"The next 40 years . . . are projected to witness a veritable explosion in the number and proportion of older people in the region."

Prepared or Not, Latin America Faces the Challenge of Aging

GEORGE W. LEESON

he world is aging—at both an individual and a population level. At an individual al level, life expectancies at birth have increased from 47 years in the mid-twentieth century to 69 years today. Life expectancies are expected to rise to 76 years by the middle of the

Demographic Dilemmas

Fifth in a series

twenty-first century, according to United Nations projections.

At the population level, the proportion of the people

of the world aged 60 years and over has increased from 8 percent in the mid-twentieth century to 11 percent today. By 2050, it is projected to reach an astonishing 22 percent, equating to 2 billion people.

The scale of this aging across the globe is immense. And it must surely be regarded as one of the success stories of humankind, as more and more people live long, relatively healthy lives. Still, this success does not come without concerns, perhaps, and challenges, certainly—and this is as true in the Western Hemisphere as anywhere else. Latin America and the Caribbean today are witnessing dramatic declines in both fertility and mortality. As a result, the aging of their populations has begun to accelerate.

Yet Latin America's continuing economic and social divides based on wealth and ethnicity (many indigenous peoples, for example, remain concentrated in rural areas) complicate efforts to address societal challenges associated with aging. And because demographic trends, including aging, are not monolithic, there are no one-size-fits-all

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policy responses—not across the region and not within countries. Adjusting to aging populations can require expensive investments and presents thorny policy dilemmas.

Fortunately, demographic trends suggest that the nations of Latin America and the Caribbean enjoy a window of opportunity in which to make adjustments. This window is open now across the region, as declining numbers of children and increasing numbers of older people provide an economically propitious period during which the ratio of dependents to workers is declining. The window, however, will not remain open forever.

THE WAVE ARRIVES

Different regions of the world have experienced the aging of their populations in significantly different ways. The aging of Europe's populations, for example, began long ago with the so-called "demographic transition" from high fertility and mortality to low fertility and mortality. Because this transition lasted more than 150 years, it afforded societies and governments time to make adjustments as their populations transitioned from young to old.

Infrastructure for dealing with aging—for example, long-term care services, housing and transport, and pensions systems—were developed accordingly, and are largely in place in the developed world today.

Elsewhere, and more recently, the demographic transition has been and will be more dramatic not only in terms of scale, but also in terms of speed. For much of the world, there is little time to adjust, despite the good intentions of governments.

Europe and North America aged through the twentieth century. The demographic transition's next wave includes the populations of much of Asia. These are aging in the first decades of the twenty-first century on an unprecedented scale, driven primarily by rapidly declining fertility. Fertility in South Korea, for example, has dropped in the course of just one generation from almost 3 children per female in 1975–80 to just over 1 in 2000–05.

This presents huge challenges to individuals, families, and societies as a whole, not least because in many of these societies support for older people is highly reliant on families. Quite simply, these families are shrinking drastically, and the role of the family is changing likewise.

As the aging of populations encompasses the globe, Latin America and the Caribbean, with their own history, culture, and traditions, now stand on the brink of their own aging challenge. The accelerating demographic transition is overtaking the region, moreover, just as populations have grown and urbanized, increasing strains on infrastructure such as public services, housing, transportation, jobs, and education.

The obvious policy implications for aging societies relate to financial security for the elderly and the provision of care. In terms of financial security, nations in the region will need to consider ways to provide basic universal pensions, as well as ways to encourage and enable older workers to remain in the workforce, where possible. As for care provision, health services need increasingly to move from acute to long-term care in an era when family support mechanisms are threatened by new family structures and by the rising participation of women in the workforce.

The countries of Latin America and the Caribbean, variously affected by demographic trends, are also variously prepared or unprepared to take on the challenges and grapple with the policy dilemmas posed by their aging populations.

STILL GROWING

It is useful to trace the region's demographic trends, actual and projected, from 1950 to 2050. At the middle of the twentieth century, Latin America and the Caribbean were experiencing a veritable population boom, as mortality declined while fertility remained relatively high. In the 1960s, the region registered population growth rates of almost 2.8 percent per year—the highest such rates of any region in the world. The high levels of population growth coincided with high levels of fertility—almost 6 live births per female on average.

Such levels of fertility were not to last. In just 30 years, they were halved. Even so, population in the region doubled in the same 30 years, from 220 million in 1960 to 442 million in 1990. Part of this was due simply to momentum in the population, but part of it resulted from decreasing mortality.

Declining mortality meant that more and more people were surviving to older ages. (Life expectancy at birth during the 30-year period increased in the region by 12 years, from 57 to 69 years.) It also meant that significantly more children were surviving their first year of life. (Infant mortality rates fell from a staggering 126 per 1,000 live births to a more modest 38 per 1,000 live births.)

By 2010, despite continued declines of fertility to around 2 per female, the population of the region had increased by a third, to 589 million. It now makes up 8.5 percent of the global population. At the same time, Latin America and the Caribbean have become more urbanized. In the mid-twentieth century, around 40 percent of the region's population lived in urban settings. Today, 80 percent live in urban settings. Only in North America is a higher proportion (82 percent) of the population urbanized. (In Europe, 73 percent live in urban settings.)

But do country-specific demographic pathways converge or diverge? In fact, not only the size of populations but also growth rates differ significantly across the region. In the mid-twentieth century, the majority of countries in Latin America and the Caribbean had populations under 10 million, ranging from just 25,000 in French Guiana to 7.6 million in Peru. Only four countries in the region in 1950 had populations greater than 10 million, the largest of these being Brazil with 54 million, followed by Mexico (28 million), Argentina (17 million), and Colombia (12 million).

As growth rates peaked in the 1960s, populations doubled almost everywhere over the next 20 years, notable exceptions being Argentina, Uruguay, Cuba, Puerto Rico, Jamaica, and Barbados. By 1990 the majority of countries' populations had more or less tripled in size compared with 1950, the notable exceptions again being Argentina, Uruguay, Cuba, Jamaica, and Barbados.

By the start of the twenty-first century, growth was slowing across the region. Even so, Brazil's population had risen to almost 200 million and Mexico's to around 110 million. The majority of countries in Latin America and the Caribbean still had populations below 10 million, but there were now 11 nations with populations between 10 and

50 million, as well as the 2 countries with more than 100 million inhabitants.

In 1950, the population of the region had more or less matched that of North America (the United States and Canada), but 60 years on the South demographically overshadowed the North by more than 200 million people.

The medium variant of UN population forecasts suggests that the population of Latin America and the Caribbean will continue to grow, reaching 729 million by 2050, outstripping its northern neighbors by almost 300 million by that time. Underlying this continued overall growth, however, is persistent diversity within the region. Population decline, albeit modest, will occur in a number of smaller countries: Barbados, Cuba, Grenada, Guyana, Jamaica, and Trinidad and Tobago (plus Puerto Rico).

Modest increases in population will continue in some other countries, while populations stabilize elsewhere. Meanwhile, most countries in the region (19) will still have relatively small popula-

tions, under 10 million. Nine nations will have populations of between 10 and 50 million. And the big four—Brazil, Mexico, Argentina, and Colombia—in 2050 will each have more than 50 million people.

By 2050, 23 percent of Brazil's population and 22 percent of Mexico's will be aged 65 years and over.

LESS FERTILE

The main drivers of these trends are fertility and mortality, and to some extent in localized areas also international migration. In the 1970s to 1990s, low levels of fertility (1.3 to 1.8) across Northern and Western Europe and North America were seen as unprecedented and unlikely to continue. The world's population was expected to reach 12 billion by the middle of the twenty-first century.

In other words, there was no evidence and certainly no expectation that fertility would remain low in all of Europe, plummet across Asia, and begin its decline in Latin America. Nor was it expected that world population would stabilize at around 9 billion by the middle of the twenty-first century.

Clearly, predictions from just 30 years ago have proved dramatically off course. Fertility levels in fact remained low or increased only moderately in Northern and Western Europe and North America; they declined to extremely low levels in

Southern Europe. Even more unexpectedly, they declined drastically in Asia, coming down to just above replacement level in the region as a whole and to frighteningly low levels in countries such as Korea (around 1.2) and Singapore (around 1.3).

These fertility declines—and the beginnings of similar declines in Latin America—are the result of profound social changes, including changing values and attitudes as well as behaviors around family formation and childbearing. In the countries of Latin America and the Caribbean, fertility has plummeted from 1950 to the present, with only one or two exceptions. (In Uruguay, one of the exceptions, fertility declined only from 2.7 in 1950 to 2.0 in 2010.)

In addition, variance in fertility levels across the region has decreased significantly. In 1950, fertility varied from 2.7 in Uruguay to 7.6 in the Dominican Republic. By 2010, fertility levels ranged only from 1.54 in Cuba to 3.71 in Guatemala. In the region's most populous countries, total fertility rates over the past 60 years

have declined from 6.1 to just 1.7 in Brazil, and from 6.7 to just 2.0 in Mexico. These are indeed remarkable declines in terms of both size and speed.

Toward the middle of the twenty-first century, projections suggest a further con-

vergence of national fertility levels, closing in on approximately 2.0 across the region. (Of course, this conclusion reflects UN forecasters' assumptions; based on the predicted experience in the latter decades of the twentieth century, these could prove misleading.)

While the national figures for fertility trends are in their own right of enormous interest to demographers and policy makers, the intra-country differences are vitally important in trying to understand the drivers of fertility decline (over and above the emergence of cheap, accessible, and effective means of birth control).

Education, socioeconomic factors, and urban versus rural residence are all important determinants of fertility. That is, fertility tends to decline with increasing levels of urbanization, with greater educational attainment for both males and females, and with rising socioeconomic status.

In Latin America and the Caribbean, as elsewhere, education may be the most critical of these factors in driving large-scale and universal fertil-

ity decline. Educated females tend to have higher aspirations for themselves and their children, and this alone leads to delays in marriage and child-bearing as well as smaller families. Once these aspirations have become rooted in a population, societal infrastructure also comes into play. Access to child care for working families and the provision of suitable housing for young families join with rising aspirations in a perfect storm of low fertility.

LIVING LONGER

Most countries in Latin America and the Caribbean began to experience significant mortality declines after 1950, which led to marked increases in life expectancies at birth for both males and females. Across the region, however, there has been and still is noticeable variance among nations. In 1950, life expectancy at birth for males ranged from fewer than 40 years in Bolivia and Haiti to more than 60 years in Uruguay, Puerto Rico, Paraguay, and Argentina. By 2010, the range was from 60 years in Haiti to almost 80 years in Costa

The same is true for females, though the regional variance is declining for both genders. Female life expectancy continues to exceed male life expectancy, and in

Rica, Cuba, and Chile.

fact the gender gap has widened over the past 60 years, from 3.3 years to 5.5 years across the region on average. Today the gap between female and male life expectancy in the region is widest in El Salvador (9.5 years) and narrowest in Grenada (3.2 years).

The gap between the region and Northern American countries in life expectancy has shrunk considerably for both genders. In the early 1950s, there was a difference of around 17 years for males and 25 years for females. By the beginning of the twenty-first century, these differences had been reduced to just 7 years for males and only 5 years for females.

Much of this improvement is related to a shift in Latin American and Caribbean mortality from communicable diseases to noncommunicable diseases. As a result of this shift, mortality at early ages is decreasing markedly, thereby increasing life expectancy. In the developed world, where the prevalence of noncommunicable diseases emerged earlier, gains in life expectancy now come mainly from improvements in mortality in later life. The increases in life expectancy at birth from these improvements are more modest. Thus, the disparity in life expectancies between Latin America and North America is shrinking rapidly.

The future, according to UN projections, assumes continuing declines in mortality such that, by 2050, the variance across countries in the region will have diminished. Life expectancies are expected to range from 70.5 years in Haiti to 80 years in Cuba for males, and from 74.6 years in Haiti to 86.6 years in Puerto Rico for females. For the region as a whole, life expectancies at birth are projected to rise to 76.7 and 82.9 years for males and females respectively. That would compare with an estimated 81.1 and 86.0 years respectively in Northern America, a further narrowing of the north-south gap in the Americas.

THE AGING CHALLENGE

There are no one-size-fits-all

policy responses—not across the

region and not within countries.

While increases in longevity and life expectancy relate to individuals' aging, declines in mortality and fertility relate to population aging,

a situation in which the number of older people and their share of the population increase. As the demographic transition gains momentum, countries in Latin America and the Caribbean are beginning to face new challenges

as both their citizens and their populations age significantly.

Why is aging so important? One could argue, in fact, that aging in itself is not very significant. But what is undoubtedly important is a population's age structure, because this affects more or less all social phenomena—from child care and schooling to housing and transportation; from hospital care to long-term care; from the workplace to community services.

For most of the twentieth century, Latin America and the Caribbean had youthful populations. It was not until the 1980s that the proportion of the region's population aged under 15 years dropped below 40 percent. By 2010, however, less than 30 percent of the population was aged under 15 years, while the proportion aged 65 years and over stood at around 7 percent, having been at most 5 percent for most of the previous century.

In 1950, the region's oldest population was to be found in Uruguay, where 8 percent of the population were aged 65 years and over. In Brazil

Total demographic dependency in Mexico and Brazil, 1965–2050				
Country	1965	2010	2025	2050
Mexico	102	53	46	62
Brazil	89	48	42	59

Source: UN (2009) World Population Prospects

and Mexico, this proportion was around 3 percent. By 2010, Argentina, Barbados, Cuba, Puerto Rico, and Uruguay all had proportions exceeding 10 percent. The variance across the region seems to have increased between 1950 and 2010, as the pace of aging has differed among countries.

The next 40 years, however, are projected to witness a veritable explosion in the number and proportion of older people in the region. By 2050, according to UN projections, only in Guatemala will less than 10 percent of the population be aged 65 years and over. The oldest population in the region is expected to be Cuba's, with 31 percent of the country's population aged 65 years and over. But again, the pace of aging will vary across the region, and the variance will have increased even more by 2050.

Cuba towers above the rest of the region in terms of aging. Its cohort aged 65 years and older will have expanded from around 4 percent of the country's population in 1950 to more than 30 percent in 2050. Cuba also exemplifies all too markedly the challenges facing the region with respect to institutions and infrastructure not adequately geared to such an aging population. Elsewhere, though, the aging of populations is striking enough. By 2050, 23 percent of Brazil's population and 22 percent of Mexico's will be aged 65 years and over.

THE DEMOGRAPHIC DIVIDEND

The nations of Latin America and the Caribbean do enjoy a so-called demographic dividend, which affords time in which to address and adjust to their aging populations. This dividend presents itself because the decline in youth and the increase in older persons have coincided to create a period of declining dependency.

By way of example, let us consider the region's two most populous countries, Mexico and Brazil. The table on this page illustrates the development in total demographic dependency from its peak in both countries in 1965 to 2050. Total demographic dependency is defined as the ratio of those aged 0 to 14 years and those aged 65

years and over to the population aged 15 to 64 years.

This is of course not a true reflection of dependency in the population, but is purely a demographic proxy of the ratio of those not working to those working. A total demographic dependency of 50 indicates that there are 100 people of working age for every 50 persons not of working age (either young or old).

Total dependency peaked in both countries in 1965 at 102 in Mexico and 89 in Brazil. Since then the dependency has declined steadily, to 53 and 48 respectively, and will decline further to its lowest levels in 2025 (46 and 42 respectively). Thus, in both countries, total dependency has been favorable and improving for 45 years, and will continue to be so for another 15 years.

Demographic shifts produced by declining fertility in particular have increased, for now, the size of the labor force in relation to nonworking segments within both Mexico's and Brazil's populations. In theory, this provides a demographic backdrop for economic expansion—revenues which in turn can be invested to offset the effects of aging.

Some time after 2025, aging populations will produce an increasing total dependency. But this means Mexico and Brazil—and other countries in the region—still have a couple of decades before this demographic window of opportunity begins to close.

By contrast, the demographic window of opportunity in Northern America is closing as we read. Total demographic dependency in the United States and Canada, having declined from 66 in 1965 to 49 in 2010 (its lowest level), is expected to increase to 58 in 2025 and to 64 by 2050, returning the region to a demographic of the 1960s.

FINDING BALANCE

Do the demographic trends evident in Latin America and the Caribbean, including the dramatic declines in fertility and mortality and the resulting aging of populations, portray a particularly good or a particularly bad set of circumstances?

Demographically, there is no reason why any given age structure should be good or bad in Latin America or anywhere else. The causes for concern are linked more to the ability of societal infrastructures to accommodate changes in age structures, in this instance the transition from lots of young to lots of old people.

There is likely to be a consensus that societies with few young people may not be sustainable societies, just as there is likely to be a consensus that continued and uncontrolled population growth is unsustainable. A balance may be the most preferable option—a balance of young and old in a stabilized population.

But do individual or even societal aspirations match this balance? Do individual aspirations to have few children and to live long, healthy lives collide with this idea of balance? Should we discourage medical science from finding cures for the diseases of old age, thereby reducing our longevity and life expectancy? Should we exempt couples with three or more children from paying income taxes? There are no easy answers to such dilemmas.

Particularly pertinent in this debate is the extent—if any—to which these demographic trends can be reversed if that is desired. What would it take, for example, to convince young

people to form families and have more (than one or even two) children? In the past, children were considered a resource. They contributed to family welfare by working, and surviving children provided for the security in old age of their parents. Today, one could argue that children are, economically speaking, a drain on a family's resources, and children's survival is almost guaranteed.

Demographically, of course, children are important because they provide new generations of workers and ensure the population's continued existence. This has to be seen against a backdrop of increasing concern about population growth and environmental change. It is a complex equation. And demographics can prove extremely difficult to influence by acceptable means.

But at least some comfort can be found in the data. As exemplified by the trends in Mexico and Brazil, the countries of Latin America and the Caribbean have actually experienced a lengthy period of opportunity in which total demographic dependency has been declining, providing in theory a backdrop for economic expansion fired by a growing labor force. While it may have been difficult as yet for many countries in the region to take optimal advantage of this opportunity, they will have at least 20 more years to try.