1

The future of Work

in Latin America and the Caribbean



How to Move towards Sustainable Pension Systems for Longer-Lived Societies





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Introduction

"The future may look gray, but it's incredibly bright" is the closing sentence of the book The Super Age by Bradley Schurman¹. With this message, the author plays with the word gray to reflect that aging, even though it has the risk of impacting the economic performance of countries in the future², does not necessarily represent a gray scenario. The future of pensions in the context of prolonged aging can be bright and optimistic.

This edition of the series The Future of Work in Latin America and the Caribbean is a wakeup call for pension policy-makers in the region. According to the United Nations' population projections, Latin America and the Caribbean will cease to be "voung" by the mid-2050s and will converge to a scenario of low birth rates and increasing longevity. There is no doubt that this aging process could jeopardize the region's pension systems.

If reforms are not implemented soon, the increase in longevity will alter the balance between the ability of countries to provide decent pensions for the entire population, and the possibility of maintaining this ability over time. In some cases, pensions could fall to half their current levels, which are already insufficient, or contribution rates would have to rise to levels that would make it difficult to create formal emplovment³.

Find out in this article what the demographics of Latin America and the Caribbean will be like in the 2050: What can we learn from other countries in the world with more advanced aging processes?

AUDIO 1 HOW CAN A GOOD PENSION SYSTEM REDUCE LABOR INFORMALITY?

Ekaterina Cuellar. IDB pension expert, explains how a good pension system can raise the quality of labor markets and vice versa.



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America and the Caribbean will cease to be "young" by the mid-2050s and will converge to a scenario of low birth rates and increasing longevity Demographic change is simultaneous with other trends that also impact pension systems. These trends include: (i) digital transformation; (ii) the changing nature of labor markets under <u>flexible</u> work and platform economy or <u>gig economy</u>; (iii) climate change; (iv) lower projected returns on the investments that fund many of the pension systems over the long term; and (v) potentially depressed output growth rates as a result of lower population growth.

It is important to mention that, while these trends pose challenges for pension systems, they also represent opportunities. For example, technology creates opportunities to identify and include groups traditionally <u>disconnected from the pension system</u>. In addition, it can increase the <u>operational capacity</u> of pension institutions through process automation, procedure simplification, more efficient supervision, fraud reduction and improvement of services to users.

Technological advances also bring about paradigm shifts. For example, the possibility of finding alternative financing sources for pensions that are not conditional on adherence to a labor contract in the formal sector 4, the massification of innovative financial instruments for saving while working 5, and obtaining a lifetime income in retirement 6.

Something similar occurs with climate change and the trend towards responsible investments. The

Technological advances also bring about paradigm shifts. For example, the possibility of finding alternative financing sources for pensions that are not conditional on adherence to a labor contract in the formal sector

pension sector is challenged to efficiently manage the risks posed by climate change on retirement savings, while being able to leverage the financial benefits of sustainable investment.

To build a prosperous and inclusive future for pensions in the region, two main recommendations are put forward. First, redefining the concept of retirement to turn aging into an opportunity. And, secondly, address with a sense of urgency the impact of aging and the other major trends that pension systems will face by 2050. Adjustments cannot be postponed: the longer reforms are delayed, the higher the burden for future generations will be.

AUDIO 2 WHAT IS THE SILVER ECONOMY AND HOW CAN IT BE INSTRUMENTAL IN THE GROWTH AND DEVELOPMENT OF LATIN AMERICA AND THE CARIBBEAN?

Daniel Gamboa and **Waldo Tapia**, authors of this edition of The Future of Work in Latin America and the Caribbean series, discuss the opportunities that come with older societies such as the silver economy.









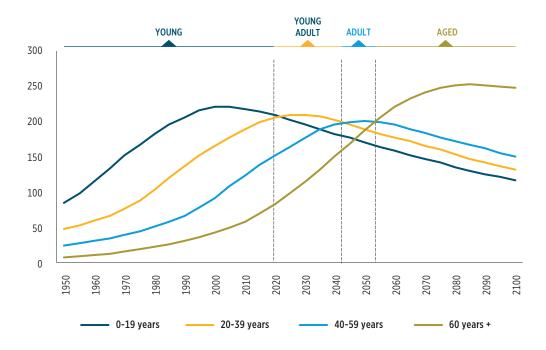
2 Why this?

Aging

The aging process in Latin America and the Caribbean will accelerate in the coming decades. In 2022, the region was considered a "young adult" because the age group between 20 and 39 years old had a relatively higher weight in the population pyramid than the rest of the age groups. In 2045,

the age group between 40 and 59 will weigh more than the rest, making the region an "adult". Only a decade later, in 2055, will the region be considered "aged", because the proportion of people over 60 years of age will be the largest in the total population (see Graph 1).

GRAPH 1. POPULATION GROWTH IN LATIN AMERICA AND THE CARIBBEAN(THOUSANDS OF PEOPLE, 1950 - 2100)



Source: CELADE (2022).



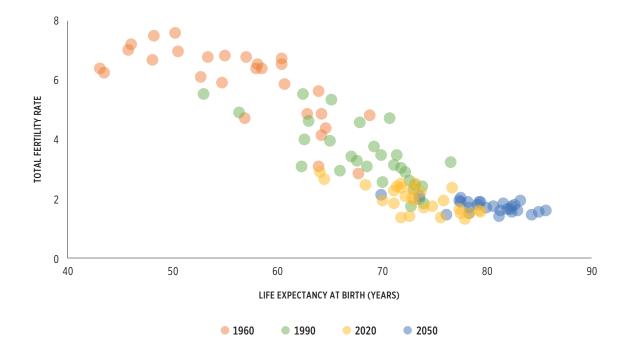


The countries of the region are at different points in their demographic transition, it currently being more advanced in South America and less advanced in Central America and the Caribbean. However, fertility and life expectancy data project that by 2050 countries will converge towards a homogeneous demographic scenario.

Graph 2 shows the transition of the countries in the region from 1960 to 2050. At this point, the vast majority will be in a low birth rate regime (on average 1.78 live births per woman) and high life expectancy at birth (80.7 years). By 2050, the population structure of the region will no longer be shaped like a pyramid but like a cylinder, reflecting an advanced stage in the demograph-

ic transition. Moreover, around 2060 the fertility rate will not be sufficient to maintain sustained population growth. From that moment on, the total population will stop growing and even fall in some countries, so the driver of change in the demographic pyramid will be longevity. This is a scenario that Japan has been experiencing since the beginning of this century. Some authors point out that ultra-low fertility is not an inevitable fate, but a reflection of the policies, institutions and norms prevailing in a society? In fact, the European Commission's 2021 Aging Report assumes a slight increase in the fertility rate from 1.5 live children per woman in 2020 to 1.6 in 2040 and 1.7 in 2070.

GRAPH 2. EVOLUTION OF THE DEMOGRAPHIC REGIME IN LATIN AMERICAN AND CARIBBEAN COUNTRIES, 1960-2050: FERTILITY RATE VS. LIFE EXPECTANCY AT BIRTH



Source: CELADE (2022).

Latin American and Caribbean societies are becoming increasingly long-lived, and data indicate that this is accompanied by improvements in quality of life. Indeed, the indicator of life expectancy adjusted for the ability to live in a state of good health at age 60 (HALE), calculated by the World Health Organization, shows that the possibility of living in good health in the region (16.1 years in 2019) is similar to that of Europe (16.8 years) and shows a difference of one year on average compared to the rest of the world (15 years). To the extent that this trend continues, the region has a valuable opportunity to extend active work periods and redefine the retirement stage in the coming decades.

Nevertheless, although longevity disparities between countries have been decreasing over time⁸, longevity differs between individuals due to socioeconomic differences. High-income or better educated groups or women exhibit systematically higher life expectancies than the rest, which could generate or widen inequality gaps in pension systems. Gender differences in life expectancy at birth are as much as 7 years on average globally and, although these differences shorten during life, at age 60 they are still between 3 and 4 years. In some countries, differences according to educational level can reach 15 years (men) and 8.1 years (women) at age 30. Heterogeneity in longevity can generate cross-subsidies among groups of between 20% and 50% of the pension value.

The convergence between the demographic regime with low fertility rates and increasing longevity will exacerbate the challenges of financial and social sustainability of pension systems in Latin America and the Caribbean. Aging will strain pension funding sources in the region. The lower fertility rate reduces the contributory base of pay-as-you-go pensions and affects the expected expenditure growth per cohort of non-contributory pensions. Aging generates a change in tax bases composition by increasing the relative weight of income from the capital factor versus income from the labor factor, in a context where the former is typically taxed at lower rates. It also has an impact on the economic growth rate, since to maintain this rate at current levels, the lower contribution of labor would have to be replaced by increases in productivity, which has not been occurring in the region 10, 11, 12, 13, 14.

No pension system is immune to the effects of increased longevity. On the side of the pay-asyou-go or non-contributory pension systems, by extending the average duration of pension benefits, the financial sustainability of the system is put at risk, especially due to the high replacement rates they offer in the region. And on the side of the savings-based systems, known as "capitalization", by increasing the average period that the same level of savings must finance, the sufficiency is compromised 15.

Latin American and Caribbean societies are becoming increasingly long-lived, and data indicate that this is accompanied by improvements in quality of life

Replacement - Sufficiency Rates

In Latin America and the Caribbean, the average replacement rate of defined benefit systems reaches 65% at retirement (see Graph 3). This rate is 15 percentage points higher than the average for the Organization for Economic Cooperation and Development (OECD). However, there is great variation at the regional level. There are countries that offer more than 80% replacement rate, such as Ecuador, Paraguay and the system prior to the 1997 reform in Mexico (still in force for the transition generations). However, the vast majority offer between 50% and 80% replacement rates, such as Argentina and the Bahamas; and the defined benefit components of the mixed systems of Costa Rica, Colombia, Panama and Uruguay.

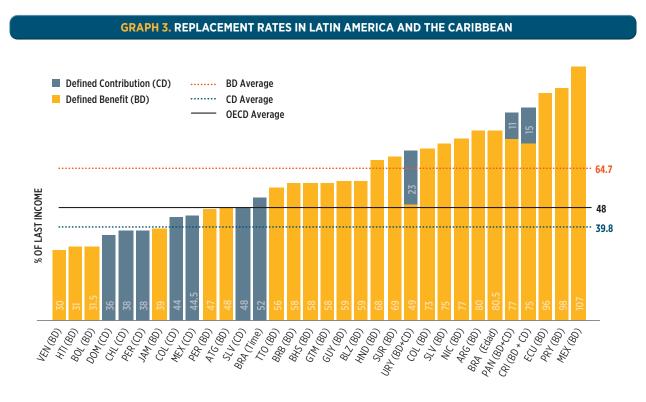
In the mandatory individual capitalization schemes, defined contribution pillars and in the mixed systems, greater longevity is assumed by savers through lower pensions. In addition, in general, the individual capitalization schemes have shallow coverage, which is reflected in low pensions, with an average replacement rate of 40% ¹⁶.

AUDIO 3 HOW DOES THE GENDER GAP IN LABOR MARKETS REFLECT IN PENSION SYSTEMS?

Laura Ripani, head of the IDB's Labor Markets Division, and Waldo Tapia, IDB lead specialist, explain how gender inequalities in labor markets are also reflected in women's pensions.







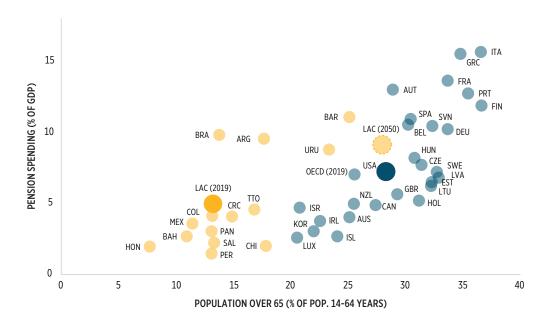
Source: Altamirano et al. (2018a).

Public Pension Spending - Sustainability

Pension spending will account for an increasing proportion of public spending, which could displace expenditure in other priority areas, such as health, infrastructure and education. Although countries such as Argentina, Brazil and Uruguay have reached coverage levels close to 100%, the generosity of benefits implies a pension spending like that of developed countries that reached high per capita income levels before being aged.

Graph 4 shows that, on average, 4.9% of GDP in the region (equivalent to 19% of total public spending) is spent on pensions, compared to the OECD average of 7.2% ¹⁷. However, the tax burden is expected to increase in the coming decades as the elderly population grows. In fact, it is estimated that without reforms as the population ages, by 2050 pensions will absorb an even larger share of public spending to finance pensions for workers with above-average incomes, leaving little room for investments in other social priorities.





Source: OECD, Pension Spending (2019), United Nations, Population Division. Department of Economic and Social Affairs (2022). **Nota:** Las cifras incluyen las pensiones no contributivas y las garantías de pensión mínima.

Need for Reforms

The region requires profound reforms to address the impacts of demographic change on pension systems. The aging of the population will challenge pension policymakers. Neither the parametric adjustments required to ensure the financial sustainability of the current systems nor a drop in pension benefits are socially acceptable if they are not made gradually (and probably not politically feasible either). For example, pre-pandemic actuarial reviews show that the contribution rates needed to balance the systems in some Caribbean countries would be between 30% and 40% of salaries (up to twice the current OECD average), or pension benefits would have

to be reduced to half their current levels. In the case of individual capitalization schemes and defined contribution systems, in the absence of reforms, replacement rates could fall on average from 40% to 34%, only considering the higher longevity expected around 2050. It is necessary to add to that scenario the potential impact of other megatrends, such as the secular trend of portfolio returns and interest rates, the changing nature of labor markets under <u>flexible work arrangements</u>, the platform economy, migration and climate change, which are cross-cutting issues with a material impact on pensions.

Most of the region's pension systems are fragmented and lack a guiding institutional framework. Fragmentation is the result of incomplete or postponed historical reforms and is observed to a greater or lesser extent in all countries of the region, being notable in Argentina, Honduras, Mexico, Paraguay and Uruguay. The cases of Colombia and Peru deserve special mention, since in these countries not only do a pay-as-you-go, defined benefit system and an individual capitalization, defined contribution system coexist, but these systems compete under rules that are not technically comparable. In addition, in Peru there are more than ten special regimes under the dominant pay-as-you-go and defined benefit system, in addition to social assistance programs that are disjointed from the main systems, even at the provincial level 18,19. Fragmentation generates interand intra-generational inequities for citizens, who are exposed to different pension levels and risks depending on the system to which they belong or the province where they reside. On the other hand, most of the public social security institutes or funds managed under pay-as-you-go and defined benefit systems are not subject to oversight mechanisms.

Globally, in the last decade there has been a notable effort to adapt pension systems to demographic change, but not so in Latin America and the Caribbean. The region's pension systems have been characterized by discrete and slow adjustments of basic parameters such as contribution rates, retirement age or pension eligibility requirements. The region's reform effort is minor compared to other regions. For example, in agreement with the OECD 20 and FIAP 21, in the last decade, 23 countries globally increased the contribution rate, but only three Latin American countries made adjustments in that direction: Costa Rica, Mexico and Nicaragua. In addition, 46 countries globally increased the retirement age, of which Brazil and Costa Rica are the only ones in the region. Finally, 51 countries adjusted the benefit formula, but only 4 in Latin America and the Caribbean: Brazil, Costa Rica, Guyana and Nicaragua. Efforts have been made in the region to increase pension coverage and adequacy (see Table 1). Examples are the reduction of the contribution time as a requirement for a minimum pension, the replacement of the solidarity pillar by a universal pillar in Chile, and the increase in the minimum pension and the establishment of a minimum contribution time in Brazil.





TABLE 1. RECENT PENSION REFORMS IN LATIN AMERICA AND THEIR APPROACHES

CHILE (2021)	COSTA RICA (2021)	MEXICO (2020)	BRAZIL (2019)
Pillar 1 - Pensión Garantizada Universal (PGU): The previous solidarity pillar was replaced with a benefit focused on 90% of the population over 65 years of age.	Minimum age of early pension: Women: 60 → 63 Men: NA Minimum months of early pension contributions: Women: 450 → 405 Men: NA	Minimum pension: 1,250 weeks Cap on commissions for AFORES: 0.92 → 0.54% Contributions: 6,5% → 15% Employer's contribution: 5.15% → 13.88% Employee's contribution: 1.45% → 1.12% Weeks of contribution: 1,250 → 1,000 Guaranteed minimum pension: \$3,289 (MXP) → \$2,622 - \$8,241 MXP	Special cases: prerequisites are maintained for field and high-risk workers. Minimum pension age: Women: 53 → 62 Men: 57 → 65 Minimum years of contribution: Women: NA → 15 Men: NA → 20

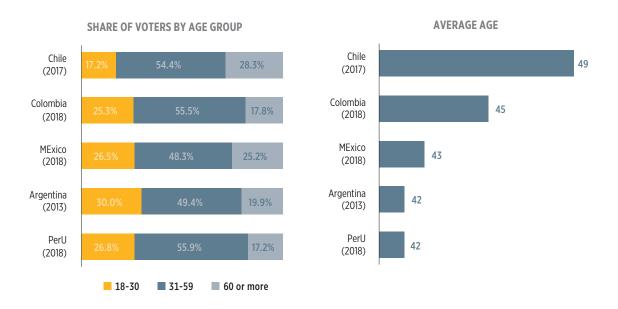
The lack of synchronization in Latin America and the Caribbean with the global reform effort jeopardizes the long-term viability of pension systems in the face of the demographic change that will be experienced in the next three decades. No pension scheme can achieve a balance between sustainability and adequacy if its parameters are not adjusted to the demographic, economic and social trends that determine the system's performance.

Pension reforms should be approached as a dynamic and incremental process rather than as a one-time event every one or two decades. They require significant political capital, broad social consensus and time for adaptation and implemen-

tation. The window of opportunity for reforming pension systems is changing as the aging process continues. Currently, the average voter age is above 40 for a selection of countries in Latin America (see Graph 5). In the OECD, the participation of young people in voting is up to 16 points lower than that of older adults (see Graph 6) ²². As people nearing retirement and pensioners gain weight in the voting base, pension reforms will have a more complex political economy ^{23, 24}. Evidence on this issue in the region is nonexistent, but the massive marches against reforms in Nicaragua in 2018 and Brazil in 2019, and demanding reforms in Chile in 2017 and 2018, demonstrate that the average voter is not indifferent.

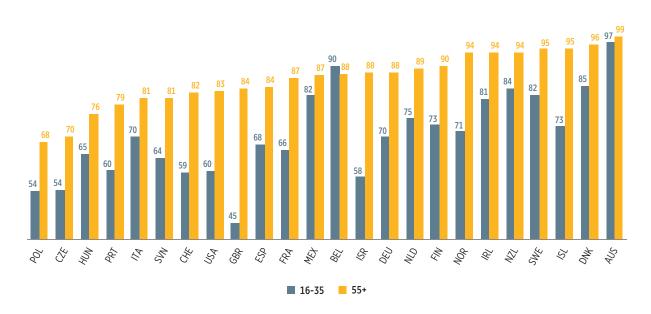


GRAPH 5. PROPORTION OF AVERAGE VOTERS AND AGE OF THE AVERAGE VOTER IN SELECTED COUNTRIES



Source: INE (2018)²⁵, JNE (2018)²⁶, Ruiz (2021)²⁷, López (2013)²⁸ and SERVEL (2018)²⁹.

GRAPH 6. PROPORTION OF VOTERS BY DIFFERENT POPULATION GROUPS IN THE 2012-2013 ELECTIONS



Source: Rouzet et al. (2019).



3 What's up?

The Status of Latin America and the Caribbean in Pension Matters

Coverage

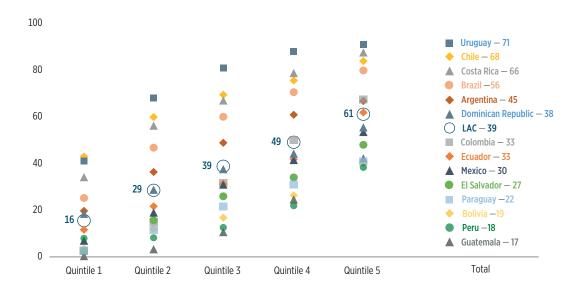
In the last decade, pension policies in the region have failed to improve active coverage, with high levels of informality persisting. The percentage of the economically active population saving or accumulating pension rights in a contributory pension plan has remained relatively constant at levels close to 40%. When analyzing these results, there are marked differences by income quintile, with only 16% of the population in the first quintile contributing to social security compared to 61% in the highest quintile (see Graph 7). Something similar occurs when considering educational level, with an average gap of almost 40 percentage points between contributors with low education and those with high education (Graph 8).



Going forward control must be improved to incorporate more people into the contributory programs. New technologies can facilitate registration and access to these systems. This is of particular relevance for the new forms of employment arising from the platform economy, and in the face of the proliferation of parttime and non-dependent jobs. Although some countries have extended the obligation to make contributions to cover independent or self-employed workers, household workers and rural workers, coverage has remained low among these groups. In addition, the design of pension systems should provide incentives to promote formal employment.

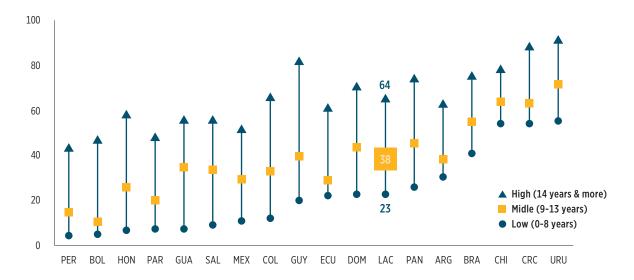


GRAPH 7. ACTIVE COVERAGE: WORKERS CONTRIBUTING TO PENSION PLANS BY TOTAL FAMILY INCOME QUINTILE. (% OF ECONOMICALLY ACTIVE POPULATION, CIRCA 2021)



Source: The Information System on Labor Markets and Social Security (SIMS) of the Inter-American Development Bank (IDB). Note: Active coverage refers to all workers who contribute to social security. The left panel shows coverage by quintile. The right panel shows the aggregate coverage by country.

GRAPH 8. ACTIVE COVERAGE: CONTRIBUTORS TO THE PENSION SYSTEM BY EDUCATIONAL LEVEL (% OF ECONOMICALLY ACTIVE POPULATION, CIRCA 2021)



Source: The Information System on Labor Markets and Social Security (SIMS) of the Inter-American Development Bank (IDB).



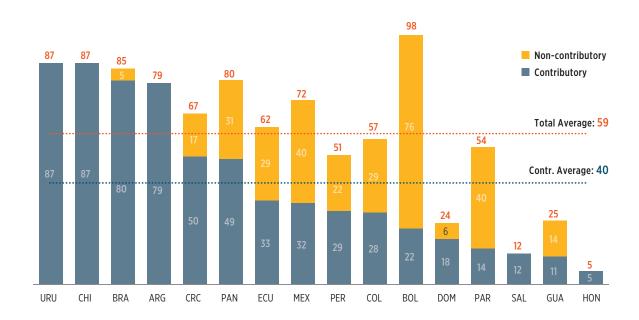




In Latin America and the Caribbean, low coverage in the active labor force and low levels of savings generate a serious problem of regressivity and lack of protection in retirement. Only 40% of adults over the age of 65 receive a contributory pension, due to the high level of informality prevailing in the region and the fact that pension systems were conceived to rely on a for-

mal salaried labor market (Graph 9). Although the coverage of adults over 65 years of age receiving a pension benefit increases to almost 60% when considering non-contributory pensions, there are still 40% of older adults who do not receive any income, which represents an implicit debt for the region's pension systems.

GRAPH 9. PENSION PASSIVE COVERAGE RATE BY COUNTRY (% OF THE POPULATION OVER 65 YEARS OLD, CIRCA 2021)



Source: The Information System on Labor Markets and Social Security (SIMS) of the Inter-American Development Bank (IDB).

The problem of access to retirement products with lifetime payments and protection against longevity and inflation risks has several dimensions, depending on the type of system. In individual capitalization schemes, when savings are very low, the individual normally receives a lump sum payment or is required to purchase a payment program without longevity risk protection. For example, Colombia has a semi-contributory

program —Beneficios Económicos Periódicos (BEPS)— aimed at the informal population or those who are unable to build up a pension, in which the life annuity receives a 20% subsidy on the initial contributions from the State. However. in most cases, members who do not meet the pension requirements continue to opt for lump sum payments.



In Peru, lump sum payments are available for any level of mandatory savings, which exposes individuals to poverty in old age if they have no other income, savings or family support, and at the end of the day, represents a contingent liability for the State.

On the other hand, in the pay-as-you-go and defined benefit systems, it is another type of regulation that limits passive coverage: the requirements of minimum years of contribution to access the pension benefit. In a region with high labor turnover and informality, where people on average contribute to their pension plans for less than half of their productive life, this is a prevalent case and a source of substantive regressivity ^{30,31}. Moreover, in an environment with high informality, high-income individuals are overrepresented within the group of pensioners, which is aggravated by the fact that there is a positive association between a person's income level and his or her life expectancy.

In response to low contributory coverage, non-contributory pensions have become increasingly popular in the region, but this brings with it challenges in the face of population aging ³². This type of retirement is not based on accumulation of contributions but on eligibility criteria. Some of them are universal, as in Bolivia. Others are conditional on not receiving another contributory pension and/or being below a certain income level or poverty line, as in Colombia and Ecuador. There are also those that exclude people from high income deciles, as in Chile, or are conditioned to being in rural areas, as in Brazil and Mexico. For the most part, non-contributory

pensions are financed by general taxes. However, in countries such as Colombia and Costa Rica, they are also financed through contributions from formal workers.

In the context of the region, **non-contributory** pensions may be necessary to increase pension coverage and guarantee a source of income to avoid poverty in old age, especially in the short term. However, this type of benefit may jeopardize public finances in the medium and long term. Evidence from countries such as Canada. Denmark and Sweden indicate that universal pension programs are typically calibrated to a level related to the alleviation of absolute poverty and are accompanied by exclusion of high-income earners. They also exclude targeted supplements complementary to universal benefits, an intra-generational redistribution tool to balance the adequacy and sustainability of pension spending 33. Conditional supplements in wealth levels or pension savings have an insurance value for those workers with longer interruptions in their working lives, but they can also distort labor decisions (both relevant in the context of Latin America and the Caribbean).

All of the above poses a huge challenge for the region, as it means that large segments of the population are not protected against inflation or longevity risk beyond the basic non-contributory state pension. Given that the raison d'être of a pension system is to provide pensions, and not simply to return the resources contributed with interest, the lack of private life annuity providers is a major market failure in Latin America and the Caribbean.

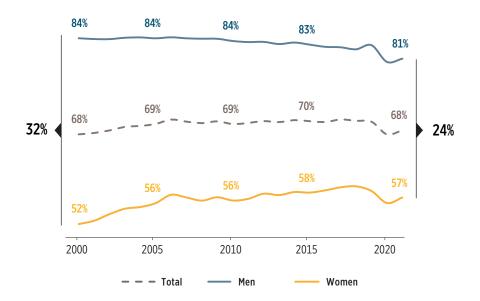


Women's Participation

Female participation in the labor market is crucial for increasing coverage and easing the burden of demographic change on pension systems and society as a whole, as well as for promoting economic development and remedying historical social inequities. In Latin America and the Caribbean, the gap in female labor force participation has been decreasing in recent decades, from 32 to 24 percentage points between 2000 and 2021 (Graph 10). However, women still face structural barriers that prevent them from fully participating in the labor market, with implications for pension systems. These barriers are explained by factors such as: (i) the traditional role of women as the main caregivers

of children and, on occasion, people with disabilities and the elderly, as well as household chores, which leads to longer periods of work inactivity; (ii) the under-representation of women in paid employment, since although they work around 54 hours per week (almost 3 hours more than men), only 19 of these hours are paid (35% of the total vs. 74% in the case of men; see Graph 11); and (iii) women's labor income is on average 24% lower than that of men. In fact, in Latin America and the Caribbean, about 63% of the time devoted to unpaid care of older adults is spent by women 34, making them less likely to work and bearing the double burden of work and long-term care 35.

GRAPH 10. OVERALL LABOR PARTICIPATION RATE IN LATIN AMERICA AND THE CARIBBEAN (% OF WORKING-AGE POPULATION, 2000-2021)



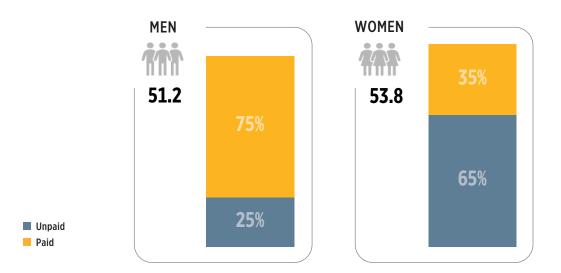
Source: IDB SIMS (2022).

Note: The overall labor participation rate calculates the proportion of people who are employed or seeking employment in relation to the total number of people between 14 and 64 years of age.









Source: Own calculations based on the Gender Equality Observatory for LAC. ECLAC.

Labor gaps add to women's longer life expectancy and lower effective retirement age. This combination of factors explains the significant differences faced by women in terms of both pension coverage and pension adequacy. Regarding coverage, Graph 12a shows that only 36% of women over 65 years of age in the region obtain a contributory pension vs. 44% in the case of men. This gap tries to be compensated through non-contributory pensions, which are more concentrated among women. However, in total coverage (which combines contributory and non-contributory pensions), there is still a 4% gap in favor of men. About the gaps in the amounts of contributory pensions, although a decrease has been seen in recent years, it still reached average values of 20% in the five-year period 2016-2020 in favor of men (Graph 12b).

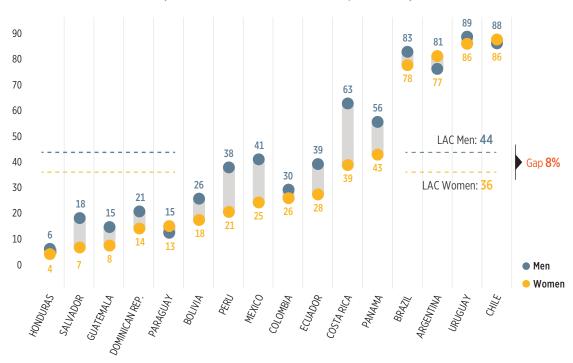
The causes of the gender gap in retirement income are diverse. In addition to employment-related factors, there are shortcomings in the design of pension systems, such as: lack of indexation mechanisms in the face of longer life expectancy, absence of compensatory tools during maternity, and care of children or the elderly. In addition, differentiated retirement ages for men and women can have a negative effect on access to and amounts of pensions. For example, it has been found that, in Chile and Colombia, differences in the retirement ages of men and women explain 45% and 54%, respectively, of the gaps in pensions received, this being the main cause of the gender gaps in the level of benefits 36.



GRAPH 12. GENDER GAPS IN THE CONTRIBUTORY PENSION SYSTEM IN LATIN AMERICA AND THE CARIBBEAN

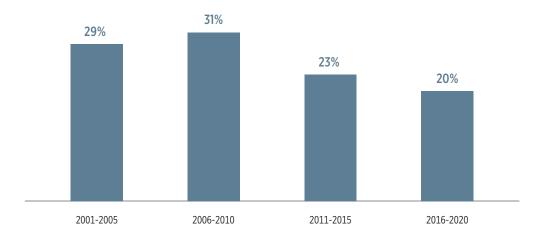
CONTRIBUTORY COVERAGE RATE

(% POPULATION OVER 65 YEARS OLD, CIRCA 2021)



EVOLUTION OF THE GENDER GAP IN CONTRIBUTORY PENSION AMOUNTS

(% IN RELATION TO MEN)



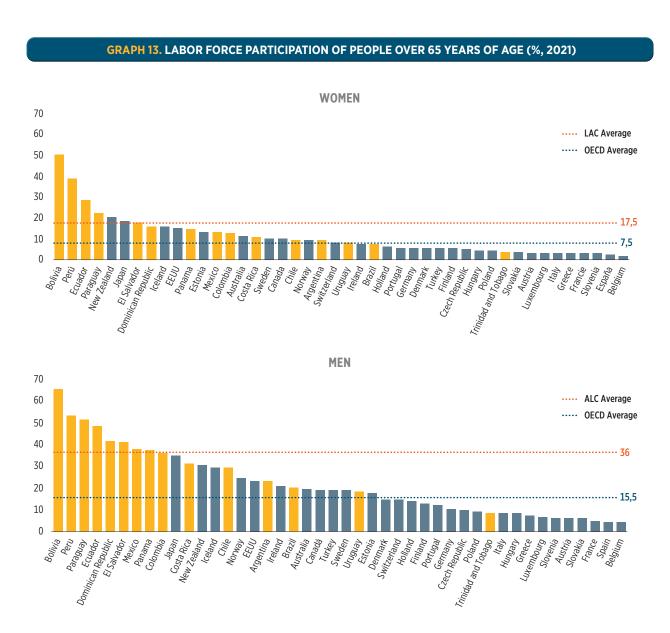
Source: IDB SIMS (2022).

Note: The gap in percentage points is shown in gray.

Participation of Older Adults

A significant percentage of older people continue to work in the labor market despite having passed retirement age. In Latin America and the Caribbean, the average labor force participation of older adults is 36% for men and 17% for women, levels significantly higher than the 16% and 8%

observed in OECD countries. Bolivia and Peru have the highest labor participation rates in this group, while Chile and Uruguay have the lowest rates (see Graph 13). It is worth mentioning that older people with lower levels of education have higher levels of labor participation.



Source: ILOSTAT (2022).

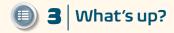
The reasons for increased permanence are varied. However, there is a close relationship between the labor participation of older adults and the existing coverage gaps in the pension **systems.** Some authors have found a negative relationship between labor participation of older workers and the percentage of older people receiving pensions in Latin America. For example, in Bolivia, where the coverage of the contributory pension system is only 20%, the labor force participation of older adults is 65% for men and 30% for women. In contrast, in countries such as Uruguay, with coverage close to 90%, labor force participation among the elderly is significantly lower. Additionally, the low income that people receive at retirement also delays the retirement age, causing them to seek employment to supplement their income.

High labor participation at older ages would facilitate social acceptance of a policy of expanding the work period. However, the high level of informal employment among the elderly implies that such measures may be less effective, as informal workers do not contribute to the pension system. In 2021, close to 80% of workers over 65 years old had an informal job, significantly higher than the 60% observed in the population under 65 years old ³⁷. This points to a complex problem that requires a coordinated perspective between pension, labor and aging policies.

Longer life expectancies, together with the increasing participation of older adults in the labor market, impose public policy challenges on

pension systems. In Latin America and the Caribbean, people turning 65 can expect to live another 18.7 years, of which 13.9 will be in good health. This situation sets challenges in terms of redefining the incentives of pension systems to keep older adults in the formal labor market. One of them is determined by the legal age for accessing a pension, which is a key variable in the decision to retire. Thus, for many countries in the region, setting fixed retirement ages can reduce the freedom of workers to remain in the formal labor market beyond their retirement age. In Chile, for example, it is a mandatory requirement to stop working at age 65 in order to start receiving a retirement pension from the universal pillar. Likewise, in Ecuador, those who receive a state pension cannot work in the formal sector because in that case they would no longer receive the benefit.

There is varied experience in OECD countries of reforms aimed at encouraging older people to continue working after reaching retirement age. For example, New Zealand eliminated the mandatory retirement age, leaving it up to the individual to choose when to leave the labor market. The Netherlands eliminated incentives for early retirement and mandatory retirement and increased tax incentives for targeted training for older adults. In Denmark, a bonus payment was established for every three months of full-time work after the age of 62. In the United Kingdom, older workers are paid for re-entering the labor market after having been unemployed. Finland and Sweden have made working hours more flexible to allow older workers to stay in part-time jobs.



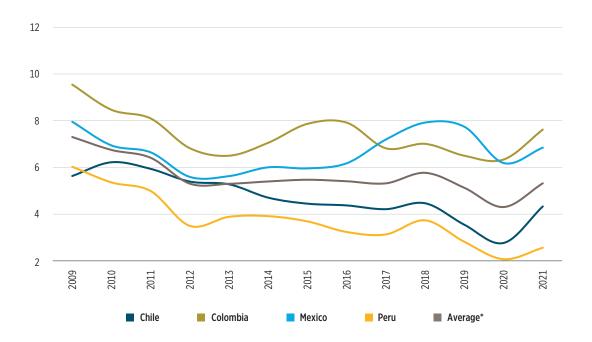
Interest Rates and Returns

Interest rates have been falling for several decades. Return expectations for diversified portfolios have also been adjusted downward. Both trends make it more difficult to achieve good pensions. Graph 14 shows the general downward trend in 10-year sovereign bond interest rates for a sample of countries. The consensus is that rates will remain low relative to their historical levels mainly because the secular decline is due to persistent trends such as the aging of the population and others that, although they could be reversed, it would be risky to make a prediction, such as the development of productivity. Even the most aggressive forecasts continue to put interest rates at low levels by the standards of

previous decades ³⁸. In addition, the prospect of higher investment spending during the energy transition in response to climate change could be a mitigating factor ^{39, 40}.

Graph 15 shows the downward trend in investment returns of the capitalized components in the region. It seems reasonable to expect that diversified portfolio returns will continue their downward trend in the coming decades. The price of risk may have risen slightly in line with the fall in the risk-free rate, but that variable is uncertain and is expected to be insufficient to maintain total returns 41.

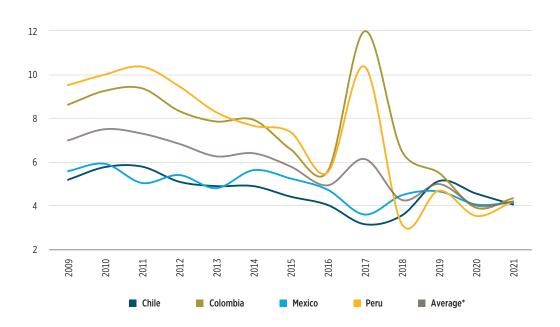
GRAPH 14. 10-YEAR SOVEREIGN BOND RETURNS (%)



Sources: BCRP (2022) and FRED (2022).

^{*}The simple average of returns was calculated for the selected countries.





Source: FIAP (2021).

Note: The graph shows the 10-year moving average of the gross return of the funds under administration. For Chile, the return corresponds to the "type C" fund, in Colombia to the moderate fund, and in Peru to the return of the type 2 or Mixed fund. Gross profitability does not consider the effect of commissions charged.

The environment of low rates relative to historical levels and lower expected returns generates pressure on pension systems. For the same expected pension level, lower returns require higher savings in a context in which generating higher savings (mandatory or voluntary) is in itself a great challenge due to informality and low incomes in the region. In addition, the fall in nominal (real) interest rates has direct implications on the price of nominal (real) pension guarantees. For example, in Chile, a person who retired in 2020 received a 28% lower annuity than if he or she had retired in 2000, attributable only to the effect of the fall in the interest rate relevant for establishing the price of the annuity 42.

The investment regimes of the individual capitalization components in the region have gradually evolved towards better diversification opportunities, refining the balance of fixed and variable income assets and expanding the universe of allowed asset classes towards the so-called "alternative assets". However, today the average proportion of government debt in portfolios is still around 50%, a figure not much different from what was observed a decade ago. This figure is even more significant in pay-as-you-go systems managed by social security institutions, where the progressive dependence of the pension system to finance the fiscal deficit has generally translated into an increasing percentage of assets invested in instruments of public issuers (i.e., Ministry of Finance and Central Bank), in some cases representing more than 95%.

^{*}Se calculó el promedio simple de los rendimientos para los países seleccionados.

Investment diversification is conditioned by statutory limits by asset class, solvency and geographic location, among the most important. These limits reduce the possibilities of generating returns. The country bias of the investment regime in most of the region's pension systems is remarkable 43. For example, in Uruguay there is a restrictive limit abroad that allows such investments only in multilateral bank issuances.

Some countries in the region are gradually adopting a risk-based supervisory framework and establishing a default based on a life-cycle strategic asset allocation structure, in which the content of equity investments decreases as retirement age approaches. These developments are consistent with international theory and practice, especially in the generational funds introduced in Mexico in 2020. However, the main challenge for pension systems continues to be the alignment of interests between the performance of pension funds and their members around the long-term pension objective 44,45,46,47,48.

In some countries, the regulatory and incentive structure contributes to short-termism in investments. For example, a minimum level of reserves is required to support a return guarantee as in Chile, Colombia and El Salvador. Typically, the commitment is defined as an industry relative rate of return guarantee. The general concept is that a pension fund that reports a rate of return below a band set by the regulator around the average rate of return of the system in the recent

past is required to cover the shortfall from its own required reserves. Evidence associates relative return guarantees with herd behavior on the part of pension funds, as well as with a short-term approach ⁴⁹.

In sum, the region shows gradual progress in terms of investment, but the possibilities for diversification remain limited. There is still a regulatory and incentive structure that does not favor the long-term vocation of the pension funds, and it is necessary to deepen in the adaptation of the strategic asset allocation structure to align incentives with the pension objective of the affiliates. Improving the ability of investment schemes to generate better risk-adjusted returns is a *sine-qua-non* condition to meet the challenge of aging and recurring volatility in financial markets.

The investment function can benefit from expanded overseas diversification opportunities and the inclusion of alternative assets on the menu. Moreover, the most important challenge for the region is to expand the investment function toolbox beyond diversification ⁵⁰. Even a well-diversified portfolio can suffer severe losses in adverse financial market conditions. Systematic risk cannot be diversified: proper systematic risk management requires that diversification be accompanied by hedging tools. Alternatively, or in a complementary manner, pension systems can share systematic risks through automatic parametric adjustment mechanisms or collective capitalization components designed for this purpose.



4 What's new?

New Solutions to Increase Coverage and Improve Risk Management

Latin America and the Caribbean has been a pioneer in pension policies to increase savings and active coverage, and innovative ideas are emerging to increase pension coverage and improve efficiency in risk management. Innovative and flexible strategies have been evaluated to seek complementary sources of financing, including the possibility of relying more on the consumption tax instead of the payroll tax, the decoupling of contributions from employment status, and the introduction of innovative financial instruments to increase coverage, savings and the provision of a lifetime decumulation product.

In the region, it has been proposed to review the evolution of contribution rates to balance the needs of liquid and illiquid savings in the life cycle, as in Singapore and Switzerland ^{51,52}, and the idea of complementing retirement savings with a liquid savings account ⁵³, as has been experimented in the United Kingdom ⁵⁴.

Latin American countries have also made progress in measures aimed at: (i) improving the linkage of pension benefits with other types of social benefits to encourage formality; (ii) strengthening the control of contributions; (iii) promoting connection through technologies and the architecture of choice to increase coverage and savings in the active stage; and (iv) improving complementary products to increase passive coverage.

In 2022, Brazil announced the implementation of a retirement bonus to boost retirement savings, especially aimed at informal workers. The instrument is inspired by the so-called SeLFIES for retirement 55 and allows savers to receive a stable monthly income in real terms for 20 years from the date of retirement. The worker only requires two pieces of information, the amount of his or her target income ("target pension"), and the expected or approximate date of retirement. At any given time, you can compare the value of your bonds with the desired target and make decisions, including the possibility of selling part of your holdings of those bonds in a secondary market in case of emergencies or liquidity problems 56

Regarding longevity risk, some countries are exploring the introduction of innovative solutions for the decumulation stage. These solutions are based on actuarially fair sharing of longevity risk among participants. It can be at the level of a pension fund or a national collective fund that offers lifetime payments even in scenarios where annuities are practically non-existent, as in Colombia. Where there is a market for annuities, as in Chile, or they are offered by a stateowned company, as in Uruguay, it may be a fund that offers complementary payments to these.

This type of decumulation product is called by various names, such as "longevity income fund", "pension mutual fund", "collective variable annuity" or "life annuity". The OECD adopted Legal Instrument 0467 in 2022, updating its *Roadmap for Good Design of Defined Contribution Pension Plans*, including longevity risk sharing as one of the options to be considered in good design. The IDB included this type of solution in its best practices for designing and regulating the decumulation phase ⁵⁷. In addition, prestigious professional associations such as the CFA Institute, the Society of Actuaries, and the Brookings Institution have

published research exploring these types of solutions ^{58, 59, 60, 61}. In Latin America, the Uruguayan Commission of Experts on Social Security included in its report of recommendations exploring the introduction of pension mutual funds ⁶², and in Chile various researchers have proposed the introduction of a similar solution ⁶³. In Colombia, the issue is being explored by pension policymakers ^{64, 65}. This type of solution already exists in several countries, including Australia, Canada, Denmark, the United States, Iceland, Israel, The Netherlands, Singapore and Sweden ⁶⁶.

Closing Gender Gaps

The discussion on gender gaps in pensions is gaining momentum in the pension reform debates, but much remains to be done. The design of pension systems influences inherited gaps in participation, income, retirement age and longevity. One measure to close the gap in the short term is to introduce non-contributory pensions and consider targeted supplements to income-tested women. This is in countries where women are lagging behind, which tend to be those where overall coverage is low. This includes measures to bring pension levels closer for women and men with the same pension savings. This type of compensatory subsidy for women exists in Bolivia, Chile and Uruguay. Brazil has achieved a gap as low as Denmark's thanks to a powerful package of compensatory measures that include the accreditation of more years or laxer requirements for accessing the pension for years contributed. The benefit formula of the pay-as-you-go system in Uruguay allows women to compute an additional year of service for each child born alive or adopted up to a maximum of five years. In Chile, there are also subsidies per live birth for low-income women. In addition, in Chile and Uruguay there has been a notable effort to incorporate the household services sector into the formal sector, thereby promoting access to social security. Another intragenerational redistributive aspect by gender is the use of unisex mortality tables, which exist in Brazil and Uruguay.

Long-term solutions to close the gender gap in pensions should focus on increasing women's access to formal employment. This is related to the promotion of <u>flexible work arrangements</u>, labor regulations that encourage greater parity between maternity and paternity leave, and investments to promote childcare and dependency care policies for the elderly. This must be accompanied by actions in the pension sector, such as:

(i) enabling the contribution of low-income and



part-time workers; (ii) implementing strategies to promote pension savings through technological tools and the application of behavioral economics; and (iii) incorporating the gender dimension in the design of pension systems.

Climate Change

Climate change and the transition to a green economy are gaining prominence in discussions **about the role of pension systems.** The responsible investment market has been gaining traction, and Environmental, Social and Governance (ESG) factors are making their way onto the priority list of pension funds globally. This is because of the need to protect members' savings from climate risks and the potential financial benefits of early integration of ESG factors into investment analysis and decisions. Climate change also exposes the assets of social security systems (such as pension funds) to financially significant risks.

In the region, several countries have been making progress in this area, a trend that has become even stronger after the COVID-19 crisis. It started with the incorporation of factors related to governance and active property requirements and has been expanding further in areas of climate change (see Figure 1). **However, progress has been slow** and uneven.

FIGURE 1. REGIONAL DEVELOPMENTS IN THE INCORPORATION OF ESG FACTORS

	Voluntary Principles / Green Protocols	Collaboration with International Organizations	Green Bond Market	Green Taxonomy	ESG Risks and Opportunities in Pensions Surveys	ESG Pension Regulations
BRAZIL	(1995)	✓	✓	(2022 - water/sawerage)	V (2021)	V (2022)
CHILE	✓ (2019)	✓	(2019 - sovereign)	√ (2022)	√ (2019)	✓ (2020)
СОГОМВІА	✓ (2012)	~	(2022 - sovereign)	√ (2022)	√ (2018)	V (2021)
MEXICO **	(2016)	✓	~	(2022 - Road Map)	√ (2020)	✓ (2021)
PERU #	√ (2020)	✓	✓			V (2021)

Source: Prepared by the authors.



Sustainable investments involve important challenges, which are recently being debated in the region. Among the challenges is the very definition of its meaning and scope, which makes it difficult to establish measurement standards and homologation of ESG criteria. This becomes even more important given recent cases of greenwashing, where creative characterization-accounting is used to "greenwash" activities that may not be green. Several financial regulators and supervisors have set themselves the task of achieving greater standardization and robustness in these ESG schemes, with the publication of green taxonomies in several countries in the region standing out. To these challenges we must add the limited knowledge about the impacts of the different strategies on the performance of sustainable investments, since given the relevance of the above challenges, the simple denomination of sustainable and responsible is not enough to obtain better performance in terms of profitability.

There are three challenges related to ESG factors ⁶⁷. First, they do not provide a coherent guide for investors and companies to make the trade-offs that are inevitable in any partnership, given that they bundle together a dizzying array of objectives. Second, they are not clear about incentives. And third, there is a measurement problem that leads to various scoring systems exhibiting inconsistencies. In this regard, it has been mentioned that these challenges are not surprising, because, for example, it is legitimate to have different opinions on the quality of intangible assets associated with ESG factors ⁶⁸. However, it is important not to become complacent.

A vital component of pension participants' preferences is that the world in which they retire be livable. Pension funds are one of the main institutional investors and are therefore essential to support the financing of the transition to a green economy and ensure the long-term sustainability of investments. Despite this, the global climate change index (AODP) shows that more than 60% of the world's 100 largest public pension funds - and all the Latin American and Caribbean funds surveyed - have limited or no climate change focus ⁶⁹. In turn, the three Latin American countries included in the Global Pension Transparency Benchmark are ranked below their international peers in terms of responsible investment ⁷⁰.





5 What's next?

Digital Transformation of Pension Systems

Digital transformation has a cross-cutting influence on all economic activities, including pension systems. This refers not only to the changes generated by digital technologies, such as artificial intelligence, machine learning, big data, cloud computing, and the metaverse, but also to the way in which it has impacted the interaction between the different agents in the markets.

New technologies facilitate innovation in relation to savings, social insurance and risk-sharing mechanisms, as well as different ways of packaging retirement solutions. However, technology adoption in general and, specifically, in the area of pensions has not advanced at the same pace in the region. This is reflected in the DiGiX 2022 (BBVA), an index that goes from 0 (low digitization) to 1 (higher digitization) and measures the degree of digitization of 99 countries around the world. The best positioned countries in the region within the index are Chile (41st place, with a score of 0.61) and Costa Rica (57th; 0.52), while other countries such as Guatemala (90th; 0.30) and El Salvador (92nd; 0.27) lag far behind in terms of digital transformation.

Digital transformation opens the range of possibilities for pension system design and reform.

Technological changes bring enormous opportunities to move towards pension systems that cover citizens regardless of their employment status, due to the digitalization of income and transactions. In this sense, it is becoming increas-

ingly feasible to equalize both obligations and rights with respect to the pension system among the different types of employment. **Technology makes it possible to facilitate and automate the process of saving for retirement,** simplifying and even eliminating many of the steps required to make voluntary contributions. Digital transformation will also be relevant in the massification of strategies to increase savings and coverage through innovative financial instruments such as retirement bonds, and boost savings initiatives via consumption.

A study conducted by the IDB's Retirement Savings Laboratory (2021) shows how technology can help in the retirement savings process and how it lowers the costs of pension solutions for system participants. In Mexico, for example, technology reduced a process that could take days or weeks to a couple of hours and eliminated the need to travel.

Technology also allows us to go where we could not go before. A couple of decades ago, the lack of connectivity, the scarce presence of offices in remote and small cities and the need to carry out procedures in person made it difficult to reach certain groups of workers. Today, with the introduction of mobile applications and the high penetration of broadband and digital telephones, there are no geographic barriers to saving for retirement. For example, a study conducted in Mexico shows that having a cell phone

is associated with a statistically significant probability of saving in pensions. In fact, controlling for other factors, owning a cell phone is associated with a 0.4% increase in the probability of saving in pensions ⁷¹.

Digital transformation also plays a key role in control strategies and compliance in the payment of contributions to the pension system, as well as in the massification of innovative financial instruments for pension accumulation and decumulation. Undoubtedly, contribution evasion represents one of the most important phenomena facing the region and threatens pension system sustainability. This situation requires the implementation of control strategies where digital transformation can support two lines of work: (i) favor the detection of the evading population based on sources of information other than tax information; and (ii) be appropriate in the treatment of contributors for whom omissions or inaccuracies are detected.

An example of the applicability of technology in control strategies is the Undetectable Identification Strategy being implemented by the *Unidad de Gestión Pensional y Parafiscales* [Pension and Parafiscal Management Unit] (UGPP) in Colombia. The UGPP seeks an increase in the formalization of the labor market through the implementation of artificial intelligence solutions that allow the timely detection of evading population.

Taking advantage of the opportunities offered by the digital economy requires transforming pension institutions. In general, pension institutions have not been known for being innovative. However, a growing number of entities in the region are considering digitalization as a key component of social security reforms. Digital technologies not only allow institutions to better fulfill their mandate, but also favor better communication with citizens and enable them to better plan.





Financial Risk Management in Pension Systems

The response to the context of low rates and expected returns requires a review of the investment regimes in the region's pension systems. The specialized literature and the work carried out with regulators in the region through the IDB's Network for Pensions in Latin America and the Caribbean (Red PLAC) indicate that efficient management of investments dedicated to retirement savings should incorporate a specific pension objective 72,73. In particular, this implies that performance and risk measures should not be based solely on asset (savings) returns, but should take into account movements in the rate of conversion of assets (savings) to income (lifetime). This change in units also has implications for the design of pension fund investment strategies. In particular, this approach requires introducing the hedging of the risk of conversion of assets to income in retirement as a fundamental element in the investment strategy 74,75. The absence of a focus on lifetime income in retirement has been documented in several Latin American and Caribbean countries, and Colombian data has shown that conversion risk is the main market risk to which pension fund members are exposed. In effect, the coverage of this risk is not considered in the design of the reference portfolios, performance measures or in the function of paying commissions to the pension fund administrators.

Despite its importance, conversion risk is outside the regulatory perimeter and the scope of action of pension funds in investment schemes in Latin America and the Caribbean. The disconnection between the investment regime and the retirement income target is not a problem unique

to the region but is global 76. This detachment is reflected in a mismatch between the terms at which pensions are paid and the terms at which the fixed-income instruments that make up pension fund portfolios pay cash flows.

There are several paths for reforming the retirement fund administrator's investment regime for retirement capitalization schemes. The starting point is relevant. In some countries, such as Costa Rica, there are no life cycle schemes. In others there is a basic version of a life cycle known as multifunds, as in the case of Chile, Colombia, Peru and Uruguay. Countries with multifunds should evaluate moving towards a generational life-cycle scheme such as the one established in Mexico. Countries where there are no multifunds could move directly to generational funds, which are operationally more efficient and enable the possibility of the other relevant change: introduction or modernization of the risk-based supervision scheme.

From a strategic asset allocation of generational funds, it is possible to introduce an investment scheme based on the long-term pension objective of members, and to attach a regulatory incentive structure (benchmark portfolios and fees) capable of aligning the performance of pension funds with that objective. Some authors also show the relevance of the so-called "retirement bonds" to achieve an improved investment scheme. This type of bond is the true risk-free asset for an investment regime that seeks to ensure a replacement income over the long term.

The Future of Pensions

overcoming the public policy dilemma between sufficiency and sustainability. This requires social, institutional and technological innovation. Globally, pension reforms in countries with advanced population aging have focused on making parametric reforms and incorporating automatic adjustments of the main parameters in response to aging. These actions have been aimed at maintaining financial or fiscal sustainability, while in the capitalization systems they have sought to maintain sufficiency and, therefore, social sustainability. Japan is a case study because today it faces the dilemma between fiscal sufficiency and sustainability in a demographic regime even

Building future-proof pension systems requires

more advanced than the one Latin America and the Caribbean will face in 2050. Risk sharing, a scheme successfully applied in countries such as **Denmark**, the **Netherlands and Sweden**, can increase welfare by collectively diluting aggregate productivity, financial and demographic risks, which are systematic contingencies that cannot be diversified in the capital market.

In the absence of a sustained improvement in productivity, increasing the effective retirement age is the key to achieving both financial and social sustainability (sufficiency). The decision to withdraw from the labor market is multifaceted and therefore altering it is not a simple task 77,78,79.



This decision results from an interaction between factors such as: (i) preferences; (ii) the type of work; (iii) the characteristics of the individual (and his/her family, if any); (iv) the room for maneuver created by job opportunities ^{80,81}; (v) the incentives and taxation of the pension system and income tax for retirees, and the articulation of this with other social benefits; (vi) social norms; and (vii) labor legislation and its application, for example, regarding age discrimination. In 1986, the United States became one of the first countries to ban mandatory retirement on the basis of age ⁸². There is evidence that this contributed to the increase in employment over the age of 65 in the following two decades by 10% to 20% ⁸³.

In particular, the decision to retire is influenced by the individual's health situation. The literature review qualifies this relationship as weak with respect to other factors such as pension system design and retirement age 84. However, for some groups the relationship is strong. For example, for people with physically or mentally heavy occupations, working longer has a negative effect on health 85. For this group, a lower retirement age leads to higher well-being and lower demand for medical care after retirement.

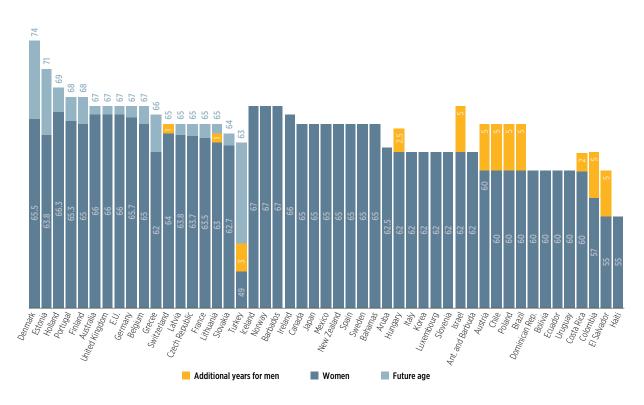
Effects have also been found in the reverse direction, i.e., early retirement can have negative consequences for physical and mental health ^{86, 87, 88, 89}. In addition, the design of the pension system is a determining factor in the retirement decision since it defines the "official" retirement age.

The effective retirement age depends to a large extent on the official retirement age. The Swedish pension reform at the turn of the century did not introduce a formal retirement age, but only a minimum eligibility age. It was expected that, if the individual knew that the monthly pension was lower than desirable, he would compensate by extending his working period if his health permitted it. This is observed in countries such as Colombia and Costa Rica, where, on average, the effective retirement age is higher than that required by the pension systems (men retire 3.6 years later and women 1.5 years later than the official age). Since the late 1990s, the labor force participation rate for the 60-64 age group has increased by more than 20 percentage points. In contrast, the increase in participation after age 65 has been lower, and it is those with higher incomes who have done so. Only about 25% of men and just under 20% of women aged 65 to 69 work 90. Thus, age 65 is a focal point. Recently, Sweden increased the minimum retirement age for eligibility and, in a major communication effort, made transparent what the target retirement age is and the sequence to reach it gradually.

Building future-proof pension systems requires overcoming the public policy dilemma between sufficiency and sustainability. This requires social, institutional and technological innovation Retirement age changes are politically complex, but also produce the greatest individual and societal benefits. Raising the retirement age broadens the contribution base and, at the same time, preserves the adequacy of pensions for those who work longer. In this regard, the International Monetary Fund states that gradually increasing the legal retirement age would promote higher levels of employment and economic growth, while increasing social security contribution rates could reduce the labor supply ⁹¹. For its part, the OECD states that giving people better options and incentives to continue working into old age is key to meeting the challenges of a rapidly aging population.

Graph 16 shows the official and legislated retirement ages around 2050 in OECD countries, with a clear tendency to increase the minimum retirement age. Most of the countries that have increased the minimum age set it at 65, Chile and Costa Rica being examples of this in Latin America. This brings them to the same levels as countries such as Canada, Spain, Japan and Mexico. It is worth mentioning that most of the selected countries in Latin America and the Caribbean are towards the right of the graph, with the lowest official retirement ages in Haiti, El Salvador and Colombia.

GRAPH 16. MINIMUM LEGAL RETIREMENT AGE



Source: OECD (2021), Pensions briefly 2021: OECD and G20 Indicators, OECD Publishing, Paris. ISSA (2019), Demographic and other social security-related statistics, by country, 2016-2018.

Due to the political and social complexity of parametric adjustments, some countries have implemented mechanisms for self-correction of pension system imbalances. This type of mechanism has been generically called sustainability factors or automatic adjustment rules and is the main innovation in pension matters in recent decades. The basic idea is to function as risk-sharing mechanisms and they are observed both in the basic pillars (e.g., via indexation of the retirement age to life expectancy, or through collective savings components in the second pillars) and in the occupational plans known as Collective Defined Contribution plans existing in countries such as Canada, Denmark and the Netherlands. About two-thirds of OECD member countries have incorporated automatic adjustment mechanisms. For example, Estonia, Finland and Greece have linked retirement age to life expectancy.

So far, no country in Latin America has incorporated this type of automatic parametric adjustment mechanism. However, the reform proposal under discussion in Uruguay foresees a gradual increase in the retirement age starting in 2027 to reach 65 years in 2035, and thereafter it will be indexed one by one to changes in life expectancy. The early adoption of an automatic adjustment factor makes it possible to reinforce and guarantee the balance of the system and, in addition, contributes to improving confidence in the sustainability of public finances. On the other hand, it helps to provide transparency on the need for adjustments, and to eliminate uncertainties among citizens.

Much of the recent global reform effort has focused on eliminating incentives for early retirement. Some countries have gone further and have promoted the possibility of combining work and pension (flexible retirement schemes). These reforms consist of lowering the implicit tax on labor and have been relatively successful in increasing labor supply in the pre-retirement years, although less so in the post-retirement years. Flexible retirement opportunities provide insurance value not only for workers with health problems but also for those who need to extend their working life in response to a potential income loss event. Flexible retirement has a positive effect on remaining in the labor market, although it in turn reduces the total number of hours worked among the older population because some choose part-time versus full-time work. Therefore, it is difficult to determine whether flexible retirement increases or reduces the total labor supply of the elderly. What is true is that these flexible retirement schemes have allowed a group of people to extend their working period so that work and pension income are complementary. It is also important to consider that there is a selection effect among this group of people in terms of education, health and other socioeconomic factors. Most pension systems incorporate the idea of flexible retirement, however, there are other barriers to the employment of older people, such as age discrimination in the workplace and prejudices about their productivity 92.

Much of the recent global reform effort has focused on eliminating incentives for early retirement. Some countries have gone further and have promoted the possibility of combining work and pension

Transforming Aging into an Opportunity

To transform aging into an opportunity, it is essential that older adults have the option to work productively in the future. Although aging prolongs the return on investments in human capital 93, accelerated technological change requires policies for continuous upgrading of labor skills to ensure that workers reach advanced ages with up-to-date knowledge synchronized with the needs of employers. Continuing education programs, as well as those explicitly aimed at upgrading technological skills, are critical to ensure that older adults are able to perform highly productive jobs in the future. In addition, it may be useful to train older adults in specific segments of the labor markets in which they may have comparative advantages.

Similarly, it is important to review the design of disability insurance to protect the value of human capital and prevent it from being the exit door to the market for those who do not need it.

Reforms at the international level have tended to shift the design of disability benefits towards fixed periods that allow for reassessment of reduced capacity to work and have incorporated a strong focus on labor market reintegration policies ⁹⁴.

It is also relevant to implement public policies to promote the demand of older adults in formal employment, given that there is no culture of hiring this population in the region. Tax benefits for bringing seniors into the workforce could be an incentive for companies to keep workers beyond age 65, as well as to hire them beyond that age. A cultural barrier to hiring older people is the misperception of an expected drop in productivity as individuals age 95. Companies that promote HR policies to tap the potential of this segment of the workforce- such as part-time programs paired with age-specific task reassignment, mixed-age work teams and mentoring programs- have higher productivity and a flatter productivity profile across worker ages. This is because workers aged 50 and older experience only a small decline in productivity 96. Another barrier is the visualization of the labor market as a zero-sum game, in which it is necessary to "retire" older workers to open a job opportunity for younger workers, a belief that is not supported by the evidence 97, 98, 99, 100.





Building Sustainable Pension Systems towards 2050

To address demographic change and build sustainable pension systems towards 2050, the region requires a coordinated package of reforms that goes beyond the design of the pension sys**tems themselves.** Here it is worth highlighting: (i) increasing retirement savings; (ii) modernizing investment regimes and incorporating responsible investment principles; (iii) taking decisive steps to resolve the market failure of life annuities in retirement; (iv) studying the incorporation of risk sharing mechanisms (including automatic parameter adjustment mechanisms); (v) balance insurance and incentive aspects in the redistributive components, especially for low-income segments; and (vi) review that redistribution goes in the direction desired by society, including the mitigation of the gender gap.

In addition, going forward, working longer should be the ordinary course of life and this process should be accompanied by income protection mechanisms for those older workers who are unable to remain in the labor market for reasons of disability, reduced working capacity or other factors. However, the performance of pension systems along the spectrum of sustainability and adequacy will remain compromised if the effective retirement age does not advance in step with increases in life expectancy. This will be politically feasible only if it is part of a series of coordinated reforms that go beyond the pension system.

Two examples of countries that offer lessons for Latin America and the Caribbean are New Zealand and Singapore. New Zealand introduced policies aimed at extending working life since the early 1990s. This country increased the retirement age, at the same time as it banned mandatory age-based retirement, introduced a series of measures to mitigate age discrimination in the workplace, and accompanied these measures with a national strategy for positive aging 101, 102. Singapore is probably the most advanced case in public policy for aging because it has not limited itself to pension, labor market and health aspects, but has adopted a broad integrated approach with policies on housing, infrastructure (transportation, cities and communities), as well as long-term care, technology and inclusive business environment for the elderly.

Latin America and the Caribbean can rewrite the social contract of pensions to turn population aging into an opportunity. To ensure a prosperous and inclusive vision for the future of pensions in the region, it is necessary to:

1. Rethink the concept of retirement to transform aging into an opportunity to live in more prosperous and equitable societies, so that workers enjoy a long, healthy and flexible working life, while ensuring protection mechanisms for those who are unable to continue working. To this end, public policies must be configured in four key areas: (i) health and care for dependency at older ages; (ii) labor markets, formality, accumulation and updating of human capital and job skills; (iii) pensions; and (iv) institutional framework, innovation and digital transformation. This should be accompanied by the mitigation of legal and cultural barriers that affect the labor demand of older adults along with an inclusive business environment for this population.

2. Urgently address the impact of aging and other trends that pension systems will face in the years leading up to 2050. Postponing adjustments is not neutral between generations from the distribution perspective, since the longer reforms are delayed, the more the costs of not reforming the systems will be billed to future generations. Moreover, there is a risk that aging will come before pension coverage levels reach ideal levels, thus exacerbating the risk of poverty in old age for large segments of the population. In addition, when a reform is approached with time, gradual changes and orderly transitions can be introduced. On the other hand, when it is carried out in the face of an immediate emergency, changes must be abrupt, making acceptance difficult and aggravating social inequities.

The long-term objective of the pension system is the basis for agreeing on a shared vision to secure the future of pensions. Pension reforms are

essential to achieve that goal, but alone they are not enough to transform population aging into what some researchers have called a "second demographic bonus." This requires a synchronized and holistic reform package that goes beyond the design of pension systems. On the one hand, policies for growth, productivity and the reduction of informality will continue to be crucial in the next three decades. On the other, if by 2050 older adults can enjoy a long, healthy, and flexible period of productive work -while protecting those who can no longer work- and coordinated public policies are shaped in relevant areas such as health, care, and lifetime income, then what currently seems a challenge will have been transformed into an opportunity, with ramifications for prosperity and social cohesion.





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