulting in an aging society." (World Bank 2009, p. xxvi).

[15] The Aging Community of Practice (CoP) has been reported to be currently idle and to function mostly as a distribution list. The evaluation aims at spurring a broad conversation among experts across several sectors and possibly contributing to revitalize the CoP.

[16] For example, Sanderson and Scherbov (2010) make the point that as life expectancy lengthens, if a person's age is defined by the number of years left to live (as opposed to those already lived), each successive cohort is, at a given age, relatively younger than the previous one. As a result, this longer life expectancy also translates in longer activity rates.

[17] As discussed in box 1, the GMR uses aggregated data on fertility and working age population to rank countries and classify them in 4 phases of the demographic dividend.

[18] According to the UN projections, twenty-one additional countries will be in the "aging" category by 2030 and another twelve by 2040. The list includes: Argentina, Turkey, Panama, El Salvador, Grenada, Suriname, Ecuador, Venezuela, Dominican Republic, Mexico, Peru, Iran, Algeria, Myanmar, Paraguay, Nicaragua, India, Indonesia, Bolivia, Samoa, Uzbekistan, Bangladesh, Bhutan, Cabo Verde, Cambodia, Honduras, Libya, Maldives, Nepal, Philippines, South Africa, Tonga and Turkmenistan.

[19] For the reference population, the SDR will also assess the consistency of the use of an 'aging' labeling across regions and global practices and between the Bank's strategic documents and its operational, analytical and advisory work.

[20] From the universe of the portfolio approved in relevant countries between FY05 and FY19, the team will use a combination of criteria to identify the portfolio of interest. These include: (a) theme codes (theme code 64, 522, 524, 621 and 625 on aging, pensions and social assistance, disability, ICT solutions, and noncommunicable diseases, respectively); (b) key word search; (c) identification of targeted beneficiaries; and (d) key informant interviews. Collaboration with Bank colleagues in country offices, GPs and CMUs will be key to identify relevant products which could escape a more traditional scan of the portfolio. A preliminary relevant portfolio has been identified for this approach paper using a key word search. This exercise has identified 133 operations that are potentially relevant (out of 1331 projects approved in FY05-FY19 in the group of aging countries), and 294 ASA (out of 5114 for the same group of countries over the same period). Abstracts, PDO and components of ASA and WB projects approved between FY05-FY19 were scanned for the following words: 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; shrinking, shrinking population; social care; social insurance; social security; voluntary savings. The other criteria will need to complement the key word search to generate the final portfolio.