Closing the Gender Income Security Gap for Healthy Aging in Low- and Middle-Income Countries

An Aging Readiness and Competitiveness Initiative 5.0 Insights Brief

Data and analysis by

ECONOMIST IMPACT

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About this insights brief

AARP's Aging Readiness and Competitiveness (ARC) initiative aims to reshape perceptions of older adults' roles in communities, economies and societies. It also is intended to prompt innovative action from governments, the private sector, civil society, philanthropy and other stakeholders to enable more independent, engaged and productive older populations.

This brief, produced by Economist Impact with support from AARP, is the fifth iteration of ARC (ARC 5.0) and a follow up to our previous report, ARC 4.0, launched in 2023. ARC 4.0 explored the challenges and opportunities accompanying global aging in low- and middle-income countries (LMICs) and identified innovative solutions and leading practices that contribute to equitable and healthy aging. This brief builds on the qualitative exploration of ARC 4.0 and provides quantitative insights about the drivers of healthy longevity and the societal impacts of social pensions, the most prevalent policy intervention used to promote income security for older persons in LMICs. ARC 5.0 also delves deeper into the root causes of the gender gap in healthy aging, analyses existing interventions to bridge it and identifies areas for further action to ensure older women are able to lead not only longer but also healthier lives.

Our goal is that the following insights brief and its associated methodology note will become useful tools for policymakers, practitioners and other sectoral leaders who seek to balance competing development priorities. It is also designed to promote effective and innovative programmes and spur investments that support healthy aging and tackle gender-based disparities in aging.

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About the cover: The illustration demonstrates the complex interplay between economic status, life expectancy and gender disparities among older adults globally. The left side depicts fewer men with more money, and a heavier scale representing lower life expectancy. On the right side, we see more women, representing women living longer than men, with less money. Despite having longer life expectancy, women are economically outweighed by men. The snake wrapped around the middle of the scale refers to the medical symbol (Rod of Asclepius), and attempts to link gender disparities in healthy life expectancy (healthspan) with economic status.

Disclaimer: The views expressed in this report may not necessarily reflect those of AARP.

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- **Dr. Ritu Sadana**, Head, Ageing and Health, World Health Organization (WHO); Head, WHO Secretariat, Council on the Economics of Health for All | Switzerland
- **Willeke van Staalduinen**, CEO, AFEdemy; director, SHAFE Foundation[i] | Netherlands
- **Dr. Enrique Vega García**, Unit Chief Healthy Life Course, Pan American Health Organization (PAHO)/ WHO | United States
- **Dr. Lisa Warth**, Chief of the Population Unit at the United Nations Economic Commission for Europe | Switzerland

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[i] AFEdemy: Age-friendly environments academy; SHAFE: Smart Healthy Age-Friendly Environments

Key definitions[ii]

Aging inequity: For the purpose of this insights brief, aging inequity refers to unfair differences experienced throughout the life course that culminate in greater disparity in older age within a country.

Country groups (High income, middle income, etc.): Country groups are defined based on the World Bank's income group classifications, which take gross national income per capita as the main indicator of a country's development status.[2] In this insights brief, we compare country groups on various dimensions and indicators for the purpose of illustration rather than generalization, acknowledging the heterogeneity of countries within an income group. We are aware that while a country's lower income level can be one of many contributing factors to the disparities experienced by its population, increasing income does not guarantee reduced disparities.

Economic security vs. income security: Economic security comprises access to all basic needs infrastructure, such as health, education, housing and information. Income security denotes adequate actual, perceived and expected income, either earned or in the form of social security and other benefits.[3]

Equality vs. equity: Equality is a state of affairs—i.e., being equal, especially in status, rights and opportunities.[4] Equity is a process in pursuit of "the absence of unfair, avoidable or remediable differences among groups of people, whether those groups are defined socially, economically, demographically or geographically, or by other dimensions of inequality."[5]

Equitable healthy aging means that all individuals have a fair and just opportunity to optimize health and wellbeing at all life stages, and fulfill their health potential to age well. Achieving equitable healthy aging requires a life-course approach, in other words, reducing or eliminating the social and structural disparities people experience *throughout their lifetime*.

Financial literacy: The ability to use one's knowledge and skills to effectively manage financial resources, ideally for a lifetime of financial well-being.[6]

Inequities vs. inequalities vs. disparities: Inequities are the opposite of equity, implying unfair and unjust differences. Inequalities are the opposite of equality, referring to measurable differences of some sort.[7] Inequalities and disparities are used interchangeably in this insights brief.

Informal economy and informal employment are defined as all economic activities by workers and economic units that are—in law or in practice—not covered or insufficiently covered by formal arrangements. People working in the informal economy are in informal employment, or "informal workers" who do not have secure employment contracts, workers' benefits or social protection.[8]

GDP per capita, PPP: is gross domestic product converted to international dollars using purchasing power parity rates. An international dollar has the same purchasing power over GDP as the U.S. dollar has in the United States. GDP at purchaser's prices is the sum of gross value added by all resident producers in the country plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in constant 2017 international dollars.[9]

Gender-targeted programs: Programs where the core objective of the interventions is to address gender imbalances and tackling the root causes of gender inequality. Such programs could be gender sensitive, gender responsive or gender transformative. Gender-aware programs entail a minimum level of gender-sensitivity without gender equality being a primary objective.[10] Gender-responsive programs explicitly cater to women and girls' needs and contribute to gender equality. Gender-transformative programs tackle the structural and root causes of inequality as a core objective and integrate features to address power imbalances, tackle unfair social norms and harmful traditional practices.

Gender-absent programs: Programs where the core objective of the interventions is not to address gender inequalities.[11] Such programs could be either gender-discriminatory or gender-blind. Gender-discriminatory programs risk exacerbating inequalities by excluding women and girls. Gender-blind programs do not consider gender-specific risks, needs and circumstances.

[ii] Note: Key definitions are aligned with those from the ARC 4.0 to ensure consistency and linkage.

Healthy life expectancy (HALE) at birth (years): Average number of years that a person can expect to live in "full health" by taking into account years lived in less than full health due to disease and/or injury.[12]

Healthy life expectancy (HALE) at age 60 (years): The average number of years in full health a person (usually at age 60) can expect to live based on current rates of ill-health and mortality.[13]

Life expectancy at birth (years): The average number of years that a newborn could expect to live, if he or she were to pass through life exposed to the sex- and age-specific death rates prevailing at the time of his or her birth, for a specific year, in a given country, territory or geographic area.[14]

Life expectancy at age 60 (years): The average number of years that a person of 60 years old could expect to live, if he or she were to pass through life exposed to the sex- and age-specific death rates prevailing at the time of his or her 60 years, for a specific year, in a given country, territory or geographic area.[15]

Long-term care: The activities undertaken by others to ensure that people with or at risk of a significant ongoing loss of intrinsic capacity can maintain a level of functional ability consistent with their basic rights, fundamental freedoms and human dignity.[16]

Marginalized/disadvantaged/vulnerable groups: These terms are used interchangeably in this insights brief, following the World Health Organization's definition, to mean "people, who, due to factors usually considered outside their control, do not have the same opportunities as other more fortunate groups in society."[17] We recognize that terminology continues to evolve, however, there is not universal agreement on terminology. Thus we chose to utilize these terms as defined above because they are widely recognized and currently utilized by the WHO. In addition, while these terms can be viewed as reinforcing hierarchies among different groups of people that can perpetuate inequities, that is not our intent in this insights brief.

Meta-analysis: Meta-analysis is a systematic method that uses statistical techniques for combining results from different studies to obtain a quantitative estimate of the overall effect of a particular intervention or variable on a defined outcome.[18]

National income (used to establish the World Bank's country groups, defined above): gross national income (GNI) per capita is converted to U.S. dollars using the World Bank Atlas method, divided by the midyear population. GNI is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad.[19]

Older adults: The age threshold applied to define "older adults" and "older populations" varies across countries and is sometimes adjusted according to average life expectancy or statutory retirement ages. In this insights brief, for comparative simplification, we benchmark older age at 60 and over when describing relevant statistics, unless otherwise specified due to data availability. However, we recognize that any metric lacking regional specificity is inherently flawed.

Preston curve: refers to a hypothesized positive, but declining relationship between income per capita and life expectancy at birth.[20]

Social pensions: Non-contributory regular cash transfers made to eligible older persons by the government.[21]

Third-sector organizations: The range of organizations that are neither public sector nor private sector. It includes voluntary and community organizations (both registered charities and other organizations such as associations, self-help groups and community groups), social enterprises, mutuals and cooperatives.[22]

How did we do it? Methodology in a nutshell

In order to guide policymakers who are looking to bridge the healthy longevity gap, Economist Impact developed a set of three novel quantitative models that explored the key determinants of healthy longevity and examined the micro and macroeconomic impacts of social pensions, one of the most common methods of delivering income security to aging populations.

1. The **drivers of HALE at age 60 model** is an *econometric model that measures the relationship between country-level socioeconomic, demographic and health factors with healthy life expectancy at age 60 globally*. HALE at age 60 is an essential metric to assess healthy longevity, as it reflects the number of years that adults can expect to live in good health from age 60 onwards. By measuring its key drivers, we provide further understanding on the policies and investments that have enabled healthy life span around the world.

   We use a multivariable linear regression model to examine the various drivers of HALE at age 60. The key predictors for healthy life expectancy we test for are logged GDP per capita, mean years of schooling, fertility rates and current health expenditure. These variables were selected based on data availability and previous research. We create balanced panel data set using publicly available data for 172 countries.

   Regression results suggest that GDP per capita and total fertility rate are strongly associated with healthy life expectancy, though the degree of impact has shifted over the years. The strength of the coefficients also differ by income levels.

2. The **social pensions impact model** *quantifies the microeconomic impacts of Unconditional Cash Transfers*[iii] *for older adults using a meta-analysis framework*. The evidence review under this framework aimed to gather evidence to establish the health, social and economic outcomes of unconditional cash transfers in low to middle income countries. This approach allows us to aggregate outcomes from a large pool of existing research.

   Using a PICO framework and a defined search strategy, a literature review was conducted, referencing 17 databases. This yielded a total of 3,873 studies. Abstract screening yielded 79 studies, which were then put through full-text screening, narrowing down the list to 24 studies for the final stage of data extraction. This first-of-its-kind analysis aggregates the results of these impact assessments and assesses the directionality of the evidence. The available statistical evidence highlights not just the favorable impacts of social pensions, but also the range of outcomes these investments can influence.

3. The **Old-Age Grant impact model** *quantifies the macroeconomic impacts of a specific social pension scheme for older adults in South Africa*. The model assesses the return on investment of South Africa's pioneering Old-Age Grant on its public finances and estimates its impact on the country's GDP between 2018 and 2023.

   From a list of 73 old-age social pension schemes identified in LMICs, Economist Impact shortlisted the 10 countries with the highest expenditure on old-age social pensions as a percentage of GDP. While there were other countries that recorded higher expenditure as a percentage of GDP than South Africa, the final selection was governed by the availability of historical data on the pension scheme—such as beneficiaries, expenditure and impact evaluation studies—and in-house modeling capabilities for forecasting the country's GDP.

   The model uses a demand side equation to identify impacts on individual GDP components under two counterfactual scenarios for reallocation of the retracted Old-Age Grant funds, assuming absence of the Old-Age Grant for the time period 2017-2023. The model results reveal that South Africa's economy would have been notably smaller without the program.

For additional information on the methodology for these models, see pages 14, 22, and 30, and our separate methodology note.

[iii] The social pensions impact model analyzed studies that looked at the impacts of social (non-contributory) pensions for older adults. The search strategy recognised and included alternative names for social pensions; such as unconditional cash transfers, income transfers, non-contributory pension schemes, old-age benefits, older persons allowances, social assistance, social pensions, etc.

Executive summary

There is a critical need for low- and middle-income countries (LMICs) to recognize the economic and social opportunities presented by the rapid growth of their older populations. People over 65 now outnumber those under five years old globally, and most of this growth is driven by the older population in LMICs, which is increasing at a rate over 2.5 times faster than that of high-income countries.[23] By 2050, almost 80% of older adults will reside in LMICs and most of these countries are currently underprepared for this demographic shift. Currently, 23% of adults over the age of 65 in LMICs live in poverty. Older women are the most affected, as they face higher old-age income poverty rates and they have longer lifespans. In LMICs, the average life expectancy for women was 71.3 years, compared to 67.6 for men, in 2019.[24]

Countries that ignore this demographic shift will face significant long-term risks because of higher poverty rates and increased fiscal pressures expected from higher pension expenditures and a rise in demand for social services. In contrast, countries that act now can leverage this shift to drive economic development and improve the lives of millions. According to recent estimates from Economist Impact's Global Longevity report, by 2050 older adults will contribute $118tn to the global economy based on their current behaviors.[25] In order to accomplish this, policymakers, international organizations and other global leaders need to adopt targeted policies and investments that promote healthy longevity, improve economic outcomes and address the gaps in social protection systems, particularly among older women.

In order to help leaders from governments, the private sector, and philanthropy identify these areas of opportunity, Economist Impact examined the key drivers of healthy aging and the impact of social pensions, the most widely used intervention to promote income security among older adults in LMICs. Even more importantly, leaders must recognize the role of gender in each of these findings, as focusing on bridging the gender divide can help to mitigate the inequities that older women in particular face in income security.

What is new in this study?

1. An extensive search yielded limited gender-targeted interventions for older adults in LMICs, including those for closing the gender income security gap in healthy aging. Social pensions for vulnerable older adults are one of the few interventions that have been recognized and implemented by policymakers across countries.
2. Aggregated evidence suggests that social pensions are valuable for beneficiaries in varied contexts across a range of outcomes, including specifically for women.
3. Social pensions are important not just for the beneficiaries, but under the right circumstances for the economy as a whole.
4. Modeling the drivers of longevity using healthy life expectancy (HALE) at age 60 instead of general life expectancy is the novel part of our model. Using HALE at age 60 is an important development, emblematic of the larger need for a narrative shift that focuses specifically on the aging population, as well as a transition from measuring just years of life to years of healthy life.

Our key findings include:

- **Finding 1a:** Annual GDP growth is strongly associated with improvements in healthy longevity for both older men and women. While much of existing literature focuses on gains in life expectancy, our model offers unique insights by focusing on healthy life expectancy at age 60. This means that as countries grow their economies, these gains will typically be reflected in an increase of the number of years older adults live in good health. According to our *drivers of HALE at age 60* model–that analyzed data from *172 countries*– a **5% increase in GDP per capita**[iv] **is associated with approximately 15 additional days of HALE at age 60**. These gains benefit both older men and women. To put this into context, countries identified by the World Bank as low income in 2001 saw an average growth rate of 5.3% between 2001 and 2018. This rate of economic growth is associated with nearly 10 extra months of life in good health for the average 60-year-old, according to our model. Also, if India's GDP per capita grows at a 7.2% rate this year, as forecasted by the Economist Intelligence Unit, our model would link this to 22 additional average days in good health for older Indians. **This finding offers new insight into HALE that builds on current evidence in the literature**.
- **Finding 1b:** Analyzing our *drivers of HALE at age 60* model by country, we also found that countries with lower per capita GDP levels can leapfrog their peers by strengthening health systems to improve older adults' lifespans and quality of life more quickly. In 2019, middle-income countries like Costa Rica, Thailand and Ecuador recorded **over three years of additional HALE at age 60 compared to their peers with similar GDP per capita, education levels and other factors**. This is potentially a result of their investments in their health systems. Policy choices that define how people access healthcare and how that care is delivered can play a key role in determining overall population health, which enhances healthy life expectancy for the population. Even with relatively lower expenditure on healthcare, countries that are able to simplify access and provide affordable healthcare are able to deliver higher returns in the form of better health and longevity for older persons compared to countries where access is fragmented and difficult. These findings also hold true for high-income countries such as Japan, which performs ahead of its peers.
- **Finding 2:** One of the critical links between per capita GDP growth and longevity is via

[iv] Annual increase

improved income security for older people. Guaranteeing income security is essential to promote better health and social outcomes for older adults and particularly for women, who make up a large share of the recipients these programs are trying to reach. While there are few rigorous quantitative studies about the impact of social pensions (a common intervention for income security) focusing exclusively in LMICs, **we were able to uncover 24 robust evaluations that measured 17 desirable economic, health and social outcomes in our *social pensions impact model*.**

Our *social pensions impact model* also found that social pensions have had **significant positive impacts on mental health outcomes**, including a reduction of depression rates, improved memory and general mental wellbeing. **Some evidence also suggests that social pensions can reduce older beneficiaries' labor force participation.** This may suggest that these programs could be allowing its recipients, particularly older women, to work less and/or retire earlier, though the evidence around the contributing factors is mixed. All of the studies showed evidence of the positive impact of social pensions on recipients' outcomes including reducing poverty rates, increasing food security, healthcare utilization and boosting social participation.

- **Finding 3:** Our *Old-Age Grant impact model*, which studied the macroeconomic impact of South Africa's Old-Age Grant program, found that **this pioneering social pension scheme positively contributed to the country's public finances**. We estimate that every rand spent on the Old-Age Grant yielded just shy of 1.4 rand back to the South African economy. When compared to an alternative scenario where Old-Age Grant funds had been spent in other areas, our model found that South Africa's GDP growth rates would have been lower.[v]

Key takeaways

As most countries, particularly LMICs, face substantial fiscal pressures as a consequence of rapid demographic shifts, it is imperative that leaders find sustainable and innovative approaches to both drive economic growth and pursue development goals. Adopting age-sensitive policies and making investments to support healthy longevity are imperative to promote better economic, health and social outcomes. Narrowing the income and healthy aging gap between older men and women is essential for this agenda. Beyond social pensions, there is very little evidence around other economic, social or physical targeted interventions that are specifically meant to address the needs of older women. More research needs to be done to uncover effective ways to bridge the gender gap.

However, a social pension program is just the foundation of a broader set of measures that can promote healthy longevity and gender equity in low- and middle-income countries. This brief and included case studies discuss targeted policies that have been adopted by some countries, including investments in fully developed pension and health systems, as well as others that remain relatively unexplored, such as long-term care systems and financial literacy programs. These options can serve as part of a holistic policy toolkit to improve healthy aging today, and can contribute to a more sustainable and inclusive future.

[v] Two alternative assumptions were analyzed in the model: (a) the funds used for the Old-Age grant are rather invested into the economy, raising gross fixed investment; and (b) the funds used for the Old-Age grant are instead reallocated to other sectors of the economy, thereby raising government consumption expenditure.

1. Progress requires reframing development conversations around healthy aging

The rapid growth of aging populations in low- and middle-income countries (LMICs) represents an opportunity to improve economic and health outcomes, if governments are prepared to capitalize on this shift.

LMICs are facing extraordinary fiscal pressures as governments struggle to contain overlapping health, social, climate and geopolitical crises. Against this backdrop, monumental societal shifts related to aging have often been overlooked. In 2018, people aged 65 and over outnumbered those under five years old for the first time in history.[vi]

While aging is often seen as a pressing issue for high-income countries (HICs), populations in LMICs are aging at a rate 2.5 times faster than in HICs. By 2050, almost 80% of adults over the age of 65 will live in LMICs, as highlighted in the fourth iteration of the Aging Readiness and Competitiveness initiative (ARC 4.0).[26] These shifts can be attributed primarily to reductions in mortality rates in younger age groups.[27] Further increases in life expectancy have been achieved by pursuing medical and policy advancements such as improvements in cardiovascular healthcare and reductions in tobacco usage.[28] Together, these demographic changes present both challenges and opportunities for countries seeking to meet key development goals, including reducing overall poverty rates and increasing life expectancy [see Figure 1].

Currently LMICs are underprepared for this demographic shift, facing challenges associated with large informal economies, reduced financial capacity and insufficient public safety nets. If governments are responsive to the upcoming changes, they can develop capital and savings surpluses during demographic boom times, and facilitate productivity gains. If governments do not act now, they risk missing out on $118trn of economic activity associated with an aging population, as outlined in our recent Global Longevity Economy Report.[29]

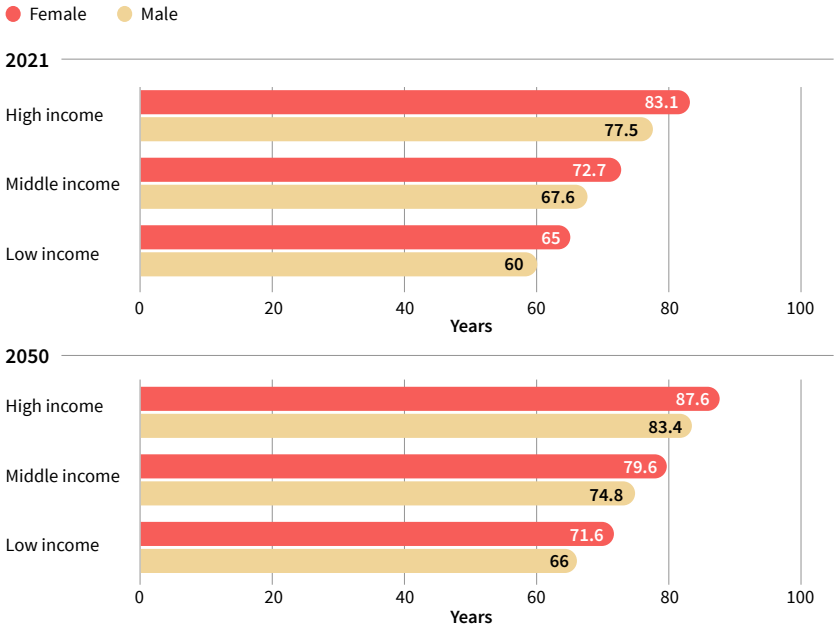
The first step policymakers can take to capitalize on this demographic shift and improve healthy aging and economic outcomes for older adults is to understand what enables people to live long, healthy lives–especially people who have already reached old age. Clarity regarding the role that factors such as gender play in aging is an essential part of this knowledge base. Policymakers must also understand the available interventions that support such healthy longevity for older people.

To provide this critical information and help policymakers harness the opportunities of healthy aging, this brief takes a deep dive into the drivers of healthy longevity for older adults using the healthy life expectancy at age 60 metric, with a focus on LMICs. It also examines policies and interventions that influence these drivers, and identifies some of the gaps that will need to be addressed to ensure that all countries can take advantage of a new demographic paradigm.

Figure 1: The longevity boom

Life expectancy at birth in years, by sex, income groups, 2021 and 2050

By 2050, life spans in low-, mid- and high-income countries will continue to grow and become more evenly distributed. Women will continue to lead longer lives in countries at all income levels.



Source: United Nations Department of Social and Economic Affairs, (UNDESA), 2022[30]

[vi] Economist Impact calculation based on World Population Prospects 2022, UN Department of Economic and Social Affairs (UNDESA).

Why wait? Key factors driving improvements in healthy life expectancy at age 60

GDP per capita[vii] *is the main driver of healthy life expectancy for adults over 60. But some countries have been able to make greater gains through age-sensitive investments.*

Economist Impact's drivers of HALE at age 60 model measures the relationship of GDP per capita and healthy life expectancy at 60 in 172 countries, which span all income levels. The model suggests that when looking at data over the past two decades, **a 5%**[viii] **increase in GDP per capita at a country level is associated with an extension of roughly 15 days of an average adult's healthy lifespan**.[ix]

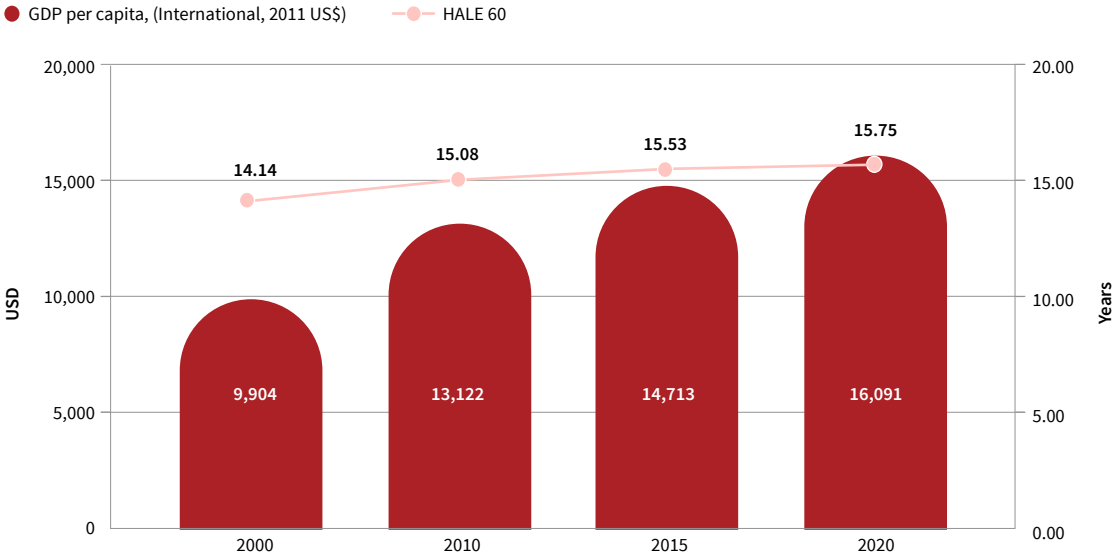
This finding from our model accounts for a country's overall level of education, health spending and fertility rates. Our findings are consistent with previous studies that had depicted the positive relationship between

GDP and life expectancy.[31] However, in contrast with these studies which look at a country's entire population, our model focuses exclusively on the life of adults over 60. For this reason, the model gives us greater insight into other drivers of growth in healthy life expectancy at age 60. [see Figure 2].

Figure 2: Global gains

Average GDP per capita and Healthy life expectancy (HALE) at age 60 (years), global

The country-level relationship between GDP per capita and healthy life expectancy at age 60 has been driven in part by improvements in healthy aging policies and investments.[x]



Source: Our World in Data[32]

[vii] While other variable representing economic factors were available, we decided to use GDP per capita on account of availability of standardized and comparable data.
[viii] We use 5% as the rough upper bound for the maximum growth rate in GDP per capita we can expect.
[ix] The model uses a Linear-log transformation, where the beta coefficient tells us the effect of a 1% change in the log-transformed independent variable (GDP per capita) on the dependent variable (healthy life expectancy at age 60). Traditionally, interpretations of regression equations describe impacts using unit changes. For this model, the results are described using a higher number of 5%. The reasoning behind this is as follows: when we look at yearly economic growth for LMICs, 5% approximately represents an upper limit to economic growth among LMICs that was achieved over the past two decades (model calculations are based on this data), and therefore, 5% roughly represents the maximum growth in GDP per capita that we can expect. Hence, corresponding to this highest possible growth in GDP per capita, we report the highest possible gains in HALE that can be expected.
[x] Testing for statistically significant differences between the data points is challenging owing to the limited number of data points, and was therefore not done for this model.

Model 1: Drivers of HALE at age 60

In the first model for the ARC 5.0 study, Economist Impact estimated the relationship between country-level socio-economic, demographic and health factors on healthy life expectancy at age 60. This was done using an econometric model through a multi-variable cross-sectional linear regression approach.

Using healthy life expectancy at age 60 as the dependent variable, we examine the impact of following factors:

Table 1: Model 1 Variable descriptions

Factor	Variable
Socio-economic factors	Logged GDP per capita, PPP (constant 2017 international $)
	Mean years of schooling
Demographic factors	Fertility rate, total (births per woman)
Health factors	Current health expenditure (CHE) per capita in US dollars

Source: Economist Impact

Using standardized and comparable data series from World Bank's Development Indicators, we created a balanced panel for 172 countries, using annual data for the years 2000, 2010, 2015 and 2019 [see Table 2].[xi] A panel data approach was employed to determine the effects of the above variables on healthy life expectancy at age 60. We use a fixed effects approach to account for country-level differences. A panel data approach was chosen, given the cross-sectional and historical structure of the available data, and also given that four time periods were available for the key outcome variable.

The model outputs give a generalized view of the impact of socio-economic and demographic factors on healthy life expectancy at age 60. **These results are best used to understand the broad relationship between the input and output variables, but not to generate knowledge on directionality of relationships or causality**. However, despite the limitations, establishing the relationship between GDP and life expectancy is useful, as it offers evidence that if a country works on their economy, it is a good bet that they will see increases in longevity. Another key limitation of the model is data availability. Variable selection was made based on the availability of standardized and comparable data. While many alternative variables exist, they typically lack the required historical time series or geographic spread. This limitation was addressed through additional quantitative and qualitative analysis of the model's outputs, discussed in *Section 2*.

Table 2: Model 1 Country distribution by income group

Low income countries	20
Lower middle income countries	53
Upper middle income countries	45
High income countries	54

Source: Economist Impact calculations

[xi] Data for HALE at age 60 is discontinuous and available for the years: 2000, 2010, 2015 and 2019.

While growth in GDP per capita remains a key driver for healthy life expectancy, it doesn't mean that governments in LMICs can sit back and reap the rewards of these expected gains. As fertility and mortality decline, the working-age population, and thus the economy, grows temporarily–a period referred to as the "first dividend"–which can make aging seem a less-pressing concern than it actually is. However, governments and societies must take advantage of this time to build up savings and capital surpluses, and prepare for the oncoming shift to higher dependency rates with policy interventions and behavioral changes. Otherwise, they will not enjoy the "second dividend" from higher capital stocks resulting in higher productivity, and could face greater development challenges.[33]

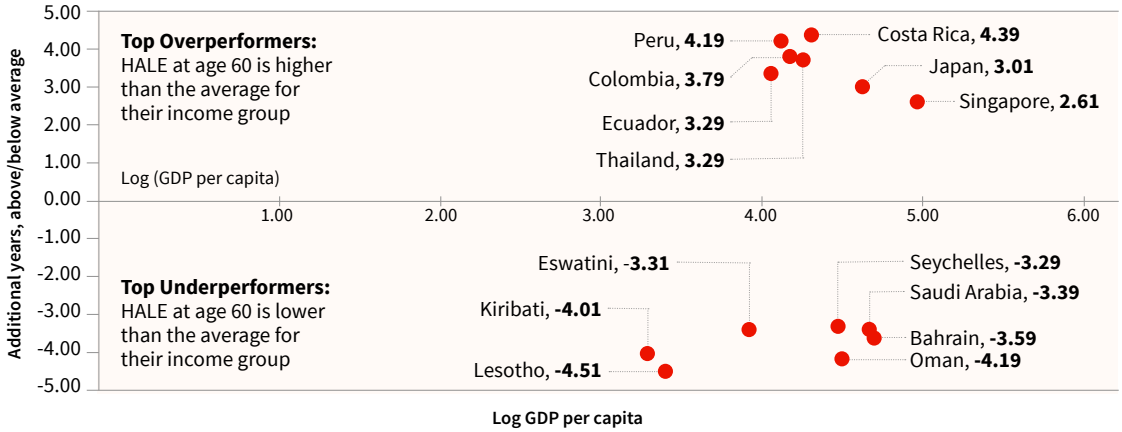
In addition to growth in GDP, a host of development policies and investments have contributed to extending people's lifespans over the past two decades. These include policies to improve economic, health and social outcomes throughout a person's life course, including greater access to healthcare, education and water, sanitation and hygiene (WASH). Other important advancements aim to improve the lives of girls and women specifically, including investments to make childbirth safer, and increasing women's access to education and labor force participation.[34-37]

Together, these efforts–which make up a large portion of the investments of both governments and international organizations like the World Bank–have led to an extra 2.9 years of HALE at age 60 for older adults worldwide. Investments in education alone have consistently moved the needle. According to our quantitative model, **an additional year of schooling across the population is associated with over 100 additional days of HALE at age 60**.[xii,38]

While our model shows that investments throughout a person's life course are essential to improve development outcomes, our findings also suggest that policies and investments that focus specifically on the needs of older adults are essential to promote healthy aging. In particular, additional research based on our model results shows that investing in health systems that are responsive to the needs of older adults has been critical to improve HALE at age 60, particularly in middle-income countries. Costa Rica, Peru, Colombia, Thailand and Ecuador all have above-average investments and policies to promote the accessibility, affordability and quality of health systems for older adults. Our model **recorded that HALE at age 60 in all of these countries is three years higher compared with countries that have similar levels of GDP per capita, education rates and other demographic factors**.

Figure 3: Leaders and laggards

2019 log GDP per capita vs. HALE at age 60 country over/underperformance in relation to economic peers



Source: Economist Impact calculations

[xii] Mean years of schooling refers to the average number of years of education completed by adults aged 25 and over in the survey and census datasets. In most of these datasets educational level is measured in years of education completed. In a restricted number of cases, education was measured by the highest completed education level. In those cases, the data was turned into years of education on the basis of information on the number of years it normally takes to complete a certain level in the specific country.

This observation also holds true for HICs, with Japan performing better than its peers [see Figure 3]. Japan, Thailand and Costa Rica in particular are also considered regional leaders in integrating the needs of older adults into national decision-making and policymaking processes.[39-42] In contrast, some Gulf Cooperation Council countries, including Saudi Arabia, Oman and Bahrain, have underperformed when compared with countries in their same income group.

Any initiative that seeks to tackle large-scale societal challenges–including education, sanitation infrastructure or gender equity–are by nature long-term projects. Our results highlight that such efforts are essential to improve the lifespan and healthy aging of populations in the future, however, they are not enough to meet the needs of and narrow the inequities among older adults today, or even in five years. To promote healthy aging now, this issue brief presents evidence that countries at every level of the income ladder adopt targeted, age-specific efforts to support older adults. These efforts would include ensuring effective health and social care systems, accessible economic opportunity, and ensuring social structures and institutions are inclusive.

While our model shows that investments throughout a person's life course are essential to improve development outcomes, our findings also suggest that policies and investments that focus specifically on the needs of older adults are essential to promote healthy aging.

2. Pensions first: Bridging the old-age gender income gap

Interventions targeted at reducing the old-age gender income gap are essential - as are evaluations of their impact

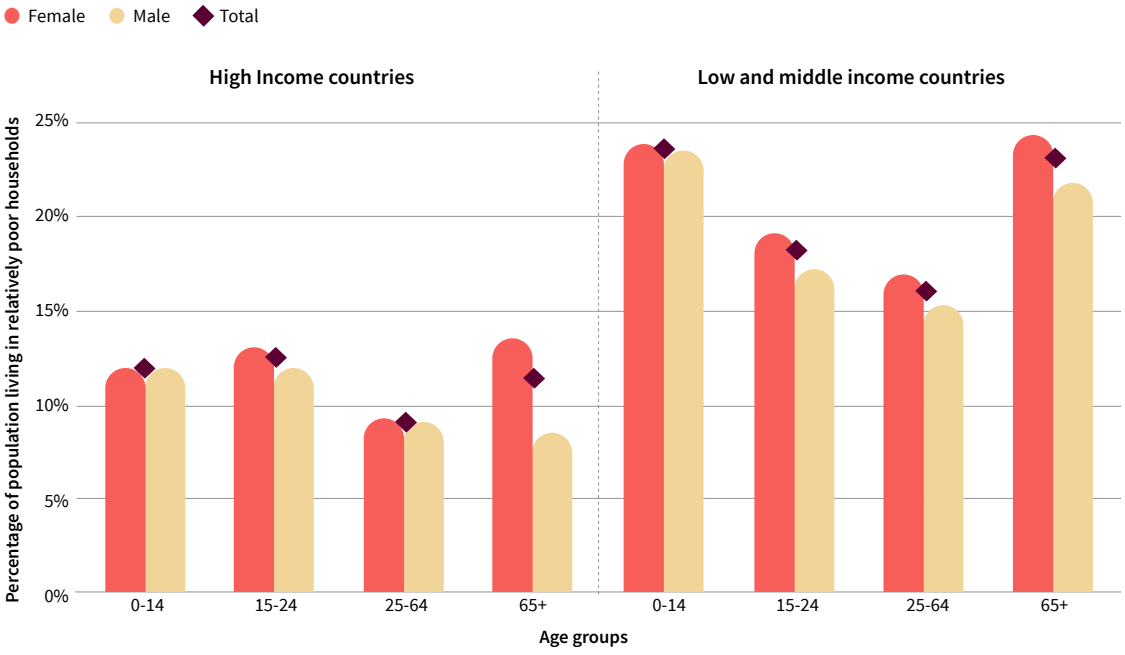
Promoting broad economic growth, developing effective health systems, and implementing aging-targeted policies will support healthy longevity, but they are not sufficient for reducing inequities between older men and women, or protecting the most vulnerable citizens. Within the mosaic of investments that help to extend lifespans and support healthy aging today, ensuring income security and narrowing the gender income gap should be primary considerations for policymakers in LMICs to achieve these aims. Compared to older men, nearly 50% more older women in HICs and 15% more in LMICs were recorded as living in relative poverty. The old-age gender income gap is larger in HICs and low-income countries, where older women's incomes are much lower than their male peers [see Figure 4].[43] Income security is also positively linked with physical and mental well-being,[44-51] with the income security gap impacting older women's ability to afford necessary health care and long-term care. This represents a considerable challenge, as older women—in both HICs and LMICs—are likely to spend more years living in poor health than men, partly due to differences in life expectancy.

These discrepancies are not simply a reflection of differences in poverty rates between higher and lower income countries. **Low savings balances at the individual level and lack of access to occupational and personal pensions lead to a spike in poverty rates among older adults in LMICs** that is not seen in HICs, as well as growth in income inequality following retirement.[52]

Figure 4: Unequal incomes, a shared challenge across income levels

Percentage of population living in relatively poor[xiii] households by age and sex, 2019 (or latest year with available data)

While many older people in HICs lack income security or live in poverty (as defined by national benchmarking), poverty rates among older adults in LMICs are considerably higher than in HICs.[53] United Nations estimates place the 65+ poverty rate at 23.2% in LMICs, compared with 11.4% in HICs, with the highest rates found among the 80+ group.[54] Interestingly, the gender gap for poverty rates among older adults are higher among HICs (7 percentage points) as compared to LMICs (1 percentage point).



Source: United Nations Department of Social and Economic Affairs (UNDESA), 2023[55]

[xiii] Estimates based on a relative poverty line of 50% of the median income of the total population

Pension coverage differs widely among countries and by gender

While retirement ages vary by country, and most older adults continue to work as they age, pensions are the main mechanism through which older adults can sustain income in later life. The World Health Organization, United Nations, and International Labour Organization cite that globally, nearly 68% of people above the statutory pension age are covered by some form of pension (contributory or non-contributory).[56] However, there is considerable variation across the world and by income level—while up to 85% of older people in HICs are covered by pensions, this falls to just 8% in low-income countries [see Figure 5].

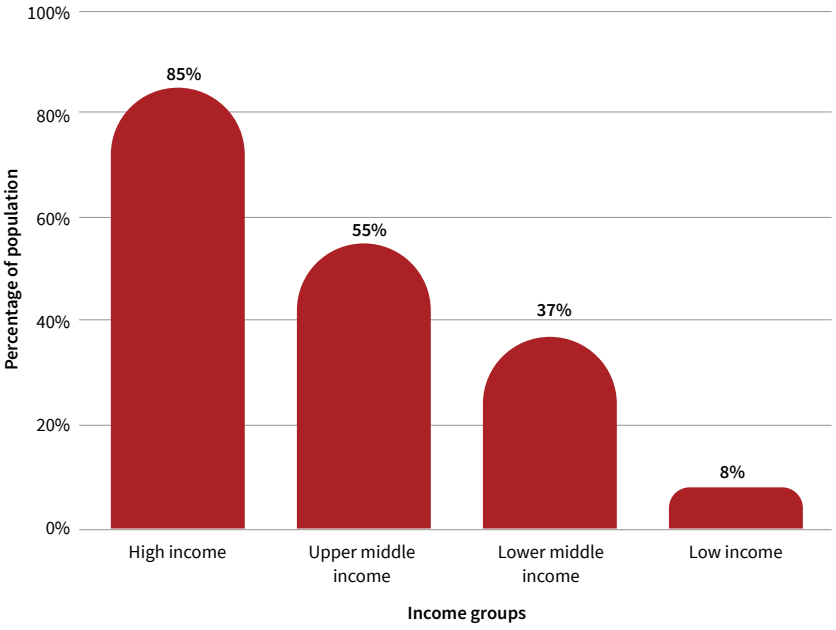
For governments struggling with constrained budgets—in countries of all income levels—pension reforms have mainly focused on making programs more financially sustainable rather than equitable. In LMICs, less than 10% of working-age women are covered by pension schemes, compared to 20% of working-age men.[57] Many state pensions require a minimum number of working years to be eligible, for example, which means that women's time out of the workforce due to pregnancy or care duties makes it difficult to qualify. When women are covered, lower earnings affect their entitlement to state pensions. **Even among OECD countries, annual pension payments for women are 27% lower, on average, than payments for men**.[58]

Certain reforms—such as moving from a pay-as-you-go system to a defined contribution system, or strengthening the privately funded voluntary pillar—tend to penalize women, worsening the impact of irregular working patterns, lower wages and fewer years of contributing to a pension system.[59] Reforms that increase women's retirement age boost the system's sustainability, but they also lengthen women's working lives and often do not entitle women to sufficient pension income.[60]

Regardless of income level, the gender income gap widens in old age. This trend is in fact particularly pronounced in high-income countries. Figure 6 shows the relatively higher poverty rate (defined as below 50% of median income) of women in across OECD countries. Comparable data for LMICs was unavailable.

Figure 5: Pension coverage increases with income

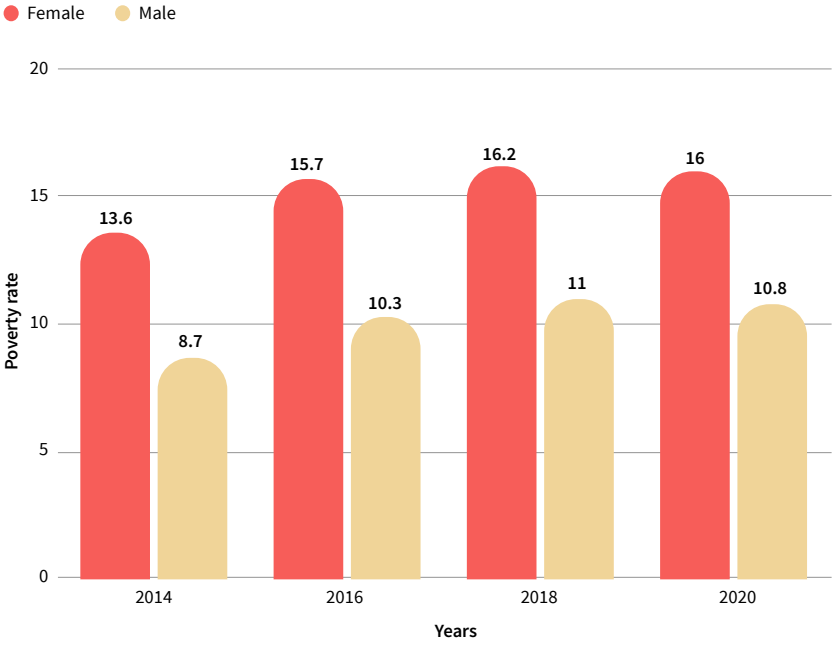
Old-age pension beneficiaries as a percentage of population above statutory pensionable age



Source: ILO, Economist Impact calculations[61]

Figure 6: The old-age gender poverty gap in OECD countries, 2014-2020

Old-age income poverty rate below 50% of median income, 66 years or over, OECD average



Source: OECD[62]

Historically, lack of equal access to education has hampered women's ability to join the workforce and reinforced income inequity. While educational gender gaps have narrowed over time–for example, gender differences in secondary school enrolment rates decreased from 15% in 1990 to around 1% by 2018– most older women, particularly in LMICs, were educated at a time when these gaps were more significant.[63] While this may have some impact on narrowing the gender income gap in the future, there are other factors to consider.

Other factors contributing to the old-age gender gap include discrimination, access to employment opportunities, rates of formal-sector employment and women's roles as carers (typically unpaid work, despite being valued at between 10% and 39% of global GDP) [see Figure 7].[64,65] A lack of stable income affects older women's ability to afford necessary health care and long-term care. This represents a considerable challenge, as older women–in both HICs and LMICs–are likely to spend more years living in poor health than men, partly due to differences in life expectancy.

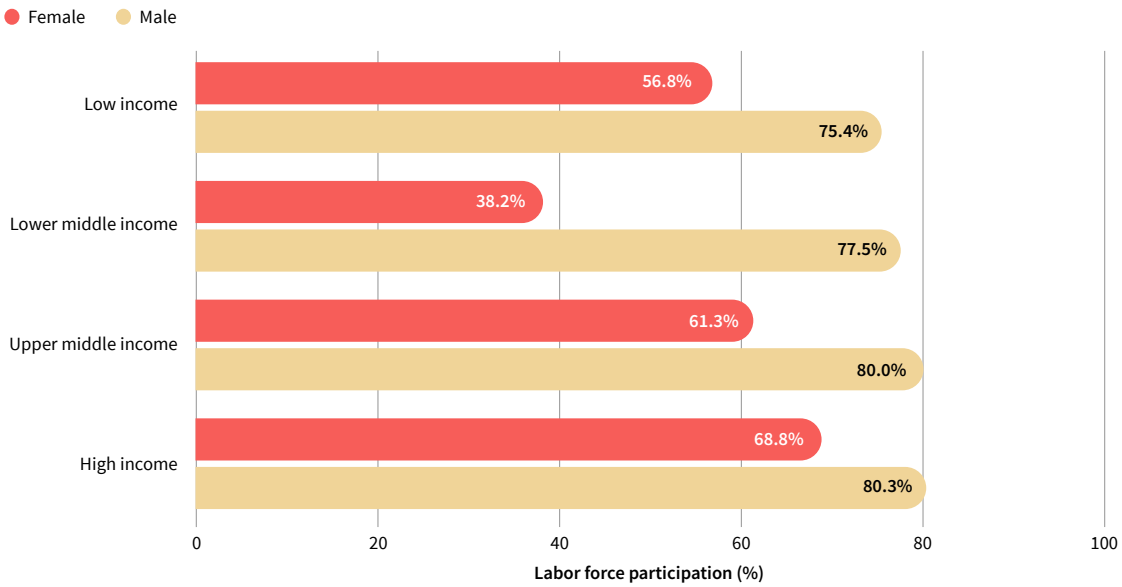
Despite the importance of income security for older adults, old-age sensitive investments and policies remain an afterthought for policymakers in LMICs and international organizations. The World Bank scorecard,[66] released in 2024, which presents the overarching view of the group's metrics, does not include any programs or measures targeting older adults. Even the World Bank's most recent gender strategy report fails to mention older women, despite its focus on economic empowerment.[67]

As the economic adage "what gets measured, gets managed" suggests, this lack of attention to the needs of older women could have serious consequences for global development efforts. While older women make up the majority of the global population living in relatively poor households, Economist Impact's review of more than 3,800 papers identified only a handful of interventions that focus on older womens' needs, and only one large-scale poverty alleviation scheme targeting older women: Bangladesh's Old Widow's Program.

Figure 7: The labor-force participation gap

Labor-force participation by gender, income groups, 2019

Over the past two decades women's participation in the formal labor force has remained well below that of men's. This gap is more pronounced in lower middle income countries.[xiv]



Source: ILO, 2022

[xiv] The upper lines in the charts refer to male labor-force participation and the lower lines refer to female labor-force participation rates.

Case Study 1: Greater efforts required to design and evaluate gender-targeted interventions

The global community of academics, policymakers and practitioners often talks about lacking critical data to better understand gender inequities among older adults. However, this data gap is a symptom of a much larger problem. Our extensive search for existing interventions and impact assessments revealed that while governments, international organizations and third-sector groups acknowledge the problem of income insecurity in old age—and may even recognize the gender imbalance within that problem—few are actively trialing different types of gender-targeted interventions, much less evaluating their impact.

With many LMICs boasting relatively young populations, there is a lack of country-level attention to both aging and aging inequity in these countries. To address gender inequity in aging, it is necessary to consider how the labor market, care provision, vulnerabilities specific to women (such as the risk of widowhood, disability, and divorce and its legal consequences) and the pension system combine to produce inequalities and potentially lead to poverty in old age.[68]

To date, however, little attention has been paid to quantifying the differences between women's and men's experiences with aging (much less the experience of older nonbinary and transgender people) in LMICs.[69] Lisa Warth, chief of the Population Unit at the United Nations Economic Commission for Europe, shares this view. "The search for interventions that are cost-effective, scalable in LMICs and have demonstrable impact, particularly for improving gender equality in aging, is a quest we all share," she says. "It is not easy to identify these, as few measures that we learn about through information sharing by governments have undergone the evaluation needed to assess that they are indeed cost-effective and/or have demonstrable impact in reducing inequities."

This lack of evidence stems from a lack of measurement, but it also reflects an absence of programs to examine. These evidence gaps exist in countries of all income levels but are especially notable in LMICs. A key challenge is the lack of investment in gender-targeted interventions by governments, third-sector organizations and philanthropic organizations, despite global efforts to support women's economic empowerment.

There are some means-tested programs that support older adults, and in practice these often support more older women than men because women's incomes are lower. However, because these programs do not specifically target women, they may miss some of the nuances around gender inequity and other intersectionalities. Governments in LMICs may feel that they do not have the resources to examine programs from this perspective, but they may miss opportunities to make programs more impactful and cost-effective as a result.

To assess the impact of current programs, governments should take advantage of a conceptual framework developed by HelpAge International—a global network of organizations promoting the right of all older people to lead dignified, healthy and secure lives. This framework helps to determine the extent to which social protection programs integrate a gender lens and the pursuit of gender equality into their design and implementation.[70] The framework's methodology defines five categories of program: gender discriminatory, blind (or neutral), sensitive (or aware), responsive and transformative. Programs are categorized based on their access to information, targeting and enrollment mechanisms, payment delivery methods, grievance and redress mechanisms, conditionalities and their relationship to gender equality, and perceptions of usefulness and adequacy.

Key takeaway for policymakers:

Few stakeholders are trialling or implementing gender-targeted interventions for older adults in LMICs. Governments and other actors may be missing out on gains from impactful and cost-effective programs that are uniquely suited to the needs of older people, and particularly older women.

3. Strong foundations: Social pensions improve healthy life expectancy for older adults in LMICs

Even though there is a lack of gender-targeted interventions specifically addressing healthy life expectancy[xv] outcomes for older adults, Economist Impact found unambiguous evidence that social pension programs have had overwhelming positive impacts in improving the lives of older populations in LMICs. This includes older women, who are more likely to benefit from these programs given the gender income security gap.

This first-of-its kind analysis aggregates all existing evidence on the general impacts of social pensions for old age in LMICs. Our *social pensions impact model* examined these impacts across 17 outcomes within three dimensions: economic, health and social. We reviewed over 3,800 papers from a total of 17 databases, including bibliographic, specialty and grey databases. Not all papers were publicly accessible. We synthesized existing impact evaluation studies in both a gender-aggregated and gender-disaggregated manner where data was available. We then refined our search based on relevance and robustness, and aggregated the results found in 24 evaluations. Our analysis provides

in-depth insights into the benefits of social pension programs for older adults overall (given insufficient evidence for interventions specifically focused on older women), empowering policymakers to implement evidence-based strategies that foster equitable and healthy aging.

Figure 8: Social pensions impact model parameters

3, 873

Studies related to unconditional cash transfers in LMICs

79

Relevant and non-duplicative studies examining impact of older adults across economic, health and social dimensions

24

Robust evaluations aggregated that measure the effects of social pensions in at least one of the 17 outcomes examined.

[xv] Refers to healthy life expectancy at age 60.

Model 2: Analysis of the economic and health impacts of unconditional cash transfers for older adults in LMICs

In the second model for the ARC 5.0 study, Economist Impact analyzed the microeconomic impacts of social pensions, which are among the most common methods of delivering income security to vulnerable older adults. This analysis was conducted using a meta-analysis framework.

Using the Population, Intervention, Comparison, and Outcome (PICO) format, we developed a search strategy targeting studies on the outcomes of social pensions for older adults in LMICs from 2000 onwards. The search strategy included identifying relevant keywords for the population under study, the intervention being applied, time frame for study, the outcomes being analyzed and the kind of studies being included.

The search strategy yielded 3,873 results, which were independently reviewed by two researchers. These studies were put through a filtering process. Two researchers independently reviewed abstracts for all studies, where relevance was the main filtering criteria. The first stage of the filtering process involved removing irrelevant and duplicate studies. In the second stage, the shortlisted studies were evaluated for quality. This involved evaluating the studies on the basis of participant selection and experiment design. This process yielded a total of 79 studies to be analyzed in full.

The full-text of the 79 studies were accessed and further evaluated for relevance. After this final round of filtering, 24 studies were selected for the final process of extracting effect size measures of relevant outcomes. Data extraction was completed by two researchers. Each study was analyzed in detail and data was collated based on the different outcomes being evaluated. The effect sizes for each different outcome were classified and tabulated under three broad domains: economic outcomes, health outcomes, and social outcomes.

While we originally hoped to standardize and pool effect sizes for a formal meta-analysis, we found too few studies utilizing standard methodologies and measures in the selected studies. Instead, we evaluated the direction of the effect sizes within selected studies individually and in aggregate to derive learnings related to the economic, health and social impacts of unconditional cash transfers.

Table 3: PICO framework and search strategy parameters

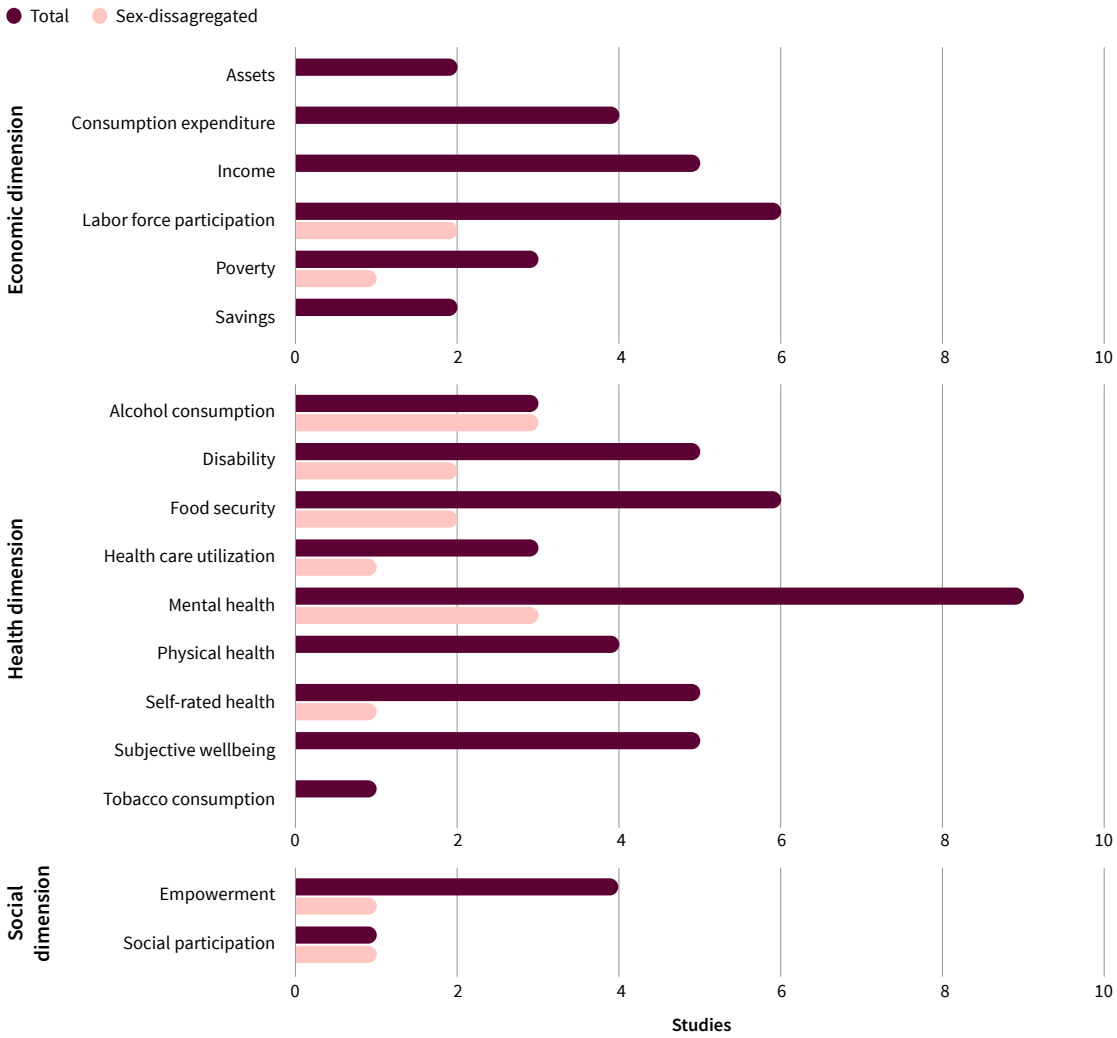
Population	Older adults (inclusive of all genders) aged 55+ living in LMICs[xvi]
Intervention	Unconditional cash transfers in LMICs including (but not limited to)[xvii]: • Income transfers • Non-contributory pension schemes • Old age benefits • Older person's allowances • Older person's social allowances • Social assistance • Social pensions
Comparison	Not applicable
Outcome	**Economic Outcomes** • Assets, consumption expenditure, income, labor force participation, poverty, savings **Health Outcomes** • Alcohol consumption, disability, food security, healthcare utilization, mental health, physical health, self-rated health, subjective well-being, tobacco consumption **Social Outcomes** • Empowerment, social participation
Time frame	2000 onwards
Study designs	Randomized control trials and quasi-randomized trials
Total no. of studies from search strategy	3,873
Final no. of studies included	24

[xvi] We used 55+ as the lower age limit, rather than 65+, to broaden the results of the search and increase the number of potentially relevant studies.
[xvii] The long list of search terms listed here all refer to social pensions for older adults. To keep the search terms broad enough to include all possible studies, we used all possible alternative names and synonyms for social pension we came across during research.

The findings suggest that **over the past two decades, social pensions have had large positive effects, and virtually no negative effects, for older beneficiaries in LMICs**. Most of the studies identified focus on the impact of these programs in older adults' mental health, food security and labor force participation. While only about a quarter of the studies included sex-dissagregated findings, women make up a larger share of social pensions' recipients, which suggest the effectiveness of these programs in bridging the income and healthy aging gender gaps [see Figure 9].

Our analysis included 44 estimates, or measures of impact, of social pensions in economic outcomes. Despite the importance of the return on investments of these programs, very few studies focus on the role that social pensions can play in allowing old-age beneficiaries to grow assets, build savings and reduce poverty rates. The few studies that do focus on the financial impacts of social pensions show positive effects on beneficiaries' assets and poverty rates, but insignificant effects on savings. A larger body of evidence has been produced to understand the impact of social pensions on labor force participation. Most of the evaluations of these programs showed insignificant effects. These findings can be treated as either a positive or negative as social pensions have an impact on the choice of recipients to retire, work less or continue working. However, it is clear that without the basic income provided by social pensions, these decisions would be more influenced by need than by choice.[71]

Figure 9. Evidence by the numbers - Existing studies on the impact of social pensions for older adults[xviii]



[xviii] Outcomes are collected from 24 different studies [see Table 5]

Table 4. Measures of the impact of social pensions for old age on economic, health and social outcomes

	Estimates	Positive	Negative	Insignificant	Mixed
	Number of measures of each outcome	% of studies that have found a statistically significant estimate of positive impact	% of studies that have found a statistically significant estimate of negative impact	% of studies that have found a statistically insignificant estimate of impact	% of studies that have found a statistically significant estimate of mixed impact
A. Economic dimension					
Assets (3, 5)	2	100%	0%	0%	0%
Consumption expenditure (3, 5, 12, 19)	12	100%	0%	0%	0%
Income (3, 12, 13, 19, 23)	8	13%	13%	75%	0%
Labor force participation (reduction) (1, 11, 12, 13, 19)	16	13%	19%	69%	0%
Poverty (3, 11, 18)	4	50%	0%	50%	0%
Savings (13, 23)	2	0%	0%	100%	0%
B. Health dimension					
Alcohol consumption (1, 15, 22)	3	33%	33%	33%	0%
Disability (4, 7, 14, 17, 19)	6	50%	0%	50%	0%
Food security (1, 7, 8, 9, 15, 17)	8	88%	0%	13%	0%
Health care utilization (natural, + = “more utilization”) (13, 17, 19)	1	100%	0%	0%	0%
Mental health (1, 2, 7, 10, 17)	12	50%	0%	50%	0%
Physical health (7, 13, 14, 19)	12	0%	0%	100%	0%
Self-rated health (binary, “bad”) (1, 7, 13, 14, 19)	1	0%	0%	100%	0%
Subjective wellbeing (7, 13, 16, 19, 23)	11	55%	0%	45%	0%
Tobacco consumption (15)	1	0%	0%	100%	0%
C. Social dimension					
Empowerment (10, 13, 19, 24)	6	50%	0%	33%	17%
Social participation (1)	1	100%	0%	0%	0%

Notes:
- Numbers in parentheses in the first column () refer to the study ID from which the effect sizes have been extracted. Refer to table 5 for the study index and the full list of references of all studies included in the analysis
- Cells highlighted in green indicate ‘Positive’ effects as the dominant direction of the effect size for the specified outcome
- Cells highlighted in yellow indicate no single dominant unidirectional effect, but rather a mixed effects for the specified outcome
- Cells highlighted in pink indicate ‘Negative’ effects as the dominant direction of the effect size for the specified outcome
- Cells highlighted in grey indicate ‘Insignificant’ effects as the dominant direction of the effect size for the specified outcome

Source: Economist Impact calculations

Table 5: Final list of studies included in the *social pensions impact model*

Study #	Study title
1	Association between social pensions with depression, social, and health behaviors among poor older individuals in Colombia[72]
2	Depressive symptoms and receipt of pensions: a cross-sectional analysis of the ELSI-Brazil study[73]
3	Does the old-age pension scheme improve household welfare? Evidence from India[74]
4	Educational inequalities in disability linked to social security coverage among older individuals in five Latin American countries[75]
5	Essays on India's Old Age Pension Program: Politics, Welfare Effects and Gender[76]
6	Expansion of Thailand's social pension policy and its implications for family support for older persons[77]
7	Favourable changes in economic well-being and self-rated health among the elderly[78]
8	Food well-being in older adults: effects of a universal non-contributory pension in Mexico[79]
9	Households with elderly members in Mexico: can pensions or a demogrant help facing food insecurity?[80]
10	Impact of the Non Contributory Social Pension Program 70 y más on Older Adults Mental Well Being[81]
11	Minimum eligibility age for social pensions and household poverty: Evidence from Mexico[82]
12	Non-contributory pensions[83]
13	Old-age pensions in a lower middle-income country: Economic or psychological effects?[84]
14	Pension exposure and health: Evidence from a longitudinal study in South Africa[85]
15	Pensions, consumption and health: evidence from rural South Africa[86]
16	Policy shift: South Africa's old age pensions' influence on perceived quality of life[87]
17	Short-term impact of income on cognitive function: evidence from a sample of Mexican older adults[88]
18	Targeting cash transfers on the "poorest of the poor" in the slums: how well did the Kenya's older persons cash transfer programme perform?[89]
19	The effects of non-contributory pensions on material and subjective well being[90]
20	The effects of pension on depressive symptoms in Chinese older adults: A moderated multiple mediator model[91]
21	The effects of social pensions on nutrition-related health outcomes of the poor: Quasi-experimental evidence from Peru[92]
22	The impact of old age pension eligibility on alcohol consumption: Evidence from a population-based study in rural South Africa[93]
23	The Well-being Effects of an Old-Age Pension: Experimental Evidence for Ekiti State in Nigeria[94]
24	Women's autonomy and old age pension transfer in South Africa[95]

Social pensions provide unique benefits to women, for instance regarding mental health, where women may benefit more than men from the improved access to a regular income.

Together, these results provide credible evidence that social pensions work to make older adults' lives better by improving their income security. Providing this baseline income is effective for improving a range of outcomes. We also find a case where social pensions provide unique benefits to women, for instance regarding mental health, where women may benefit more than men from the improved access to a regular income.[96]

But social pensions are a starting point: governments should continue to work to expand all forms of pension coverage, particularly for women. Social pensions do not operate in isolation, and their largest benefits are primarily felt by those who lack other sufficient forms of income. In addition, the positive effects of social pensions on older women can be compounded by effective financial education to ensure that they have the tools and knowledge to make informed decisions around the use of all forms of income. Financial education and literacy programs targeting older women could improve income security and healthy aging outcomes when used as a complement to social pensions [see Case Study 2].

Key takeaway for policymakers:
Our social pensions impact model provides additional evidence that social pensions are an effective model across a range of countries and contexts for reducing poverty rates, improving health outcomes and supporting a general sense of well-being among older adults, especially older women in LMICs. Social pensions should form a key element of a broader suite of gender-sensitive pension reforms.[96]

Case Study 2: Fostering older women's empowerment through financial literacy interventions

Increasing access to financial services like bank accounts and savings, investment and insurance products has been at the center of economic development efforts for decades. These tools are essential for building wealth and have also proven effective in reducing stress and improving general well-being.

Historically, women around the world have been systematically excluded from the financial system. According to the latest World Bank's Global Findex data, 740 million women still do not have access to any banking services, representing 13% of all adults globally and 54% of the unbanked.[97] While there are several country-level factors, including legal barriers and social norms, that are driving this persistent financial gap, lower financial skills combined with fewer available resources puts women's financial security at risk, particularly at retirement.[98]

Women are much less likely to plan and save for their retirement than men. They also may have different savings needs than men. According to the S&P Global FinLit Survey, worldwide,[99] 35% of men are financially literate compared with 30% of women. While this gap is persistent across high, mid and low income countries, basic financial knowledge and skills differ enormously. In G7 countries, 55% of adults are financially literate compared to 28% of the adult population in emerging economies.[100]

A 2017 study from George Washington University, which leverages data from the S&P Global Finlit Survey and the Global Findex, found that there is a strong correlation between women's financial literacy rates and the percentage of women who save for old age.[101] This correlation highlights the important relationship between financial knowledge and financial behavior and decision-making.

There is a large body of evidence detailing the role that financial literacy interventions can have in improving participants' knowledge and behavior. However, there are very few studies that focus on how to bridge the financial literacy gap, particularly among older women. A recent evaluation—from the University of Southern California (USC), Research for Impact and HelpAge USA—of a first-of-its-kind financial education program targeting women aged 40 to 65 years found that there were strong immediate effects on financial attitudes and self-reported behaviors among participants as a direct result of this intervention.[102] Increasing financial literacy is one way to help bridge the gender gap in financial security, alongside addressing the very real structural barriers that negatively impact womens' economic outcomes.

The Citi-Tsao program for older women's financial education[103]

The Citi-Tsao Foundation Financial Education Programme for Mature Women is a financial education program first launched in Singapore in 2007 and then implemented across Asia. It was developed to help women over the age of 40 build financial management, communication and confidence skills to help address gender equity in financial well-being in older age. The program, still currently in operation, consists of a 12-week group-based, in-person intervention where participants attend a facilitated interactive session for one to two hours a week. The core curriculum focuses on both financial and social empowerment:

- Personal finance: savings, debt, investments and insurance
- Social empowerment: understanding roles and dynamics within families, negotiating for support, being informed and confident in transacting with financial institutions, and being independently prepared for old age

The program pedagogy rests on an interactive model of sharing participants' personal experiences: a "see-judge-do" system of learning through role-playing, reflecting on how they would use their newly acquired knowledge and skills in the real world, and practical suggestions for participants to become more financially independent and secure as they grow older. At the end of the program, participants design and pledge to commit to a financial plan for themselves.

Evaluating the impact of financial education interventions[103]

The results of the program were evaluated through a rigorous study conducted between 2013 and 2023. The 2013 evaluation involved 1,360 participants who had low self-reported levels of financial literacy. When they enrolled, 78% of participants reported "no knowledge" or "some knowledge" of family finances. After the course, participants showed strong immediate effects on attitudes towards financial planning, savings, knowledge of financial products that suited their needs and implementing behaviors that allowed them to be prepared in case of an unexpected crisis and feeling empowered in facing their financial future, among others.

A second evaluation in 2023 caught up with 200 women 10 years after their participation in the program and compared them to a control group of their peers who had participated in other, non-financial community-based programs. Overall, participants reported more control and reduced stress related to financial decisions and more financial self-sufficiency, suggesting strong persistence of program impacts. The evaluation also indicates that the program may be more useful for those with initially lower financial literacy and capability. Qualitatively, women reported feelings of appreciation for the pedagogical approach and the safe space with their peers as much as the actual program content itself.

Financial planning for healthy aging

ARC 4.0 highlighted the importance of financial and health planning for improving older adults' economic security and well-being. The profile of Leticia Figueroa, a 58-year old woman living in Mexico City, exemplified how the experiences she witnessed earlier in life instilled in her the need to prepare for the future. "Having seen older adults' poor life conditions helped me to plan and get ready for this stage of my life," she says, "I hope my financial and health planning help me avoid becoming a burden to my family and allow me to lead an easier life as an older person."

Letitia believes there is great potential to be unleashed among older people. For example, the knowledge and skills of older women can be passed on through established programs, courses and conferences: "For women who have always been housewives, assistance should be provided to help them share their knowledge that, in some cases, has been passed down from generation to generation." Letitia also wishes for universities to promote and support programs for older adults.

The empirical evidence presented in the study above confirms what Leticia sees. People with a better understanding of basic financial concepts and life-long consequences of financial decisions are more likely to set aside money for the future.

4. The case for social pensions: Economic growth

Social pensions can contribute to economic growth in LMICs.

The findings of our novel *Old-Age Grant impact model* suggest that social pension programs targeting older adults may not place a disproportionate burden on public finances. To study the macroeconomic impacts of these programs, we conducted a historical analysis of South Africa's Old-Age Grant Programme. The selection of South Africa for this analysis was based on a list of the 10 countries spending most on old-age social pensions as a percentage of GDP. While other countries in the list–including Mauritius, Georgia, Lesotho, Barbados, Kosovo and Bolivia–recorded higher expenditure as a percentage of GDP than South Africa, the final selection was governed by the availability of historical data on the pension scheme and in-house modeling capabilities to generate GDP estimates.

The Old-Age Grant is a pioneering, large-scale social pension program that aims to guarantee income security for the 60-and-over population. The state-funded social pension pays out around R2,180 per month (approximately US$118), which is nearly twice the national poverty line (R1,058, or approximately US$58).[xix,xx,104] In 2023 there were 3.9m recorded beneficiaries of the grant.[105] Fifty percent of the beneficiaries resided in rural areas, and women accounted for 63% of beneficiaries. Nearly 75% of people aged 60 and above in South Africa receive the grant.[106] The Old-Age Grant is an income tested grant provided to older adults aged 60, with an annual income of up to R86,280 (US$ 4,700) if single or R172,560 (US$ 9,400) if married. Eligible individuals must not be in receipt of any other social grant to be able to draw benefits from the Old-Age Grant.

[xix] As of April 2024
[xx] Those over 75 years of age receive R20 additional

Model 3: Old-Age Grant Impact model: Macroeconomic impacts of unconditional cash transfers in South Africa

In the third model for the ARC 5.0 study—the Old-Age Grant impact model—Economist Impact analyzed the macroeconomic impacts of social pensions. A domestic demand national income accounting model was used to generate estimates for historical GDP figures under a counterfactual scenario in which the social pension does not exist. It instead assumes the government spent an equivalent outlay on a typical set of other uses.

To select a country of focus, Economist Impact shortlisted the 10 countries with the highest expenditure on old-age social pensions as a percentage of GDP from a broader list of 73 old-age social pension schemes across LMICs. While there were other countries in the list that recorded higher expenditure as a percentage of GDP than South Africa, the final selection was governed by the availability of historical data on the pension scheme—such as beneficiaries, expenditure and impact evaluation studies—and in-house modeling capabilities for forecasting the country's GDP.

The starting point for the model was Old-Age Grant beneficiary data. Total government expenditure on the Old-Age Grant for the time period 2018-23 was obtained from South African National Treasury data. Next, impact evaluation studies and descriptive studies for the Old-Age Grant were obtained and analyzed in order to build estimates of the relevant savings and consumption rates of the grant beneficiaries, as well as to understand other demographics of beneficiaries. These factors, along with secondary literature on transfer multipliers in LMICs, were utilized to generate an estimate for the transfer multiplier for South Africa.

Additional literature was analyzed to understand the trends and determine the best estimates for fiscal multipliers, government spending patterns and public debt for South Africa. Based on the results, a counterfactual scenario was formed outlining the alternate investment channels under the assumption that the Old-Age Grant scheme was not in existence. Further data were collected on GDP components, mainly whole-of-economy private consumption, savings rate and fixed investment rates.

Using multiplier estimates and macroeconomic variables, GDP calculations were made for both direct and indirect impacts under the counterfactual scenarios. Changes in consumption patterns, savings rates, investment decisions and government expenditure were all studied to calculate final impacts.

The model methodology makes reasonable assumptions for the consumption and savings behavior of the Old-Age Grant recipients in the South African economy. However, there are limitations to this model as it does not account for the changes in consumption, and relies heavily on our multiplier estimates.

The results are estimates of nominal GDP in South Africa for each of the years between 2018 and 2023, in the absence of the Old-Age Grant.

Table 6: Elements of economic impact analysis of social pensions

Inputs	
• Total expenditure on Old-Age Grant (billion, South African Rand) • Consumption and investment multipliers	
Counterfactual scenarios	
Alternative investment of Old-Age Grant expenditure: • The retracted OAG funds are invested in the economy, raising gross fixed investment • The retracted OAG funds are reallocated to other sectors of the economy in line with historical proportions, raising government consumption expenditure	
Impacts	
Direct Impacts (Fixed outcomes)	Decline in private consumption, as an income source for consumers is removed
Indirect impacts (Variable outcomes)	Change in government consumption, fixed investment, public debt
Output	
Alternative estimates for nominal GDP, (billion, South African Rand)	

Leveraging the Economist Intelligence Unit's rigorous forecasting models, we estimated the country's GDP in the absence of public investments in the Old-Age Grant over a six-year period between 2018 and 2023. We use the demand side equation to estimate macroeconomic impacts on individual GDP components under two counterfactual scenarios, assuming absence of the Old Age Grant (OAG) for the time period 2017-2023. Grant income from the OAG is income for the recipients. We assume a consumption to savings ratio of 70:30 among grant recipient households. The model operates on the assumption that the additional personal income from OAG benefits drives an increase in personal consumption and savings in the economy, through the multiplier effect.

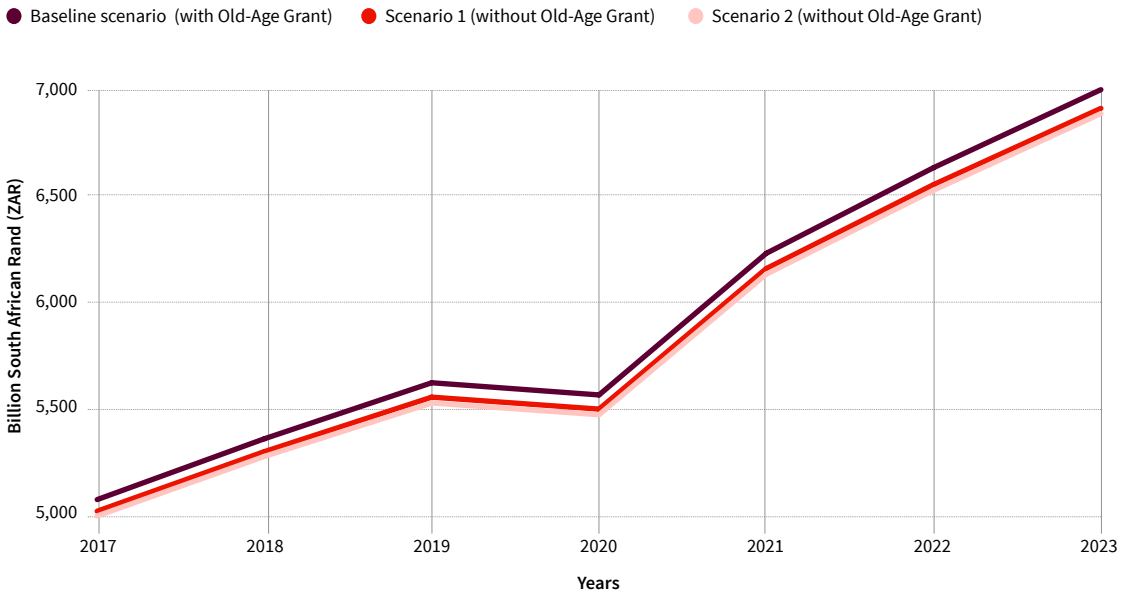
The macroeconomic impacts of the OAG are assessed through the direct and indirect impacts on individual components of GDP, mainly private consumption, government consumption and fixed investment. Two counterfactual scenarios are examined to ascertain the direct and indirect impacts of retracting the OAG funds. One scenario assumes that funds used for the Old-Age grant are rather invested into the economy, raising gross fixed investment. Under this assumption, we expect GDP growth rates to be lower for four out of the six years under consideration, with 2020 and 2021 being the exception. The second counterfactual scenario we analyze assumes that the funds used for the Old-Age grant are instead reallocated to other sectors of the economy, thereby raising government consumption expenditure. Similar to the first counterfactual scenario, we expect GDP growth rates to be lower for four out of the six years under consideration, with 2020 and 2021 being the exception.

Our model results reveal that despite the program's cost—R99.1 billion—accounting for nearly 1.4% of South Africa's GDP in 2023, GDP growth rates would have been lower during the six-year period-barring the pandemic years of 2020 and 2021 [see Figure 10].

This means that **South Africa's economy would have been notably smaller without the program under the two alternative scenarios for alternative utilization of the Old-Age grant funds**.[xxi]

Figure 10: South Africa's macroeconomic gains from the Old-Age Grant

South Africa's nominal GDP (billion South African Rand (ZAR)) with Old-Age grant spending and with modeled alternative government spending.



Source: Economist Impact calculations

[xxi] As a caveat, the direction of these returns is governed by the structure of the South African economy. The monetary amount of the Grant being paid out to the beneficiaries does not play a significant role in ascertaining the direction of the impact, but could possibly affect the size of the impacts.

It is important to highlight that the Old-Age Grant, and other social pension programs, do not operate in a vacuum and are one of many types of interventions that support healthy aging. Other interventions, such as improvements to long-term care systems, likely provide similar benefits for healthy aging, to economies and for women of all ages

Under a considerably more conservative estimation, the program made no difference to GDP growth rates, assuming those investments had instead gone to a representative set of general government spending. While the return on investment in many other countries with varying demographic and economic characteristics would likely be different, social pension programs do not need to be prohibitively expensive, even in LMICs.[107] Still, it is important to highlight that the Old-Age Grant, and other social pension programs, do not operate in a vacuum and are one of many types of interventions that support healthy aging. Other interventions, such as improvements to long-term care systems, likely provide similar benefits for healthy aging, to economies and for women of all ages [see Case Study 3]. Nonetheless, it is the most fundamental component of a well-developed and supportive pension system.

The macroeconomic evidence on social transfers suggests that they have the largest economic returns when offered to the poorest individuals[108-110] and are likely to be more effective at generating positive economic return in lower-income countries.[111-112] For this reason, both resource-constrained and richer countries need to adequately consider the trade-offs between program scope and social benefits from social pension programs.

Key takeaway for policymakers:
There is a strong economic case to invest in social pension programs that aim to improve income security among older adults. However, it is important to recognize that a social pension program is the foundation of a fully developed pension system and must be accompanied by more targeted investments.

Case Study 3: Creating more equitable outcomes through improved care

Reducing the old-age gender-income gap requires interventions that target both older and younger people.

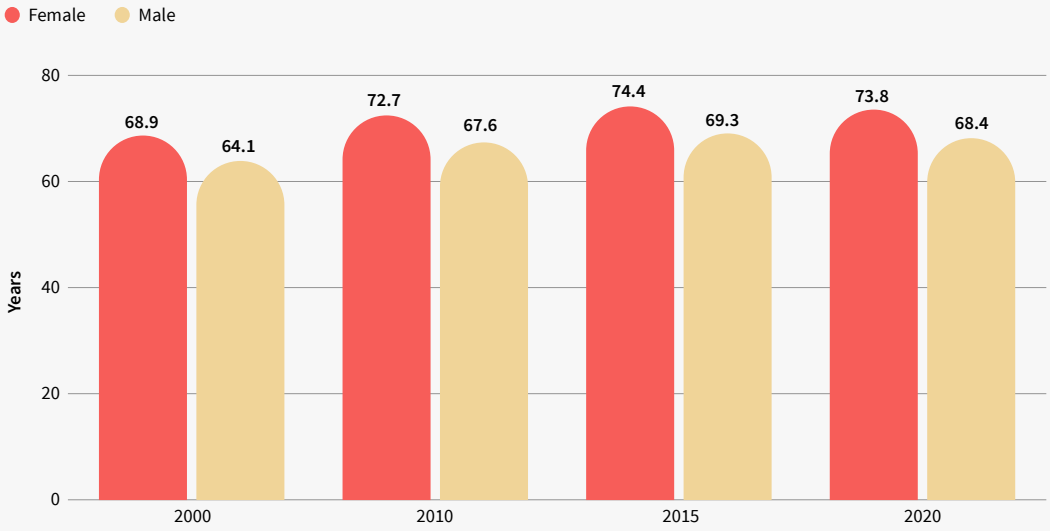
The root causes of gender disparities in old age are a result of the cumulative effects of discrimination, unequal access to health, education and formal employment opportunities across the lifetime, as well as challenges that emerge as women live longer lives.

Globally, women's life expectancy exceeds that of men by nearly five years [see Figure 9].[113] In addition, because men are more likely to suffer from conditions such as cancer, heart disease and stroke that reduce their longevity, and women are more likely to experience disabilities in old age, due to chronic conditions such as arthritis, osteoporosis, depression, fractures and dementia,[114] womens' need for care typically exceeds that of men's.

Long-term care (LTC) programs in LMICs hold potential for improving older women's income security (and quality of life) at the same time as they help reduce gaps through the lifecourse.

Figure 10: Women's longevity

Life expectancy at birth, years, by gender



Source: WHO[115]

Promoting integrated long-term care in LMICs for income security and gender equity

As people live longer and spend more years in poor health, the demand for the demand for LTC continues to grow. Indeed, the World Health Organization (WHO) estimates that two-thirds of individuals who reach old age will need care and support from others at some point to perform the activities of daily living (ADL).[116]

LTC care can take different forms, from residential provision in LTC facilities–such as nursing homes–to community-based care services that enable them to continue to live somewhat independently, or support given in the person's home. The WHO defines LTC as "the activities undertaken by others to ensure that people with or at risk of a significant ongoing loss of intrinsic capacity can maintain a level of functional ability consistent with their basic rights, fundamental freedoms and human dignity."[117]

Demand for LTC is already outstripping supply. Globally, one in four older adults may have unmet LTC needs because services are unavailable, inaccessible or insufficient.[118] Without the support they need, older people have a lower quality of life, are unable to perform many ADL, suffer more hospitalizations and hospital readmissions, and have a higher rate of mortality.

The lack of LTC also has implications beyond the individual. Family members frequently have to step in to provide care, affecting their ability to work and earn a living.[119] This often creates stress, which affects their own health and well-being.[120] Globally 70% to 80% of older people who need LTC are cared for at home by family members.[121] Even in HICs, family members or other unpaid caregivers provide the majority of care for older people.[122]

Beyond the family, a lack of LTC has significant consequences for economies and societies. Taking people out of the workforce or reducing their working hours to provide care affects economic growth. Furthermore, when care needs are not met promptly and sufficiently, the health problems of older people can worsen to the point where they need more serious medical interventions, hospitalization and greater levels of care. Ballooning health and social care costs cause government deficits to rise.[123]

Different LTC needs for women in LMICs

Women are more likely than men to have unmet care needs because they live longer, spend more years living with disability and are more likely to live in poverty (and therefore have difficulty affording care). Women are often unable to afford their own care because of the time they spent as caregivers themselves, reducing their wages and years in employment. With greater life expectancy, older women also tend to outlive their male spouses, meaning they do not have a partner to provide care.[124]

Women are affected by a lack of LTC in other ways, too. Women of all ages are overrepresented among care providers, and as many as 80% of all caregivers of older adults are women.[125] This is particularly the case in LMICs, where most LTC is provided by family members or informally, as publicly financed LTC remains limited and paid care is mainly funded out of pocket.[126]

Although there is a lack of data on LTC needs in LMICs, the studies that are available demonstrate substantial unmet demand. Despite this, there is a severe lack of government intervention in LMICs to address the problem.[127] One WHO scoping review assessed LTC interventions for older people around the world between 2010 and 2020 (as reported in 305 studies) and identified no interventions from lower-middle-income or low-income countries. Relatively few LTC programs have been implemented overall, and they are typically implemented by third-sector partners rather than governments.[128]

To show how LMICs can address unmet LTC needs, we highlight two innovative programs in upper-middle-income countries that have been shown to provide quality, cost-effective care.

Brazil: Programa Maior Cuidado[129–131]

Programa Maior Cuidado (PMC) is a community-based intervention for older people living in deprived neighborhoods in the Brazilian city of Belo Horizonte. Run by the municipal Departments of Health and Social Assistance, PMC has been providing support for dependent older people living in vulnerable families since 2011. Families receive 10 to 40 hours of support a week from professional family care support workers, depending on the needs of the elderly individual and the family situation.

Support is provided by lay carers, who are recruited from similar communities, provided with basic training and paid a basic wage. The carers provide daily assistance and work with families to build their care skills and agree on a care plan. PMC carers report back on the older person's situation in monthly case reviews, conducted by staff at health and social assistance centers, in order to anticipate and respond to problems. A unique aspect of this program is the focus on enhancing communication and engagement between carers and local health services, something often missed by traditional home care worker services.

The results have been positive across the board. Older people experience improved health and well-being, and their families experience less stress. The burden on local health services is also reduced, with a higher incidence of planned visits versus unplanned visits and a higher proportion of visits for rehabilitation rather than treatment. The program has also been beneficial to caregivers, providing them with skills and meaningful employment.

Importantly, these results come at a substantially lower cost than alternative interventions: approximately 916.2 reais (US$173) monthly, as of April 2023. Between 2011 and 2022, PMC provided support to 3,062 families. These encouraging results led the Belo Horizonte municipality to extend the scheme and the Federal Ministry of Health to support similar pilots in other cities.

Thailand: Community-integrated intermediary care program[132]

LTC has traditionally been provided by family members in Thailand, neighboring Asian countries and many LMICs globally. The community-integrated intermediary care (CIIC) model is designed to enhance rather than replace that care, similar to the PMC in Brazil. The CIIC program exists within the broader Thai context, where the government has been rapidly scaling up baseline LTC access nationally since 2016.[133]

CIIC is a combination of formal care and informal care, centered around a community-based facility. It consists of three components: care prevention exercise, care capacity-building of the family caregiver and a community respite service. Care prevention exercise is intended to preserve the functional ability of older people and is offered as either home-based exercise (to be done individually or with friends and family) or community-based group exercise. Care capacity-building consists of training and assistance for the family caregiver, tailored to the needs of the care recipient. Community respite is a formal LTC home for eligible older people.

The CIIC program mobilized community resources and municipality funds to establish a new community-based facility, with its own staff. This enabled it to operate in the community it served, while being functionally linked to the primary health care center and administratively linked to the municipality office. The program is bridging gaps in existing health and social services and strengthening existing community resources, resulting in quality care for older people and improved well-being for family caregivers.

New models of care

These examples demonstrate how new interventions can work within current systems of primarily family-based care within LMICs. The efficacy of these types of interventions is backed up by the WHO Integrated Care for Older People framework. It promotes integrated care approaches centered around community-based care, which engage and empower people and communities, facilitate coordination between multidisciplinary providers and support stronger systems.[134]

These models of care deliver many benefits. They improve care for older people, both male and female, and help to relieve financial and health burdens on the largely female family members caring for older relatives. The models also provide employment opportunities to caregivers, who are typically women. Family caregivers have new opportunities to enter the workforce, while professional caregivers have new job opportunities. These opportunities improve the economic prospects of both types of caregivers and increase their chances of being economically secure in old age.

Through these benefits, these programs provide a triple dividend for women: supporting their needs in old age (particularly while gendered differences in mortality and morbidity persist), supporting family carers to join the workforce and creating new jobs in the care sector. Providing opportunities to enter the workforce and expanding the care sector also help to address the root causes of women's economic security in a world where care labor remains gender imbalanced.

While these interventions are promising, policymakers must assess all efforts through the lens of gender equity, and with the knowledge that the societal costs of policy inaction are borne disproportionately by women. As highlighted by our social pensions impact model, social pensions can improve health outcomes, which could potentially reduce the need for LTC and the monetary support from the social pensions could improve affordability of LTC. Policymakers must ensure that interventions do not increase this burden—for example, they must be aware and mitigate the impact of occupational segregation, informality and low wages in the LTC sector, and reinforcing traditional gender roles.[135]

This work can begin with a true assessment of the social costs of LTC and the potential economic gains from improving LTC access, taking into account the implicit costs of informal care. A 2023 National Bureau of Economic Research working paper estimated that **informal care accounted for at least one-third—and on average, half—of all LTC costs in a series of ten HICs**.[136] As population aging continues in LMICs, policymakers must find a way to share these costs more equitably.

Conclusion

This insights brief highlights the critical importance of addressing aging as a multifaceted issue, particularly in low- and middle-income countries (LMICs). The main body of the insights brief provides clear evidence that, with the right policies and interventions, the rapid growth of the over-60 demographic in these regions can be turned into an opportunity to improve both economic and health outcomes.

Section one–which is based on the results of the *drivers of HALE at age 60* model in the insights brief–demonstrates the significant impact of economic growth and societal improvements on healthy life expectancy for older adults. The analysis shows that while increases in GDP per capita are positively associated with healthy life expectancy at age 60 targeted efforts–such as enhancing healthcare systems and improving educational attainment–are crucial in achieving above-average gains in healthy longevity. Countries like Costa Rica, Thailand and Japan serve as examples of how such investments can lead to better outcomes for older adults, even in the face of economic constraints.

Section two emphasizes the pivotal role of income security in supporting healthy aging based on background analysis and literature review for each model. This is particularly true for older women, who still lag men in the extent to which they benefit from broad-based economic growth. The gender-income gap, which is exacerbated by disparities in education, employment opportunities and caregiving responsibilities, significantly impacts older women's financial well-being. This insights brief stresses the need for targeted interventions that specifically address these gender disparities. Ensuring income security through social pensions emerges as a key strategy to mitigate the economic vulnerabilities faced by older adults, especially women, in LMICs. Beyond this, conclusive evidence on effective interventions for income security for older women in LMICs is sparse. More research in this space is urgently needed.

Section three–which is based on the results of the *social pensions impact model* in the insights brief– reinforces the importance of social pensions as essential tools for improving income security among older adults. The *social pensions impact model* focused on the microeconomic impact of social pensions, providing robust evidence that social pensions have a positive impact on poverty reduction, health outcomes and overall well-being. These benefits are particularly pronounced for older women, who are more likely to qualify for and benefit from social pensions due to their higher rates of poverty and limited access to contributory pension schemes. This section underscores the need for LMICs to prioritize the implementation and expansion of social pensions as part of a comprehensive approach to pension reform and promoting income security for aging populations.

Section four–which is based on the results of the *Old-Age Grant impact model* in the insights brief– affirms the macroeconomic value of social pensions by analyzing the cost-effectiveness of a social pension program. The case study of South Africa's Old-Age Grant Programme reveals that social pensions do not place an undue burden on public finances in all circumstances; in fact, they can generate significant economic returns.

The findings suggest that government expenditure on the Old-Age Grant generated positive returns to the economy, as compared with alternative investments. This result highlights the broader economic benefits of investing in income security for older adults. This reinforces the argument that social pensions are not only socially beneficial but also can be economically prudent investments.

By focusing on targeted interventions such as social pensions, and addressing the gender disparities that exacerbate poverty in old age highlighted in this insights brief, policymakers can harness the potential of an aging population to drive economic growth and improve health outcomes. The evidence presented underscores the urgency of proactive and inclusive policies that promote healthy aging and economic security for all older adults, particularly women. The time to act is now, and the benefits of doing so will be felt across generations.

In order to accomplish this, global leaders including policymakers, international organizations and third-sector stakeholders should:

- **Identify the unique needs of older women**, acknowledging the life-course factors that contribute to gender inequity. The gender-age intersection must be used as a lens to develop effective interventions and measures that address the unique needs of older women.
- **Continue to foster economic growth alongside other improvements** to essential national systems such as education, health and meaningful work. Promoting policies that enable women to have equal and unbiased access to education, health and employment opportunities through the life-course can help mitigate some of the challenges faced by older women.
- **Leverage social pensions**–as also suggested by the World Bank in its latest research on healthy longevity–to promote income security for older people. Countries that are implementing social pensions should continue to do so, and those that are not should invest in these programs.

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