Understanding Income Security for Older Adults

Rethink Social Protection and Jobs in an Actively Aging World

WORLD BANK GROUP
Social Protection & Jobs
What are the main contributors to income security at older ages? Income security is a common concern for older adults globally as their capacity to earn work income diminishes. The most important income sources for older people are: (i) continued work; (ii) family support; (iii) income from assets accumulated during their lifetimes; and (iv) benefits received from government programs, financed either from general revenues or social contributions. However, the relative contribution and overall adequacy of these different sources varies greatly across levels of development, over time, between formal and informal sector workers within countries, between genders, and by other factors.

Why should policy makers care? In emerging economies where societal aging is rapid, there are serious concerns that current and future older populations are poorly prepared to achieve income security throughout old age. These concerns are reinforced by smaller family sizes, changing living arrangements, and shifting social norms which risk undermining informal sources of support. In addition, financial literacy and inclusion often remain inadequate, resulting in low lifetime savings and poor planning for people's older years. In this context, the role of the state in promoting financial security for older people will need to grow. Despite this growing need, public pension and safety net systems for older people typically have low coverage and/or insufficient adequacy to provide decent protection for the majority of older people. There has also been modest progress in recent decades in expanding contributory pension coverage in most developing countries. At the same time, formal sector pension schemes often contribute to fiscal pressures and are disincentives for work at older ages among the most productive mature workers. As demographic transition deepens, the risks of rising old age poverty and higher inequality among older people and in society overall are therefore growing. How countries support the income needs of a growing share of older people will also have intergenerational consequences and will require a reimagining of work, learning, and retirement.

What does this note cover? The note first discusses the main pillars of financial security at older ages before focusing on the status of contributory and noncontributory (or social) pension systems in developing countries. It highlights worrying under-coverage of contributory pension systems in the face of persistent labor market informality, as well as the rise of social pensions and innovative informal sector matching schemes in response, and the trade-offs between coverage, adequacy and sustainability of pension systems. It then reviews World Bank support on the old age financial protection agenda, including different forms of budget support and investment lending, policy advisory and analytical work, capacity building and technical assistance (TA), and convening. It concludes by noting the need to broaden the policy dialogue to wider dimensions of old age financial well-being, as well as innovating with public sector and market instruments which can diversify sources of financial security at older ages.
## CONTENTS

Understanding Income Security for Older Adults 1

Income Sources for Older Adults across Regions 1

Role of Contributory and Non-Contributory Pensions in Old Age Financial Protection 5

Contributory Coverage Expansion Challenges, Promise of Voluntary Schemes, and Growth of Non-Contributory Pension Benefits. 8

What the WB is Doing on Income Security for Older Adults 11

Learning from World Bank Engagements on Income Security in Old Age and Looking Ahead 14

References 17
Growing old is a predictable human reality that most of us will undergo and is a triumph of development attributable to remarkable improvements in medicine, health, and incomes. This note focuses on understanding income security for older adults, while other notes in this series look at areas such as long-term care and work at older ages. Specifically, this note addresses the following questions: (a) what are the income sources for older adults across regions? (b) what is the role of contributory and non-contributory pensions in income security and challenges they face under current contexts? (c) how does the World Bank inform and support income security for older adults through its analytical and lending programs? and (d) what are the future areas of work based on lessons from the past?

### Income Sources for Older Adults across Regions

Income security is a concern for older adults as their capacity to earn income through work starts to diminish. Four of the most important income sources for older people are: (i) family support; (ii) continued work; (iii) income from assets accumulated during their lifetimes; and (iv) benefits received through their employer or through government programs, financed either through general government revenue or through social contributions. The income needs of older adults also vary depending on the environment in which they live. Income security depends on living arrangements and the availability, access, and cost of various services such as health care, housing, transport and other infrastructure, home help and care services, and long-term care. In countries where more in-kind benefits are provided, less income (financial) security is required. But in countries where such services are under-provided, higher income support for the elderly may be required.

Support from family, continued work, and income from physical and financial assets were prevalent sources of income security for older adults until the twentieth century in rich countries and are still dominant in most parts of the world. While there has been some decline...
over time, the large majority of older adults in developing countries still live with other family members: over 80 percent of them in the South Asia and Sub-Saharan Africa regions and over two-thirds in the East Asia and Pacific, Middle East and North Africa, and Latin America and the Caribbean regions. This contrasts with the OECD pattern where only around one-third of older adults are co-resident with adult children. However, co-residence rates tend to fall with economic development resulting in shifting family structures, generational splits, migration, and other factors. Equally importantly, significant shares of older adults also continue to work well beyond age 65, particularly those in the informal sector and without adequate social protection benefits at older age. In Africa, for example, over half of men and around one-third of women 65 and older are still working, as are a third or more of men in the East Asia and Pacific, Latin America and the Caribbean, and South Asia regions (Figure 1).

Figure 1: Labor force participation for adults aged 65 and older

![Bar chart showing labor force participation rates by region for adults aged 65 and older.]


Further, some older adults have accumulated assets over their lifetime which can provide income at older ages. In addition to financial assets, some elderly rely on income from renting out real estate and land, and/or generating income from livestock, and/or selling other assets. For instance, in Pakistan (where almost 90 percent of employment was informal in 2017), accumulated assets are a significant supplementary source of subsistence for older Pakistanis in the form of renting or selling land, equipment, or animals. As in other countries, owning housing also results in imputed rental income. While savings and assets play an important role

---


3 Joubert and Kanth (2022). However, labor force participation rates among older men are sizeable (39 percent) and the large majority of older Pakistanis live with adult children.
for many people as they age, large numbers also enter older age saddled with significant debt or, as in the case of Singapore’s Central Provident Fund scheme, the use of pension savings for housing leaves most individuals ‘asset rich but cash poor’ in retirement (Stewart et.al, 2019). Across the working age and older populations, levels of financial literacy and often financial inclusion continue to be low, compromising people’s capacity to plan for a financially secure old age.

**The role of pensions and other public transfers in providing income support at older ages varies substantially between high income and developing countries.** In OECD countries, there is variation in the share of pension income in total income at older ages, but pensions are consistently the single largest source of income for people 65 and older in all but a few countries (Mexico, Republic of Korea, and Chile), with work also a significant source of support in much of the OECD. In contrast, the majority of older people in developing countries either do not receive a pension or at best receive only a noncontributory social pension which typically provides only modest financial protection. As a result, income from work remains crucial even at older ages. Figure 2 shows the importance of labor income in selected Asian countries, but the pattern is also seen in other developing regions with the exception of Europe and Central Asia.

**Figure 2:** Primary source of income for older adults in selected East/Southeast Asian countries

A further crucial consideration for countries operating with limited fiscal revenue is the relative poverty rates of older people. Figure 3 shows that in every World Bank region, the average regional poverty rate among those 65 and older is lower than that of the general population. In Europe and Central Asia, pensions play a central role in keeping elderly poverty low. In Latin America and the Caribbean, the rise of social pensions, which are often quite high
relative to average income, has reduced elderly poverty dramatically, but at a fiscal cost. In East Asia and the Pacific, there is a mixture of continued co-residence as well as pensions in some cases. However, the regional averages mask a lot of differences. Of the 122 countries for which data are available, almost a quarter have older poverty rates higher than youth poverty. In addition, for regions with higher intergenerational co-residence rates, such as South Asia and Sub-Saharan Africa, the poverty rates of older people predictably do not differ much from those of the general population.

**Figure 3:** Poverty looks misleadingly lower for older adults when compared to other generations

While regional averages are instructive, a more nuanced picture of elderly poverty emerges once analysis accounts for co-residence rates, equivalence scales, and different groups of older adults. Yet such disaggregated data and analysis are often lacking. It is important first to note that the failure to use equivalence scales in much data analysis from developing countries is likely to bias poverty rates of larger households upwards, while those with older people living alone or only as a couple will look relatively better off. Similarly, the picture in urban and rural areas may vary. For example, in Sub-Saharan Africa, 25 of the 40 countries for which there are data, report higher poverty rates among older men, women, or both genders than the overall urban population average, despite national older poverty rates being lower.
Role of Contributory and Non-Contributory Pensions in Old age Financial Protection

Employer- and government-provided benefits became a source of income security for older adults in high-income countries largely due to urbanization and industrialization. Pensions were first introduced in the late nineteenth century in response to increased urbanization and industrialization. People from rural areas migrated to cities for work, but when they became ill, disabled, unemployed, or too old to work, there was no former family or community safety net available. This led to the development of support mechanisms outside of the traditional family and community-based methods. Similar shifts are unfolding in developing countries, but without the same degree of labor market formalization that accompanied the process in most OECD countries and facilitated participation in contributory pension schemes.

Pensions, when introduced, focused on alleviating poverty among older adults or replacing all or part of the income that individuals earned when they were working. Replacing the income that individuals earned during their working years is also referred to as consumption smoothing. To allow for a link between contributions and benefits, the systems were set up to require contributions based on earnings from individuals and their employers, sometimes with governments also contributing. To avoid redistribution toward the rich and to protect those most vulnerable, features such as minimum pensions, wage ceilings for the purposes of benefit calculation, and early retirement for hazardous roles were introduced. Pension benefits from contributory schemes also accrued only to individuals who earned income and contributed during their working life, and not all older adults. This followed the logic that if the income of one family member was sufficient to support the entire family during working years, the pension of that family member would also be sufficient to support the family during retirement years. Most countries in the world have some type of contributory system covering at least some (often small) subset of workers. These schemes were largely mandated for workers with a labor contract or those that had an employer (often with above a certain number of workers). This not only allowed for cost-sharing between employers and employees, but also simplified contribution collection for the government and made it easier to ensure compliance.

A drawback—increasingly common outside of OECD economies—was that this arrangement failed to cover those who lacked a traditional employer-employee relationship, e.g., workers in the informal sector, contract or part-time workers, self-employed, and farmers.

Contributory pensions can be of two main types: defined benefit or defined contribution. Under defined benefit (DB) pensions, individuals are guaranteed a certain percent of their average salary, with “average” varying from anywhere from last salary to average of salaries of the last five years of employment to lifetime average salary. Under this system, revenues depend on the number of contributors and their salaries, while expenditures depend on the number of beneficiaries and their defined benefits. There is no guarantee that the finances will balance, with any shortfall to be made up by the government in publicly managed schemes or by the employer in employer managed schemes. A significant number of developing countries run deficits in their DB schemes. But individuals face less uncertainty as the benefit they will

---

4 If there is any redistribution, many contributory social insurance programs redistribute toward the poor, most notably in flat pension benefit programs (and health insurance). See Thompson, L. (1994).
receive is defined, although pension rules may be changed for at least some cohorts or pensions might not be adequately indexed.⁵

**Defined contribution (DC) pensions, in contrast, define the contribution rates, but do not define what individuals will receive.** Defined contribution pensions take the contributions from individuals, their employers, and sometimes the government, and invest them in financial assets. When the individual retires, the benefits come from the accumulated contributions plus the interest earned on those contributions. Since individuals are only entitled to what is in their account, neither the government nor the employer face additional liabilities. On the other hand, workers face the risk that there may not be sufficient income for them to live on.⁶ Some DC schemes, however, choose to provide a minimum return or minimum pension to limit the investment risk of members. Schemes that provide such guarantees need to ensure they have funds to meet those guarantees.

**Other countries focus their public programs on alleviating poverty among older adults, providing similar payments to all older adults or to some subset of older adults deemed in need, with targeting based on income, assets, other pension income, or a combination of measures.** These programs, commonly known as “social pensions”, tend to provide benefits to older adults, irrespective of their work history, but with couples frequently getting less than twice an individual benefit. Governments like those of New Zealand, Australia, Lesotho, Botswana, South Africa, Georgia, Timor-Leste, Kosovo, and Denmark, among others, focus their public support on this type of benefit. Frequently, they also support mandatory or voluntary contributory programs. At least 16 countries have universal age pensions; at least 25 provide social pensions to those who do not receive contributory pensions; and at least 45 have means-tested social pensions.⁷ However, both the amount of social pension benefits and the degree of coverage of older people vary enormously across countries, with benefits at or below 5 percent of GDP per capita in a significant number of countries (around a global average of 16 percent) and coverage ranging from under 5 percent of people 60+ to over 100 percent (Figure 4). Social pensions, being noncontributory, are financed out of government revenues. As the share of elderly increases, working age population shrinks, and the need for higher pension grows (to support longer lives), these programs could consume a significant share of fiscal resources. More important, unless they are complemented with contributory schemes, they would fail to meet the income replacement needs of individuals, reducing their quality of life in retirement.

---

⁵ At minimum, it is recommended that pensions be systematically indexed to inflation so that the real value of pensions is protected but, depending on the generosity of the scheme, pensions can also be indexed to nominal wages, or a hybrid of inflation and wage growth (e.g., Swiss indexation), or be revised in an ad hoc fashion, depending on availability of government resources. See Piggott and Sane (2009).

⁶ Both DB and DC are simplified generic descriptions of the schemes. Each actual scheme has its own set of parameters and may contain elements of the other type, most notably multipillar pension systems which combine DB and DC.

⁷ [www.pension-watch.net/social pensions-database](http://www.pension-watch.net/social pensions-database).
A final form of financial support for older adults comes via social assistance transfers. Social assistance is typically given to households deemed to have insufficient means (regardless of age). Some of these households may include older adults. From a poverty perspective, there is an argument for focusing government resources on poor households, rather than on older adults who may or may not be poor. But there are also reasons why relying on general social assistance to protect older adults might not be optimal:

- There is evidence that older adults and disabled adults have higher and different consumption needs than working age adults and children. While the means testing metric could be adjusted to accommodate the differences, it typically is not.

- There is also evidence that the intrafamily distribution of resources may not always result in a fair share for older adults. Thus, deprived older adults may exist within a nonpoor household.

- Older adults who are fortunate enough to have saved throughout their lives may find themselves asset-rich, but income-poor as they age. It is not always easy to convert assets into an income.


Note: Numbers over 100 represent discrepancies between population numbers taken from the UN Population data and the administrative numbers reported by each country.

---

8 Gelders (2021).
9 Calvi (2020); Brown, Calvi and Penglase (2020); Miguel (2005).
10 In Serbia and other Eastern European countries, for example, older adults in rural areas often hold small plots of land but may be too frail to farm them and are reluctant to sell. At the same time, land ownership often disqualifies them for targeted public assistance.
Social assistance schemes typically require periodic retesting and recertification. Younger adults may find a job, altering the household’s need for social assistance. Older adults, by contrast, are less likely to find themselves in improved circumstances over time, making retesting and recertification costly for both the individual and the government without yielding significant savings.

**Contributory coverage expansion challenges, Promise of voluntary schemes, and Growth of non-contributory pension benefits.**

The high coverage of pension systems in high-income countries is not the case for low- and middle-income countries (LMICs), making income security for older adults precarious in these contexts. Workers in LMICs are largely in the informal sector, either self-employed or in small businesses which typically do not pay payroll taxes, and do not provide workers with labor contracts or benefits for life events such as retirement, sickness, disability, or maternity. As a result, coverage of contributory schemes remains low in many developing countries and is closely associated both with country per capita income levels and the share of informal sector employment (Figure 5). Since aging is happening rapidly, more so in developing countries, the strong correlation between coverage and country per capita poses a risk that developing countries grow old before they grow rich, leaving older adults in these countries susceptible to poverty, vulnerability and a reduced quality of life.

**Figure 5:** Coverage of contributory pensions is low in many developing countries and correlated with country income levels

![Graph showing the correlation between coverage of contributory pensions and income per capita](image)

Source: WB pensions database.
In addition to low current coverage rates in many developing countries, there has been relatively limited progress in expanding coverage in recent decades. As Figure 6 shows, coverage rates between the mid-1990s and mid-2010s have not improved in most countries and, in fact, have decreased in some. There are success stories such as China, Türkiye, and Costa Rica, but they tend to be the exception rather than the rule. As a result, both rural and urban workers have little prospect of achieving income security in their older years via contributory insurance, increasing the risk of rising old age poverty as countries age rapidly. With growing casualization of employment and expansion of nonstandard employment relations such as gig work, the challenge of expanding coverage through traditional approaches may well increase.

**Figure 6**: Low coverage in contributory pension systems persists

![Figure 6: Low coverage in contributory pension systems persists](image)

*Source: World Bank pensions database*

Given the challenges of expanding coverage in traditional contributory pension schemes, countries have been experimenting with innovative informal sector schemes. Several countries, including India, China, Kenya, Vietnam, Ghana, Thailand, and Rwanda, have set up schemes where informal sector workers can contribute money for their old age, often via mobile money. The design is DB in some instances (India, Vietnam, China) with a schedule of contributions/benefit specified, while in others the money is held in DC accounts and is invested, with the money available to the workers, typically at a given age. China has a unique hybrid of both approaches. Governments typically provide a matching contribution to incentivize contributions, with the match ranging from as little as 15 percent to 100 percent of individual contributions. Because informal sector workers tend to have more fluctuating

---

11 Guven (2019)
incomes, contribution amounts and timing are often flexible and some schemes allow workers to access part of their savings after a defined period. In some cases, life, health, or funeral insurance is bundled with the old age component while in others the savings account balance can be partially used as collateral for loans. With the exceptions of China and Rwanda, coverage expansion has not been substantial and is typically nowhere close to filling the coverage gap. Matching schemes have nonetheless resulted in not insignificant proportional increases in countries with low formal sector coverage such as India and Thailand. Apart from coverage, adequacy tends to be modest in these schemes to date, and the level of consistency of participation by informal workers over long periods remains to be seen. DB schemes like those in China, India, and Vietnam could fare better than DC schemes in terms of adequacy but at the expense of lesser flexibility to access savings.

Improving income security among older adults will require expanding the role of savings, encouraging and enabling older workers to continue to work, and providing access to social assistance or social pensions when needed. Savings for old age, broadly construed as savings within pension systems, in financial institutions, or in real estate and other assets, will inevitably have to play a larger role in providing income security to older workers. The use of mobile money and other digital tools may make savings instruments more accessible to those who currently do not have access, and there is a clear role for policy in facilitating increased financial inclusion (e.g., simplifying know-your-customer requirements). Partnership with the private sector to explore innovative bundled products, e.g., in Colombia (Guven et.al 2022), and fintech solutions can also improve the design of the scheme. Identifying the aggregators for informal sector workers and incentivizing them are going to be important for mobilization and ensuring persistence in saving. In Rwanda, for instance, cooperatives have emerged as an effective aggregator as a large share of rural workers are affiliated to a cooperative; worker associations of different forms or gig platforms have performed a similar role in other countries. As digital payments become more common and uniquely traceable, it could become possible for tax agencies to act as aggregators, and financing of social security to be expanded from payroll to a hybrid of payroll and general revenue financing. The limitations of mandatory schemes to expand coverage beyond the formal sector, the importance of long-run viability for voluntary schemes, and the fiscal costs of social pensions suggest that pursuing one approach only might not be sufficient to meet the need of older adults in developing countries. A complementary but coherent set of mandates, behavioral nudges, and general revenue financed minimum level of protection will be needed in most countries.

As life expectancy continues to grow, savings alone will not offer affordable and adequate old age income security to all unless more older workers continue to participate in the labor force, have fewer gaps in contribution history, or are more productive in work at older ages.12 In high-income countries like Japan, already 40 percent of older adults work, compared to 30 percent in the United States and far fewer in European countries. Many formal sector older adults in developing countries currently face impediments to continued work, including loss of pension benefits if they work beyond retirement age; required payment of contributions to social insurances which older adults may not need (though countries such as Singapore and Malaysia sharply reduce contribution rates with age); limited scope for flexible and part-time

---

12 See the companion brief on mature age work in aging societies by Johanssen and Huang.
work; service years lost due to child care needs (more acute for women); and lack of access to credit for small businesses. Often, small changes like universal and ergonomic workplace design can significantly improve the retention and productivity of older workers. Counting the years spent caring for children for benefit calculation can reduce the gender pension gap and is already done in different ways in many countries. Retraining and upgrading workers over their lifetimes to better accommodate the changing requirements of work will also be necessary for all workers in all countries as life and work spans lengthen and technology continues to advance. Pension regulations will also need to change accordingly to accommodate increases in health life expectancy and adjust parameters to suit the preferences of older workers and employers. Incentives to delay retirement (e.g., an actuarially fair increase to pension for every year of delaying retirement) could be provided, so that those who can work longer have a financial incentive to do so.

Almost everyone will reach a point when they are unable to continue working or the number of hours that they work gradually fall, leading to greater need for income security from other sources. However, while older adults may own assets, they may not always be able to translate that ownership into income, making them income-poor even if they are not asset-poor. As a result, they will need to depend on the savings they have accumulated, or on social assistance or social pensions if their other income sources are insufficient. Contributory schemes that have a clear link between contributions and benefits are best suited to meet individuals’ consumption smoothing needs but the sustainability of these schemes (in the case of DB), adequacy (for DC or NDC schemes) and the predictability of payout stage (a challenge with Provident Funds or DC schemes without fair annuity markets) need to be considered. Social pensions have been a major instrument to provide a level of financial support, but the trade-off between coverage and adequacy will become more acute as populations age. Where social pensions exist, they could be coupled with encouragement (or requirements) for annual blood pressure and blood sugar screenings, immunizations, and other programs which help older adults remain mentally and physically healthy and engaged.

What the WB is doing on income security for older adults

The World Bank has been supporting income security for older adults through various lending and nonlending instruments for several decades. This includes analytics and modeling, budgetary and investment lending to support pension reforms, capacity building of clients, and knowledge sharing on pension benefits adequacy, coverage, and sustainability. While support to reforms of contributory schemes dominated in the 1990s and early 2000s, there has been an increased engagement on schemes for informal sector workers and social pensions in the past decade. As pension schemes mature in much of the developed world and in some emerging economies and as aging progresses, the intra- and intergenerational fairness within pension systems is becoming more prominent in policy dialogue.

The World Bank has been actively supporting income security for older adults through a wide range of lending operations. This has included both policy-based budget support lending and investment lending of different forms. While lending operations have primarily focused on
reforms to formal contributory pension systems to improve their sustainability, they have also included attention to the adequacy of income for older adults, including coverage expansion of formal and informal contributory sector schemes and other mechanisms for improving income security at older ages such as social assistance and social pensions, changes to labor laws to support longer and more flexible work, and promoting financial inclusion and literacy through reforms of ID and payment systems. Development policy operations (DPOs) provide budget support to governments who are undertaking reforms, and pension reform has featured strongly in DPO programs. Examples include a recent operation in Mozambique which supports changes to civil service pensions, and in Brazil, as well as DPOs supporting a variety of reforms in Europe and Central Asia, including in Georgia, North Macedonia, Albania, Kosovo, Serbia, and Poland. The Independent Evaluation Group (IEG) of the World Bank cites 58 DPOs between 2005 and 2019 in 47 member countries supporting reforms that impact income security for older adults, with the total number of loans across all years being much larger.14

**A second type of lending operation, investment project financing (IPF) is also frequently used to support pension reforms, including strengthening of pension administration and setting up of pension modeling units within social security organizations.** These typically involve investing in improvements in pension administration, including computerization of records, enhancing contribution collection capacity, setting up new administrative platforms and integrating existing ones, and financing communications strategies. IPFs are often accompanied by technical assistance. In Albania, for example, an IPF supported the digitization of fragmented regional social insurance contribution records and consolidation in a single central location. This simplified the business processes, protected records, and shortened the time between application for a pension and receipt. In Guangdong in China, an IPF supported social insurance information system integration across five previously siloed social insurance systems and 21 prefectures, streamlining processes for contributors, pensioners, and administrators. Some projects like the Social Insurance Administration Project in North Macedonia also include subcomponents aimed at improving the technical capacity within social security organizations, so that these institutions can independently and periodically evaluate their schemes and provide modeling results to policy makers. The IEG report noted at least 21 IPFs supporting income security for older adults in 2005-19, with several other operations prior to that period. A recent project in Kenya, National Youth Opportunities Towards Advancement Project, aims to increase employment, earnings and promote savings for youth in the informal sector. It includes a US$ 20 million component supporting the National Social Security Fund in updating their business processes, adopting an innovative communication strategy, and introducing a savings scheme for the informal sector which is designed with elements that have been proven to boost take up of voluntary schemes notably auto-enrollment, auto-debit, fiscal matching and a maternity benefit in the short run.

**A third type of lending operation which has been used to support pension reforms is the Program for Results (PforR).** In this instrument, governments commit to achieving particular results over a period of time. Once a result is achieved, the money associated with the result is disbursed to the government, often in a series of steps as further progress is made, much like budget support. Most recently PforR was used in the Pakistan Crisis-Resilient Social Protection

---

project which supports a hybrid savings scheme for the informal sector and disbursement is linked to reaching 150,000 active savers in the scheme.

**All of the lending modalities can also support improved pension fund governance, investment regulations, and improved supervision.** The Croatia Pension Reform IPF Project, for example, provided financing to support the establishment and capacity of the new supervisory and registry agencies established when the country undertook a funded pension reform, and a number of DPOs in Europe and Central Asia countries supported new policy and institutional frameworks for multipillar pension reforms.

**Nonlending support is also provided in a variety of ways.** The Bank draws on its own expertise supplemented by external consultants for analytical work and technical assistance. Recent examples include technical assistance in Mexico, Ecuador, Cambodia, Vietnam, Rwanda, Romania, Albania, North Macedonia, Malaysia, and Saudi Arabia. Sometimes this is standalone work on pensions and in other cases it is integrated into wider work on aging policies, e.g., in Malaysia. Work on income security for older adults has also frequently been included in public expenditure reviews, country economic updates, and poverty assessments. The Bank also produces regional and country level aging reports on the overall issues of income security for older adults or on a subset of welfare-related issues. At least one regional report on aging and old age income security has been produced for each of the Bank regions, and, in some cases, multiple reports. At the country level, a Latvia aging report (World Bank 2015a), for example, uses the Active Aging Index to explore inequalities in employment and health outcomes by sex, educational attainment, and geographical region. Several reports, mostly in the Latin America and the Caribbean Region but also in the South Asia region, use the National Transfer Accounts (NTA) methodology to tease out the links between individual and aggregate income, consumption, and savings over the life cycle and explore the interconnections among population aging, labor force participation, productivity, and asset accumulation and decumulation (Apella et al. 2019; Gragnolati et al. 2015; Rofman, Amarante, and Apella 2016; Rofman and Apella 2020; World Bank 2012).

**Both lending and nonlending assistance are also used to support countries looking to improve their public sector pension systems.** DB public sector pension schemes in Asia and Africa are often quite generous and mostly unfunded, posing a strain on fiscal resources. Public sector wages and pensions could cost as much as 30–40% of tax revenues in some of these economies. The work on public sector pensions entails technical assistance to estimate the implicit pension debt of these systems and lending support to finance transition costs related to parametric or systemic reforms, as is the case in a string of projects in Pakistan at the federal and provincial level. Public sector pension work focuses not only on fiscal sustainability, but also on the fairness of government support, and on portability between public and private systems. For example, in countries like Mexico and Brazil, many state and local governments operate their own old age security systems, but with workers penalized by potential loss of pensions if they move across state boundaries. Portability between private and public sector employment is also important to achieve the best allocation of labor.

**Finally, the World Bank helps build capacity among counterpart governments by providing pension core courses, training counterparts on specific issues like pension modeling on the**
PROST model developed at the World Bank, and hosting and organizing conferences where practitioners can meet and exchange ideas. The diverse experience of Bank teams on pension policy, reform, and implementation, across regions, makes them often unique facilitators of global and regional events that bring together policy makers, researchers, and experts to learn from country experiences, and explore solutions to the myriad challenges facing pension systems. The World Bank has often taken a convening role to bring together disparate stakeholders within a country as well as disparate stakeholders across countries. The Bank also produces cross-country comparative data on pension parameters in its ASPIRE database.

**Learning from World Bank engagements on income security in old age and looking ahead**

The lessons emerging from WB engagements that can guide future work are: (i) rethinking pension design and financing to support coverage expansion, especially for informal workers and women (ii) prioritizing stakeholder consensus, capacity building and communication so that pension systems are both financially and socially sustainable (iii) promoting data transparency and standardizing reporting on pension systems in developing countries (iv) harnessing the growing potential of digital and mobile transactions for facilitating pension administration and supporting coverage expansion (v) taking a more holistic view on income security for older adults, and (vi) deepening innovations in financial product development.

Rethinking design and financing with the intent to expand pension coverage in an equitable and sustainable manner will require moving away from payroll financing models alone. Coverage has not expanded appreciably or fast enough by tying pension contributions closely to benefits. In fact, the rise of nonstandard employment has resulted in fewer people covered in traditional formal sector plans in many cases. This suggests that alternative methods of providing income security to older adults, such as the informal sector schemes that have been initiated and the enhanced provision of social pensions in many countries, may play a larger role in the future. A rethink is needed not only in design of schemes but also financing methods given that there is an increased blurring of lines between strictly payroll finances versus a mix of payroll and general revenue financing even in high income countries where growing pension deficits necessitate greater reliance on the latter. The differing labor markets, and social expectations between LMIC and high-income countries, will necessitate experimentation to see what works and what does not.

Prioritizing consensus building for pension reform and emphasizing pension communication to promote transparency and trust are key. Many of the issues surrounding the state’s role for providing income security and its ability to make changes to entitlements are politically sensitive. Communicating what needs to be done, why, and how is important. The intra- and intergenerational effects of not making reforms is equally relevant so stakeholders understand the consequences of inaction. Consensus building alone is also not sufficient as at an individual level people need to know how the reforms affect their benefits. This can help them better plan for their retirement and clarify their expectations. The mode of communication itself needs to be done within the local context. The World Bank can serve as a knowledge hub to document what has worked well and what has not. The creation of user-friendly World Bank toolkits has been helpful in consensus building among stakeholders and recent work in developing pension
calculators helps individuals better estimate their pension benefits. The toolkit, PROST, for example, is used to work closely with clients, using their data to do baseline modeling, and then have discussions and training with key stakeholders so the assumptions and logic of the model are well understood. An important strategic reason of using PROST is to build consensus among stakeholders including ministries of labor, finance, actuarial teams of social security institutes, and the central bank. Another toolkit is the pension calculator (developed under Croatia RAS). This calculator will allow individuals to estimate their benefits based on their contribution history, thereby managing expectations of the population and reducing the risk of reversals.

**Promoting data transparency and standardized reporting improves accountability.** While data on pension indicators like coverage, replacement rates, or spending in developing economies are being compiled by various organizations, comparable statistics and long-term projections like those available for OECD and EU countries, can be hard to come by. The EU nations not only have standardized reporting on cross-sectional pension data in EUROSTAT, but they also provide long term projections under a common methodology established by the EU Ageing Working Group. The presence of both cross-sectional data and projections allows for comparison across countries and improves transparency and accountability. Developing countries often lack such systematic reporting which can make it harder to make a case for reforms or prevent worsening of the pension system based on myopic decisions by politicians. The World Bank’s ASPIRE, which is a compilation of indicators on social protection, is expanding its focus to include some pension indicators, but a concerted effort from countries to compile and report pension data on a regular basis will be a first step to ensuring such databases can be updated regularly. In the medium term, legislating social security schemes to present actuarial reports with long-term projections every few years or anytime a change to the system is planned is recommended.

**Harnessing the potential of rapid digitization across the developing world presents a new opportunity for design, administration and even financing of pension systems.** The rapid advances in building blocks which can facilitate old age savings, including digital identity internet and mobile phone penetration, rising financial inclusion and the spread of digital and mobile financial transactions, and partnerships between public and private sectors in program delivery, suggest that some of the historical constraints on coverage expansion are diminishing and that the platform economy provides new possibilities for deepening old age financial protection. These approaches need to be explored to tap into the ability of voluntary schemes to provide income security for the vast group of individuals currently uncovered or inadequately covered. This not only includes workers in non-standard employment but also a rising number of migrant workers. Using digital payments can also make it easier for pensioners to access benefits without waiting in line every month. At the same time, understanding the specific constraints of older people as the digital economy expands will be essential to develop both a platform and a product which are inclusive of their needs.

**Taking a more holistic view on income security for older adults will require policy discussions on old age financial security to broaden the focus from specific schemes to wider issues which impact financial security at older ages.** These include: (i) expanding work on financial inclusion, financial literacy and decision making of individuals and households, and variations across countries, regions and social groups within countries—this would require enhanced
integration of insights from behavioral sciences\textsuperscript{15} (ii) more analysis of the interaction between public and private transfers for older people and the possible extent of crowding in or out of private transfers as public programs expand (iii) deepening analysis of the gender dimensions of old age financial security, including both within pension schemes (e.g., survivor pension rules or how systems deal with career breaks) and more broadly (e.g., the interaction of labor market dynamics and financial protection; intra-household resource allocation patterns) (iv) distributional analysis of winners and losers when contemplating pension reforms so that policy makers can consider fairness aspects in addition to sustainability (v) deeper attention to how pension systems manage mobile populations and benefit portability, both within and across national boundaries, and (vi) better understanding the interactions between pension and social assistance programs on the one hand and health and long-term care services on the other to understand the net impacts of income and expenditures on financial security as people age.

**Deepening innovations in financial product development will require cautiously exploring more diversified instruments to promote old age financial security, with proper regulation and consumer protections.** The evolving use of and access to other sources of income besides pensions should be considered so that context-specific recommendations can be provided. Much of the work on income security focuses on asset accumulation with little attention to payout stages which is increasingly important given the uncertainty around life expectancy. For example, instruments such as reverse mortgages or other forms of home equity release have the potential to address the asset vs. income challenge at older ages, and emerging public-private partnerships such as in Singapore and Australia may provide lessons for overcoming some of the demand and supply side constraints which have limited their take-up even in developed countries.\textsuperscript{16} Private sector innovations such as the use of fully paid-up life insurance policies as collateral for lending at older ages (as seen in Hong Kong SAR, China, for example) also suggest the potential of approaches which may help better balance income needs and assets at older ages. For the public sector, an instrument which may have potential is longevity bonds through which the public sector could assist commercial providers in managing longevity risk and providing more attractive pricing on annuities, long-term care insurance and other products which have under-realized potential to support financial security at older ages. Over the longer term, there are likely to be further products innovations, such as linked annuity products which allow insurers and policyholders to share risks, and mutual risk pooling approaches like pooled annuities or group self-annuitization accounts, modern tontines, and other innovations.\textsuperscript{17} These are considerations for the longer term in most developing countries given that insurance markets are still underdeveloped in these contexts, but there lies significant potential for future innovation in this area. As with any insurance or financial products, however, it will be important to put in place adequate consumer education and protections, take account of the weak regulatory capacity in many emerging economies, and monitor the suitability and operation of new instruments as they are brought to market.

\textsuperscript{15} See Chomik et al. (2022) for a summary of effective approaches to inform, simplify and guide financial decision making for and in old age.

\textsuperscript{16} Knaack et al, 2020 has a useful review of the potential benefits and pitfalls of reverse mortgages in developing countries.

\textsuperscript{17} Kabuche (2023); Iwry et al (2020).
REFERENCES


