POPULATION AGEING IN CUBA: POLICY OPTIONS FROM A GLOBAL PERSPECTIVE

Sergio Díaz-Briquets1

Many countries are coping with the realization that population ageing demands long-term policies to accommodate rising elderly costs. While attention is rightly focused on rising pension and health care costs, interest is also being directed to potential means whereby some of these expenditures could be curtailed. In countries where population ageing is just getting underway as fertility declines, policymakers have more breathing room. Savings to be realized from lower educational and other services required by the young, for example, could be reallocated to train a more productive labor force, current surpluses saved and invested to cover future elderly safety net expenditures, or consumed by the currently old. This so-called "demographic dividend," however, is not available to countries like Cuba which already have low fertility, often below replacement level. For these countries, the ageing issue has immediate policy relevance.

The way a country supports its ageing population to a great extent hinges on its demographic context and political/economic system. While some countries mostly rely on state-run programs to provide pensions and health care, in others the state has a lesser role. In these cases, more modest government-run ageing support programs are supplemented by private pension plans, personal/family savings, and intergenerational family transfers. Generally, the longterm viability of old age support instruments, whether public or private, is sought through the power of compounding to generate investment yields over time. How financially sustainable these schemes turn out to be depends on the accuracy of actuarial financial projections, a challenging endeavor as forecasts are based on uncertain assumptions regarding longrun economic and health care costs trends, among other variables. In any case, absent major economic, natural or military upheavals, most modern nations at least have a broad understanding of the financial prospects of their ageing-related pension and health care schemes and therefore are able to fine-tune policies to accommodate anticipated developments.

Cuba is a glaring exception. Decades of mismanagement, erratic policy shifts and economic dislocations have left the Cuban state ill-prepared to satisfy the long-term retirement and health care needs of its growing elderly population. The only resources available are those the state currently generates on a day by day basis. Private savings are modest, no private pension or health care plans exist to complement inadequately funded public programs, and under current conditions, government-funded programs are unable to accumulate savings to cover future costs. While a majority of current and prospective pensioners are at risk, a relatively lucky few may avoid such dire prospects: they include those accessing family assistance, many via foreign remittances. Others may count on the savings associated with private home sales now that such sales are authorized.

^{1.} I am grateful to Rodolfo Stusser for his valuable comments.

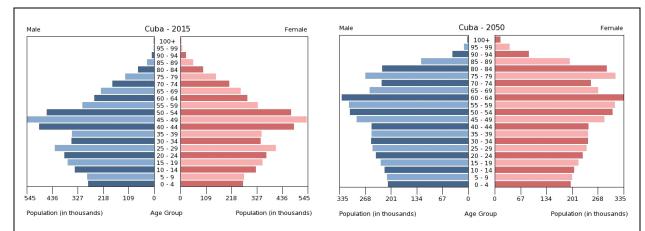


Figure 1. Cuba: 2015 population pyramid and projected 2050 population pyramid

Despite this less than encouraging panorama, there are many policies the Cuban government could embrace to minimize the stresses of population ageing. Several are economic in nature, others involve policies to impact demographic processes, while still others bank on expanding or increasing the effectiveness of public health interventions to constrain future costs. From today's vantage point, the foremost economic policy priority is to accelerate economic growth to generate additional revenues for elderly support. Other related policies could minimize future costs by, for example, streamlining or reducing the provision of certain elderly services, focusing service provision primarily on the most vulnerable, or reducing the state role in elderly care as families assume more of the burden. Some potential interventions demand immediate action if urgent social demands are to be satisfied even if they entail unrecoverable investments and financing recurrent costs. Included in this category are potential public health measures that, if implemented today, could yield significant long-term savings. How to pay for these programs is the big question for a financially strapped Cuban state.

The ageing challenges confronting Cuba in the future could best be appreciated by comparing its 2015 age-sex population pyramid with that projected for 2050 (Figure 1) by the international division of the U.S. Census Bureau. As can be observed, the ageing process is just accelerating and will continue to do so for approximately the next 50 years. By 2050, the share of the elderly population, while much higher than in 2015, will expand considerably in the following two decades as the baby boom cohorts continue ageing and reach the end of life. While future demographic developments will determine the size of yetto-be-born younger age cohorts, the numerical size of currently living age cohorts is unlikely to depart from their projected path. Potentially larger (or smaller), yet unborn cohorts may help ease (or worsen) elderly dependency ratios, but not the actual numerical size of the aged population.

What are the options to address the ageing challenge, and how applicable are they to Cuba, is examined below. In the review, aside from evaluating selected interventions, I examine some implementation issues impacting ongoing initiatives and assess their potential success. The highlighted topics were suggested by two recent World Bank (2015 and 2016) reports. They provide a synopsis of new research findings and comprehensive reviews of the international ageing policy literature.

DEMOGRAPHIC OPTIONS

Demographic policies, only likely to have a modest impact given Cuba's rapidly aging population, are designed to reverse on-going population trends. Raising the fertility rate is one option. If such policy were to succeed, it would aggravate the existing dependency burden over the short- to medium-term. The contemporary small cohorts of working age adults would have to support and care for the elderly, while simultaneously raising relatively larger younger birth cohorts. The remaining demographic options reducing emigration, encouraging return migration, and promoting non-native immigration—are not realistic at this time.

Policies to Encourage a Rise in Fertility

Most developed countries with ageing populations and high female labor force participation rates - as is the case in Cuba-have implemented policies to encourage women/families to have more children. The emerging consensus is that while some of these policies have had some success, they are costly to implement, while others that formerly were assumed to hold promise only produced disappointing results. The World Bank (2015:46) has concluded that "differences in fertility levels among the advanced countries are in large part due to differences in family policies and the institutional environment for the labor market, particularly as these affect the employment of women." It appears, in general, that facilitating family life and promoting gender equality for men and women to more equitably share child care duties achieve their intended effect, whereas extended postbirth work leave and cash transfers (such as added family benefits and tax benefits) are ineffective policy tools. More positive results are produced by policies designed to increase labor market flexibility (in scheduling work hours, for example) and provide families with access to convenient and affordable child care facilities ("Breaking" 2015). How well such policies prove to be is generally impacted by economic fluctuations, a well-established fertility determinant. Women generally adjust the timing, if not the ultimate number of children they have, in accordance with their expectations regarding how family budgets will fare under changing economic conditions.

The current Cuban economic context is not conducive to higher fertility, as documented in multiple sources (see, among many others, Ahmed 2015; Celaya 2014; Díaz-Briquets 2015; and Matienzo Puerto 2015). Because of extremely low salaries by international standards, a housing shortage and lack of access to child care necessities (such as disposable diapers and baby food), many Cuban women postpone or limit childbearing. On this score alone, the scope for a near term fertility rise is unlikely. Reluctant to implement pro-growth economic policies and facing considerable head winds (now aggravated by the troubled Venezuelan economy), the Cuban authorities have done as well as they could to formulate a marginally successful pro-fertility policy package (Fonticoba et. al. 2014; see also Céspedes Hernández and Fariñas Acosta 2015).

Policy options embraced include promotion of in vitro fertilization and related medical treatments for women having difficulties conceiving. Several advanced fertility treatment facilities—one in Havana and three in the provinces-are being used for this purpose ("Fecundidad" 2015). A factor aggravating the low fertility picture, as discussed by Fonticoba and her colleagues in an article in Granma, is the infertility prevalence rate associated with the high number of induced abortions (in 2012, 83,682 induced abortions were recorded, or 26.5 for every 1,000 women in reproductive ages)², and related complications. At best, the infertility treatments impact on the birth rate will be largely inconsequential given the relatively few women (out of the total in childbearing age) who could benefit from the procedures. It is clear this is an expensive policy Cuba could hardly afford at this time. A far greater quantitative impact on the birth rate would result from a policy to restrain the abortion rate, but this policy option would be counter to the Cuban government's pro-choice philosophy, shared by most Cuban women (Sanabria Mora, 2010).

Other pro-fertility policies include expanding and/or providing financial incentives to ease the cost of child bearing, particularly for higher parity mothers. Such incentives are expensive and difficult to manage and, as reviewed above, not likely to be effective. For years, Cuba has implemented selected flexible labor market policies (such as the right to receive a full or partial salary while at home following childbirth, time off from work during the day to breastfeed) with modest effect. Elsewhere, these policies have

^{2.} Far more menstrual regulation procedures, a form of very early abortion, were performed, but not officially recorded as "abortions."

met with only relative success. Moreover, such policies can hardly de defended in a national context where economic subsidies are being reduced. In recent years, social assistance subsidies have contracted by 60 percent, affecting 67 percent of all Cuban families, as noted in a recent newspaper article (Díaz Moreno 2014, quoting former Economics Minister José Luis Rodríguez).

The potentially most promising pro-fertility policy is to expand the national child care center network to allow women to continue working while having children. While this is a potentially important option, its implementation is problematic given the scarcity of financial resources, relatively limited pool of qualified child care providers, and low wages they earn. Many such child care providers are reported to be leaving their child care jobs as they seek higher remuneration in better paid economic sectors (Aquino 2015). In 2014 in the City of Havana alone, 44 child care centers were closed due to maintenance problems and inability to recruit and retain qualified personnel (Fonticoba 2014). Eleven other child care centers had closed in the provinces, while only one child care center was available in 34 municipalities. In view of the scarcity of placement slots in child care centers, priority admission is being offered to a woman's second child. A policy discussion was underway regarding potential parity-related subsidies and the establishment of child care cooperatives in government-owned rental facilities, as well as the training of early child-care specialists ("Crisis con círculos" 2015).

As the above discussion suggests, the potential for fertility increase is limited by economic conditions, including availability of financial resources with which to implement the more promising policies. Even less encouraging is the reluctance of Cuban males to abandon traditional gender roles that assign to women the bulk of child care obligations.

Policies to Reduce Emigration, Encourage Return Migration, and Promote Immigration

Migration policies, while viable in many advanced countries—though increasingly polemical for cultural and political reasons—are not likely to bring results in present day Cuba. It is hardly necessary to review the contemporary Cuban migratory outlook. With the relaxation of domestic emigration controls, continued availability in the United States of the Cuban Adjustment Act, and migration preferences accorded to Cuba under the 1994 U.S.-Cuba Migration Accord, the flow of emigrants to the United States continues unabated. During the first five months of the U.S. Fiscal Year 2016 alone, according to official U.S. Federal sources, 27,644 Cubans reached the United States. This number exceeded the more than 26,000 Cuban migrants entering the country in all of 2014; it may even surpass the overall 2015 number of 44,159 entries ("Casi 28 mil cubanos" 2016). Other countries in Latin America and Europe also report continued Cuban arrivals, some on a permanent basis but most hoping to reach American shores ("Más de 26,000 cubanos" 2016).

While the Havana authorities increasingly recognize how emigration exacerbates population ageing, they are in a Catch-22 political and economic dilemma. Allowing continued emigration helps ease internal social tensions and, just as importantly, contributes to the rising remittance inflow. This contradiction likely with leadership connivance — by tampering with the officially reported migration data. The outflow, documented in international data sources, was statistically contained by assuming a change in the nature of Cuban emigration. The supposition behind the statistical falsification rests on a rather peculiar interpretation of the assumed consequences of the recently revised Cuban migration legislation: citizens departing the country and living abroad for up to two years no longer forfeit Cuban residency rights. Thus, the government is alleging recent emigrants are no longer leaving the country permanently.

The outcome of the statistical manipulation is extraordinary. As if by magic, from Cuba having a net external migration of -46,662 individuals in 2012 (and -39,263 in 2011), the sign of the figures for 2013 and 2014 turned positive, to 3,302 and 1,922, respectively (ONEI 2015a:97). While this statistical artifact may allow Cuba to downplay the significance of emigration, it does nothing to alter its actual consequences. The end result is that continued largescale emigration aggravates the ageing population trend, while also adding to future economic difficulties—most migrants are of prime working age and their children will be born abroad rather than in Cuba. Unless a radical domestic economic improvement occurs, Cuba will continue to experience emigration, fail to attract return migrants, or even less so, foreign immigrants.

ECONOMIC OPTIONS

Some of the principal policy levers available to control ageing costs include adjusting statutory requirements by increasing retirement ages, doing away with mandatory retirement ages, and increasing the flexibility of labor markets to allow workers to remain economically active as they age. These measures are also valuable as they contribute to rising retirement revenues (as worker and employer contributions to retirement programs increase). Some of these policies are only briefly discussed here as their implementation in Cuba has been extensively assessed elsewhere, particularly by Carmelo Mesa-Lago.

Through Law No. 24 of 2008, retirement ages were increased by five years for both men and women (to 65 and 60, respectively), ages that could be further adjusted upward given Cuba's current life expectancy. In addition, as summarized by Mesa-Lago and Pérez-López (2013:156; see also, Mesa-Lago 2012), the law "toughened the formula to calculate the pension and added five years of required work; set a five percent payroll contribution for workers (to be reached gradually, tied to an increase in wages); allowed for a pension increase for each year that retirement is postponed; ... and allowed pensioners to work without losing their pensions." The law also increased nominal pensions, mainly the minimum pension. According to Mesa-Lago and Pérez-López (2013: 156), while this reform "should moderately contain expenses and increase revenue somewhat ... is insufficient to secure the long-run financial sustainability of the pension system."

The revenue shortfall can only get worse as rapid population ageing continues. As Mesa-Lago (2016) has observed, in the absence of financial reserves, the state collects workers and enterprise contributions, adds other state resources, and redistributes the combined revenue as pensions. It is therefore unable to invest accumulated savings (as current social security contributions are insufficient to cover present costs) to help pay for future pensions costs (the actuarial deficit). Other issues to consider include determining what should be the level of minimum pensions as a poverty palliative and a means to address growing inequality. The same applies to disability pensions. Challenges associated with these issues are daunting and likely to weigh heavily in the country's economic future regardless of the nature of reforms: future workers will have to live with the consequences, and so will potential investors. The latter will have to evaluate in their investment decision-making process how higher than average (by international standards) social costs will impact their business model and competitiveness.

HEALTH CARE OPTIONS

Despite continued health advancements in the last decades, Cuba has lagged behind other countries in the implementation of preventive interventions (in nutrition, physical activity, cigarette/tobacco smoking, and alcohol consumption) generally associated with a lower incidence of certain degenerative diseases and improved health outcomes. Significantly, many of these interventions, aside from improving health standards, also reduce health care costs. Information for Cuba regarding some of these parameters often is fragmentary or impressionistic, although in some instances inferences could be drawn from international comparative data sets.

There is reason for concern, for example, that Cuba's enduring difficulties feeding its population — in terms of quantity, quality and variety — impact its ability to provide optimal nutritional intake. The extent to which these shortcomings may adversely impact overall health standards is unknown, but it could be speculated to be deleterious as average food intake may be insufficient—and certainly not varied enough—to satisfy nutritional requirements. Since the Special Period, the nutritional situation has worsened, with the facing out of subsidized prices for some staples and the introduction of market mechanisms, particularly for the poorest Cubans, including the elderly, as reported in multiple sources. Far less could be said about the extent the average Cuban benefits from physical activity. What is known is that a balanced and nutritious diet together with regular exercise is conducive to improved health outcomes, just as smoking and excessive alcohol consumption have the contrary effect. As the World Bank studies cite, and a multitude of scientific studies report, promoting better nutrition and increased physical activity, together with limited tobacco and alcohol use, can help control ageing-related health care costs. Havana's health authorities have or are considering implementing some of these preventive policies. It is evident, however, that for a number of cultural and financial reasons, these policies may not produce outcomes similar to those achieved in other nations. What makes the Cuban situation alarming is the pace of ageing and the brevity of time available for interventions to have effect.

Cardiovascular Revolution, Cancer Prevention and Other Health Improvement Interventions

As in other countries with advanced demographic regimes and high life expectancies, the burden of degenerative diseases in health and mortality is high. Cardiovascular diseases and cancer, followed by strokes, respiratory infections, and other degenerative diseases (such as cirrhosis of the liver) plus accidents, account for the bulk of elderly ailments and deaths, a pattern observed in Cuba (ONEI 2015). While many medical and public health advances have been made for treating these diseases, they will continue dominating morbidity and mortality profiles as they are conditions associated with the end of life.

Even though the etiology of these maladies is embedded in the ageing process, there is mounting evidence that their prevalence and early onset is frequently associated with life styles amenable to change. This realization is at the core of public health campaigns to reduce their incidence and thus their economic and social costs. To succeed, they demand the modification of harmful behaviors that in one way or another contribute to the early onset or aggravation of disease. The cardiovascular revolution refers to the "growing knowledge about the treatment and prevention of heart disease" and its ability to minimize its prevalence and severity (World Bank 2015:89). Smoking is the leading cause of lung cancer and also a major contributor to cardiovascular disease. Alcoholism has been linked as a necessary condition with more than 30 diseases in the International Classification of Diseases (ICD) and as a component cause in 200 others (WHO 2011:20). Some nine disease and injury categories, according to the WHO (2011:20-21), are tied to excessive alcohol consumption: neuropsychiatric disorders, gastrointestinal diseases, cancer, intentional injuries, unintentional injuries, cardiovascular disease, fetal alcohol syndrome, and diabetes mellitus, with recent evidence indicating it is also linked with infectious disease. While what constitutes a healthy diet is still debated, there is consensus that a balanced diet, including intake of animal and vegetable products, tends to be healthiest. Physical activity, finally, is known to provide many cardiovascular benefits.

The scope for related public health interventions in Cuba is significant in some areas, although limited in others. Smoking, for example, even though is responsible for much morbidity and many deaths, is difficult to eradicate given its national historical significance and cultural acceptability. In an international comparison, Cuba, along with the United States and a few other countries, ranked as a low prevalence, high consumption country (20 or more cigarettes per smoker per day), one of the highest incidence categories. Such prevalence was only exceeded in a few other countries, namely Russia, other former Soviet bloc countries, Italy and Uruguay (Ng, Freeman et. al. 2014).

Aware of the health damage associated with smoking, since 2005, Cuban health authorities have begun to apply measures similar to those in effect in other countries (prohibiting smoking in public places, antismoking public awareness campaigns) but only with guarded success. Aside from the high rate of smokers—one in four adult Cubans is addicted half of the population is reported to be exposed to secondary smoke at home, work or public spaces (Benítez 2014). On account of these and other findings, stricter anti-smoking rules are being evaluated and implemented to reduce the estimated 36 daily smoking-related deaths, or more than 13,000 annually: fifteen percent of all deaths in Cuba are connected to smoking. That much remains to be done is suggested by the fact that as late as 2013, smoking incidence was on the rise.

While the situation regarding alcohol consumption is not as dire as with smoking, available indicators are also troublesome. According to WHO (2011) data, annual consumption per capita of total pure alcohol in Cuba stood at 5.51 liters, below the global average of 6.13 liters. The global average masks significant regional disparities. Highest consumption levels are in the Northern Hemisphere, together with the Southern Hemisphere nations of Argentina, Australia and New Zealand, with the mostly Muslim countries at the lowest consumption levels. In Latin America, total alcohol consumption was 8.67 liters, Cuba being below the regional average.

The WHO data breaks down recorded alcohol consumption by source. According to these statistics, on a global basis, 45.7 percent of alcohol consumption is attributed to the ingestion of spirits, 36.3 percent to beer, 8.6 percent to wine and the remainder to other alcoholic beverages. In Latin America, beer (54.7 percent) displaces spirits (32.9 percent) as the predominant alcohol consumption source, with wine accounting for less than 9 percent of regional consumption. In Cuba, as in most LAC countriesother than Southern Cone countries and Guatemala-wine represents less than one percent of total alcohol consumption. Where Cuba stands out is in its relatively high percentage of recorded spirits consumption, 65.6 percent, one-third higher than the global average and twice the Latin America average. In the region, Cuba's spirit consumption level is only exceed in Haiti and several Central American countries. Whether or not rum consumption in Cuba is more harmful to health than beer or wine consumption remains to be ascertained, but it is likely to be so. Unfortunately, alcoholism rates are believed to be high in the country.

Alzheimer's and Other Cognitive Diseases

Another major ageing-related disease is dementia, Alzheimer's accounting for 60 to 80 percent of cases. Although much research is underway regarding the etiology and potential cures for the latter, a great deal remains to be learned about this disease. At present no known cure is available. Alzheimer's is believed to be the product of a complex interaction of age, genetics, lifestyles, environment and medical conditions. Elevated blood pressure, diabetes, and high cholesterol are associated with a higher prevalence, 80 percent of Alzheimer's sufferers having cardiovascular issues. Incidence is strongly correlated with age, as risks of developing the disease double every five years past age 65. After age 85, the risk reaches 50 percent. During its late stages—lasting from weeks to years—patients require intensive, around the clock care (summarized from Alzheimer's Association 2016).

Given the rapid ageing of the Cuban population, the rising incidence of Alzheimer's and other dementias constitute a significant public health problem. According to a study underway since 2003, 10.2 percent of the population above age 65, or 160,000 people, suffer from one or another form of dementia. Of these, 60-70 percent were Alzheimer's cases. The study found that, in addition to the risks factors identified above, being overweight and smoking also entailed higher risks. By 2040, the number of dementia cases in the country is projected to increase 2.3 times, or to 300,000 cases ("Unos 300,000" 2016). Assuming 65 percent of all cases are Alzheimer's-related, the number of Alzheimer's cases will approach 200,000. These estimates seem to underestimate the actual number of future sufferers as by 2035, according to several projections (reviewed in Diaz-Briquets 2015), 700,000 Cubans will be above 80 years of age. This conclusion is based in the Alzheimer's Association finding that the risks of contracting the disease double every five years past age 65.

By 2050, unless a cure or cures are found, the situation could be truly alarming as Cuba is expected to have close to 1.4 million people over age 80 (of a total projected population of about 11 million). As many as half-a-million Cubans may be affected by Alzheimer's at that point in time. The situation will get even worse over the next two decades as the number of elderly continues to rise before starting to rapidly decline, as depicted in the 2050 projected population pyramid in Figure 1. An obvious question is who will provide care for that large a number of demented Cubans requiring round the clock support as the working age population is projected to decline. Even today, when the share of the aged is relatively small in relation to what it will be in coming decades, family members caring for the elderly can hardly cope given time allocation constraints and difficulties obtaining medications to help manage dementia symptoms (Méndez Castelló 2016b). Projected health care and opportunity costs for potential care givers in future years will reach staggering levels although it will be a passing phenomenon lasting several decades as the baby boom cohorts age and die.

INFRASTRUCTURE PRIORITIES

Sustaining optimal health among the aged partly depends on the sanitary and specialized geriatric facilities available to them in their physical and social milieus. To address existing and projected deficits will demand considerable infrastructural investments and the training of specialized health and social care personnel. Upgrading the sanitary physical infrastructure and that needed to provide geriatric services may well be the most critical ageing-related fiscal challenge, as the former is in general disrepair and insufficient to satisfy existing demand, while there are few of the latter facilities. The poor condition of the sanitary infrastructure is particularly worrisome as inadequate water distribution systems and deteriorated sewers facilitate the spread of communicable diseases to which the elderly are particularly susceptible. How to finance these improvements will remain a key question, but the sooner they are satisfied the lower future health care costs are likely to be.

Environmental Sanitation

Lack of environmental sanitation is connected with numerous infectious diseases (e.g., dengue) that are preventable through vector control as well as other transmissible diseases caused by contaminated water and unsanitary handling of human and industrial refuse (cholera and other water borne diseases). Particularly noteworthy in these regards, as described in a recent *Bohemia* article (Cabrera and Carrobello 2016), and corroborated in numerous other accounts (see, for example, Transition 2015; Rodríguez Cardona 2016), are the inadequate collection and disposal of urban refuse, the crumbling status of Cuba's sewerage systems, and the contamination of surface waters (rivers and streams) and aquifers by agricultural runoff and toxic chemicals released by mining activities. There is also evidence of lead poisoning in Cuban communities (González 2016), a situation not unlike that in countries that for years relied on lead-based paint, now banned. The amount of resources required to reduce the disease load associated with this environmental situation is considerable and well beyond the capacity of the Cuban state in the near future. Nevertheless, environmental sanitation should be assigned priority as and if resources become available not only for the benefit of the elderly but on behalf of the population as a whole.

Financing Community-Based Long-Term Care Facilities

The health and physical infrastructure for elderly care in Cuba is woefully inadequate. How to develop the necessary human and physical infrastructure in years to come will be challenging. Of the 83,000 physicians in Cuba in 2013/2014, only 279, or 0.33 percent, specialized in geriatric care, with an additional 137 in training (EFE 2013; "Envejecimiento" 2014). The deficit is likely to increase substantially as the population 60 years of age and older rises from 18.3 percent in 2014, to 30 percent in 2030. It could be assumed shortages of geriatric nurses, nurse assistants and other healthcare workers are just as problematic.

With respect to facilities, the deficits are just as acute. In anticipation of the growing demand for long-term care facilities, in 2014 the government announced several policy measures. These included a budget allotment of CUC 66 million to expand the *Casas de Abuelos* (Grandparents' Homes) network, non-residential facilities where day visitors receive medical services, meals, and certain social amenities. In 2013, there were 230 such homes capable of accommodating 7,398 users, or about one-third of current demand (EFE 2013). To cover expenses and improve service quality, plans were afoot to raise user fees. Those with the ability to pay will be charged 180 CUC a month on average, while those with lower in-

comes will pay in relation to their ability to pay. The destitute would receive services for free through the Social Assistance budget (Martínez Hernández 2014).

Hogares de Ancianos (Homes for the Aged), a new type of facility, the first initially established in 2014 in Playa municipality on a pilot basis, will act as residential and non-residential facilities to accommodate individuals experiencing cognitive problems and dementia. Full-time residents are to be charged 400 CUC a month and non-residents 80 CUCs. While the two types of facilities currently are state-subsidized, the intent is to gradually reduce subsidies as economic conditions improve and higher income family members pay the residents' fees. At the time of the announcement, family income payment criteria were under study, as were the facilities care standards. Presumably as new facilities are built and/or refurbished, the system is to be expanded, in tandem with the growth and demand of the elderly population.

Currently complementing the state-run Grandparents' Homes is a network of facilities managed by the Catholic Church (Programa de la Tercera Edad de Cáritas en Cuba) with limited state support. Under this program, much in demand, more than 3,000 volunteers provide services, mostly on a non-residential basis, to some 28,000 aged Cubans ("Población" 2014). Church-related facilities also charge fees for those who could afford to pay. In one documented instance, a user stated to be paying CUC 162 a month, or 60 percent of his monthly pension (González Suárez 2016). An ancillary program priority is caretaker training for home care given the excess demand for institutional services and inability to fulfil it. Trainee beneficiaries include self-employed workers authorized to provide home care to the aged (Fariñas Acosta 2015).

While an expanding pool of home care providers may help, many other problems complicate the provision of elderly care. Caretakers are challenged by the shortage of basic necessities such as adult pampers, wheelchairs, geriatric beds, and commonly used medications. Compounding the situation are shortages of affordable food supplies and the time family or home caretakers must assign to the search for necessities. Such is the time demand that some family caretakers are forced to exit from the labor force to dedicate sufficient time to assist elderly relatives (Méndez Castelló 2016a).

OUTLOOK

While from a demographic perspective the situation faced in Cuba is comparable to that in other countries confronting ageing population challenges, in some respects it is more problematic. For one thing, population ageing is occurring at an accelerated pace as it will soon involve the ageing of the very large (in relative terms) 1960s baby boom cohorts.

Even more daunting is the economic disparity distinguishing Cuba from other ageing countries. The latter tend to be wealthier developed countries. But even in developing countries with large population shares in the older age brackets, economic conditions are generally more propitious than in Cuba. Structural adjustments under way add still another source of uncertainty as in a society habituated to state-provided universal social services, even if inadequate, subsidies are being reduced as family members are asked to assume a greater share of elderly care costs. They are also been asked to increasingly assume traditional provider roles, some of which-under the existing post-1959 social contract—were expected to be supplied by the socialist state. Finally, long-term solutions to the pending elderly crises are time-dependent. Measures implemented today, as suggested in this paper, may help control long-term costs. However, the current state of the Cuban economy is interfering with the country's ability to adopt potentially beneficial ageing policies.

REFERENCES

- Ahmed, Azam. 2015. "In Cuba, an Abundance of Love but a Lack of Babies." *The New York Times*, November 3.
- Alzheimer's Association. 2016. www.alz.org.research.
- Aquino, Ernesto. 2015. "La polémica de los Círculos Infantiles privados." *Cubanet*, December 18, www.cubanet.org.
- Benítez, Daniel. 2014. "Cuba to Pass Stricter Anti-Smoking Legislation." *Havana Times*, November 26, www.havanatimes.org.
- "Breaking the Baby Strike." 2015. *The Economist*, July 25.
- Cabrera, Marieta and Caridad Carrobello. 2016. "Higiene Ambiental: ¿Atrapados y sin salida?" *Bohemia*, May 16.
- "Casi 28 mil cubanos han llegado a EEUU en el año fiscal 2016, revelan autoridades." 2016. *Cubanet*, March 31, www.cubanet.org.
- Celaya, Miriam. 2014. "Las cubanas ya no quieren parir." *Cubanet*, November 21, www.cubanet.org.
- Céspedes Hernández, Lauren and Fariñas Acosta. 2015. "Cuba envejece: ¿éxito o problema?" (I) *Granma*, May 10, www.granma.cu/cuba.
- "Crisis con círculos infantiles desestimula crecimiento poblacional en Cuba." 2015. *Café Fuerte*, November 9, www.cafefuerte.com.
- "Unos 300,000 ancianos podrían sufrir trastornos mentales, principalmente Alzheimer, para 2040." 2016. *Diario de Cuba*, June 4. www.diariodecuba.com.
- Díaz-Briquets, Sergio. 2015. "Major Problems, Few Solutions: Cuba's Demographic Outlook." *Cuban Studies*, 43:3–18.
- Díaz-Briquets, Sergio. 2014. "Accounting for Recent Fertility Swings in Cuba." *Population and Development Review*, 40:4, 677–693.
- Díaz Moreno, Rogelio Manuel. 2014. "Looking at Cuba's Social Spending Cutbacks." *Havana Times*, October 9, www.havanatimes.org.

- EFE. 2013. "Un país que envejece: Cuba admite que necesita más asilos de ancianos y geriatras." November 14, www.efe.org.
- "Envejecimiento 'unico en el mundo." 2014. *Cúbanet,* December 14, www.cubanet.org.
- Fariñas Acosta, Lisandra. 2015. "Cuba envejece:¿éxito o problema? (II)". *Granma*, May 11, www.granma.cu.
- "Fecundidad, política de estado en una Cuba envejecida." 2015. *Cubanet*. June 25, www.cubanet.org.
- Fonticoba, Onalsys, et. al. 2014. "¿Perdió el rumbo la cigüeña?" *Granma*, April 1. www.granma.cu/ cuba.
- González, Eloy A. 2016. "Intoxicación por plomo en comunidades suburbanas en La Habana." *Cubaencuentro*, June 6, www.cubaencuentro.com.
- González Suárez , Jorge Luis. 2016. "Jubilarse en Cuba, una seria desventaja." *Cubanet*, March 31, www.cubanet.org.
- Martínez Hernández, Leticia. 2014. "Nuevas medidas para la atención a los adultos mayores." *Granma*. December 25, www.granma.cu.
- "Más de 26.000 cubanos han recibido permisos de residencia temporal en Ecuador desde 2012." 2016. *Diario de Cuba*, March 29, www.diariodecuba.com.
- Matienzo Puerto, María. 2015. "La decisión de parir en Cuba." *Diario de Cuba*, October 8, www.diariodecuba.com.
- Méndez Castelló, Alberto. 2016a. "Falta de medicamentos golpea a la población anciana." *Cubanet*, June 24, www.cubanet.org.
- Méndez Castelló, Alberto. 2016b. "El viacrucis del cuidador." *Cubanet*, June 2, www.cubanet.org.
- Mesa-Lago, Carmelo. 2012. *Sistemas de protección social en América Latina y el Caribe: Cuba*. Santiago de Chile: Comisión Económica para América Latina y el Caribe (CEPAL).

- Mesa-Lago, Carmelo. 2016. "Seguridad y asistencia social en Cuba: Sugerencias para su reforma." *Cuba Posible*, www.cubaposible.net.
- Mesa-Lago, Carmelo and Jorge Pérez-López. 2013. *Cuba under Raúl Castro: Assessing the Reforms.* Boulder, CO: Lynne Rienner Publishers.
- Ng, Marie, Michael K. Freeman, et.al. 2014. "Smoking Prevalence and Cigarette Consumption in 187 Countries, 1980–2012." *Journal of the American Medical Association*, January 8.
- ONEI, Oficina Nacional de Estadística e Información. 2015a. *Anuario Demógrafico de Cuba 2014*, Havana, Table V.2, 97.
- ONEI, Oficina Nacional de Estadística e Información. 2015b. *Anuario Estadístico de Cuba* 2014, Salud Pública y Asistencia Social. Havana, Table 19.17.
- "Población: No hay recursos, instituciones ni personal para atender al creciente número de ancianos." 2015. *Diario de Cuba*, December 13.

- Rodríguez Cardona, Roberto. 2016. "Provincia Granma, un premio a la contaminación." *Cubanet*, May 25, www.cubanet.org.
- Sanabria Mora, Helena. 2010. "El futuro demográfico de Cuba: ¿un caso sui generis?" *Cubaencuentro*, November 30, www.cubaencuentro.com.
- Transition. 2015, *Situación Ambiental en Cuba*. People in Need, Czech Republic.
- World Bank. 2015. Golden Aging: Prospects for Healthy, Active, and Prosperous Aging in Europe and Central Asia. Europe and Central Asia Studies: Washington, D.C.
- World Bank. 2016. Development Goals in an Era of Demographic Change. Global Monitoring Report 2015/2016: Washington, D.C.
- World Health Organization. 2011. *Global Status Report on Alcohol and Health*. Geneva.