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Achievement and Deterioration of Universal Access to Social Services in Cuba

Carmelo Mesa-Lago, University of Pittsburgh
(412) 648-7392 cmesa@pitt.edu cmesa@usa.net
1902 Beechwood Blvd., Pittsburgh, PA 15217
(412) 521-1273

Executive Summary

In 1958, Cuba ranked in the top four Latin American countries in indicators of social well-being, but it suffered severe inequalities and limitations in the access to social services, particularly among the rural and urban-marginal populations where the poor were concentrated. The revolution of 1959 brought radical socioeconomic reform that significantly improved the availability and quality of social services. By 1989, the country was among the top socialist and Latin American and Caribbean countries in achieving access to social services, despite its relatively low gross domestic product per capita.

The collapse of socialism in the Soviet Union and Eastern Europe, however, combined with errors in Cuba's economic policy, led to a severe crisis in 1990–93 that reduced the availability and quality of social services, prompting an adjustment program and some market-oriented reform. Though modest compared to reforms undertaken in other former and current socialist countries, the Cuban reforms did halt the economic decline and generated an oscillating recovery. But the reforms virtually halted in 1996, and there was an economic slowdown in 2001–02. As a result, Cuba still now lags behind the former and current socialist countries in GDP, economic growth, and social performance, though it is ahead of other countries in Latin America and the Caribbean in this regard.

There is no accurate measurement of poverty in Cuba. The Cuban government, which has never published statistics on the incidence of poverty, claims poverty is not extensive because the country provides universal access to free social services and pursues other policies, such as full employment and subsidies to consumer goods, that improve living conditions. While no study provides definitive evidence, abundant information indicates that there is poverty in Cuba and that it became more pervasive in the 1990s as a result of the crisis. Further, it is clear that the gap between the poor and the small but growing population of wealthier people expanded in the 1990s and early 2000s.

Education, health, pensions, and social assistance after the Cuban Revolution

After the 1959 revolution, using its enormous political and economic power, the government gave a high priority to expanding access to social services—focusing particularly on rural and urban-marginal areas where the poor were concentrated. Education, health-care, and pension services were centralized and made available to the entire population at no charge. These policies were designed and implemented from the top, with little participation from below. The government did not allow local experimentation and competition, and social programs were implemented nationally without previous local testing to detect flaws, improve efficiency and cut costs.

Universal access to primary education was virtually achieved by 1970, thanks in part to a free program of day-care centers that helped working mothers and supplied meals to the children. The emphasis shifted next to secondary education, where enrollment jumped from 25 percent of the population 12–17 years old in 1970 to 90 percent in 1990. A program of boarding schools in

the countryside considerably contributed to the expansion of rural enrollment. Finally, access to higher education was expanded through free tuition and a scholarship program that provided resources for lodging, food, and other expenses. The number of universities and technical-vocational schools increased four-fold, while university enrollment climbed sharply. There was a successful effort to increase enrollment of girls and women at all levels.

Access to health care services became universal after the revolution, and health standards improved significantly until the crisis. Though facilitated partly by the relatively advanced health care system existing in 1958, the gains resulted mainly from government policies. The government set as a primary goal the expansion of free health care to rural areas and low-income urban groups, which had been virtually excluded. It also put a priority on a massive effort to vaccinate children.

Real per capita expenditures for health care jumped 162 percent between 1976 and 1989. As access became universal and free (with few exceptions), the results were remarkable. The infant mortality rate, the number of children born underweight, maternal mortality, and the mortality rate of the population age 65 and above all fell. Most contagious diseases were either eradicated or sharply reduced, although a few increased (acute diarrhea and respiratory diseases, venereal diseases, hepatitis and chicken pox). Finally, the gap between access to facilities and health personnel and in health standards between urban and rural areas was greatly reduced.

On the other hand, there were several problems and inefficiencies. The health care system was highly dependent on imports of medical equipment, drugs and other essential inputs from the Soviet bloc. The national health service is capital intensive, placing significant emphasis on hospitals, equipment, and physicians. A separate health care system for the military, internal security personnel, and top officials of the government and the party is very expensive. Investment to reduce the infant mortality rate through costly techniques for early detection of fetal congenital problems and special programs for mothers in risk depleted scarce resources that were badly needed to ameliorate other problems, such as the deterioration in the infrastructure needed to provide potable water and sewage.

In 1959–63 the state consolidated Cuba's many pension and social insurance funds into a single system with relatively equal eligibility rules and benefits. A 1979 law expanded coverage to the entire population (coordinating social insurance and assistance) and centralized administration in the ministry of labor and social security. By 1989, Cuba's social insurance and pension system was probably the most extensive and liberal in Latin America and the Caribbean. The system is financed by a payroll contribution charged to state enterprises, farms, and agencies—the state covers the substantial and growing deficit. Modest, means-tested social assistance programs protect destitute people who are not entitled to social insurance pensions.

Social services during the crisis

The collapse of socialism in the Soviet Union and Eastern Europe ended the preferential trade relations and generous aid Cuba enjoyed from those countries. While the USSR and some Eastern European countries made market-oriented reforms in 1986–89, Cuba went in the opposite

direction, halting the Soviet-style, timid economic reform of 1970–85 and moving against the market during the "Rectification Process." That provoked an acute economic crisis. At its worst point, GDP declined by 35 percent in 1993, inflation jumped from 0.5 percent to 26 percent, and the fiscal deficit surged from 7 percent to 34 percent of GDP.

These problems forced an adjustment program as well as a market-oriented reform, though one considerably more timid in scope and depth than that in former communist and current socialist countries. Both programs aimed to stop the GDP decline, promote a recovery, and reduce inflation and the fiscal deficit. Despite positive outcomes, the reform was virtually halted in 1996. As a result, only marginal changes have been implemented, some policies have been reversed and several key measures that were planned have not materialized. That, combined with adverse external factors (the world recession, a decrease in international tourism, and a toughened U.S. embargo), led to a new economic slowdown in 2001–02.

The government allocated considerable resources to avoid a deterioration of social services during the crisis. The cost of social services climbed from 15.8 percent of GDP in 1989 to 20.7 percent in 2000—7.5 percent for education, 6.5 percent for pensions, 6.1 percent for health and 0.6 percent for social assistance.

But declining real expenditures for education between 1989 and 1997 led to a scarcity of supplies, a halt in investment and maintenance of infrastructure, deterioration of equipment due to lack of spare parts, a cut in students' meals and transportation, and a decline in the quality of services. Enrollments declined at all levels. The fall in enrollment at the secondary level is explained in part by lack of incentives to continue into higher education.

Health indicators deteriorated in the first half of the 1990s, and improved in the second half. But as of 2000, several had not recovered to their 1989 levels, particularly in the poorest eastern provinces. The deterioration is explained by several causes. Soviet food imports virtually stopped after 1989, Cuba's hard-currency allocation for imports was halved in 1989–97, and domestic food production sharply decreased. All these problems had an adverse effect on nutrition: the proportion of Cuba's population that was undernourished increased from 5 percent in 1990–92 to 17 percent in 2000.

Real health care expenditures per capita in 1999 were 21 percent below the 1989 level. The cut in real expenditures and in imports led to a severe scarcity of medicine, spare parts for equipment, inputs for tests, anesthesia, hygiene goods, and other essentials. The separate and costly health care scheme that provides better services than the NHS for the military, internal security and top echelons of the government and the party has not been affected by the crisis, making its beneficiaries even more privileged and resented by the population. A new separate scheme that provides services for foreigners who pay in dollars was created and expanded rapidly; it is profitable but also generates irritating inequalities.

Remedial steps have been taken to tackle the most severe problems. Although these policies are appropriate and have led to positive results, they have not solved most of the structural problems in the health care system, and there is no discussion of reforms that would do so.

The problems that the social insurance pension system suffered at the end of the 1980s were aggravated by rising costs, the rapid aging of the population, generous entitlements, and the crisis, which lowered salaries and thus employer contributions. The cost of the separate pension scheme for the armed forces was equal to the entire deficit of the general pension system in 1995; a contribution rate equal to 118 percent of salaries would be needed to finance it. The Latin American Center for Demography projects that, by 2005, 25 percent of the Cuban population will be 65 years and older, making Cuba the oldest country in the region; at that point, there will be only 1.5 active worker per pensioner.

Coverage and benefits have deteriorated. The average real pension shrank 42 percent in 1989–98. The previous safety net has largely vanished due to the reduction in subsidized rationed goods, the deterioration in health care, increasing tariffs of public utilities and difficulties in transportation.

Challenges to Cuba's social-service policies

Decision-making and administration of social services, particularly education and pensions, are excessively centralized in the Cuban government. Rather than allow institutions to grow in a bottom-up fashion and develop partnerships between the government and civil society, the government designed and implemented policies, and later changed them during the crisis, without open public debate and real participation from below. Unlike countries such as India, Cuba has not encouraged local experimentation and competition. It implemented a homogeneous education program nationally, for instance, allowing little adaptation or individual initiative. Councils at the provincial and local levels manage health-care facilities and social assistance, but their representatives are not freely elected in competitive elections, and key policy decisions are left to the central authorities. The pension system lacks representation from workers in its administration or supervision. In contrast to China, which scaled up successful programs previously tested at provincial and local levels, Cuban programs have been implemented nationally without previous local testing to detect flaws, improve efficiency and cut costs; such approach has led to failures, inefficiencies and high costs.

Free and universal access to social services, regardless of user's income, is increasingly untenable. Social service programs need to increase their income and reduce expenditures in order to be sustainable in the long run. Allowing the private sector to open private schools and clinics would create jobs (reducing employment in the overstaffed state sector), offer high-quality services for high-income users, cut government costs, generate government revenue through taxes on profits, and promote competition and efficiency in the public sector.

Estimates of Poverty in Cuba

The Cuban government has never published statistics on poverty incidence and claims that there is not extensive poverty because of universal access to free social services and other policies (full employment, subsidies to consumer goods), hence there is not an anti-poverty program, except for social assistance that only covers 1 percent of the population. Nevertheless, two studies measuring poverty have been published in Cuba, with diverse methodologies and results.

The first study, done at the Ministry of Economics and Planning, rather than estimating poverty incidence, used the concept of "urban population at risk of not covering some essential need" (Informe 1997). The change in methodology was arguably justified because the state provides free education, health care, social insurance pensions and social assistance, guarantees a supply of basic food at subsidized prices (through the rationing system), and most of the people owns a home or pays low or no rent. The urban population at risk was defined as that with insufficient income to buy a basic food basket, which determines the poverty line. An estimated value of all social services was added to the average income of the population, while the value of the food basket was calculated taking subsidized food prices into account. The study failed to show full calculations and it had several flaws, for instance, didn't give the average monthly income of the urban population, offered two different figures on the value of social services, and the estimate of the food basket was questionable. The urban population at risk was calculated as 14.7 percent, with some of the following characteristics: children below age 14, women more predominant than men, people with primary education only, persons living in households with more than six members, and those either unemployed or not economically active. A comparison of the population at risk in Havana, between 1988 and 1995, showed an increase from 4 percent to 20 percent, because of expanding inequalities, but a comparison between 1995 and 1996 indicated a decline from 20 percent to 11.5 percent, due to a "reduction in inequality," when actually there was an expansion in that period (Mesa-Lago 2002b).[1]

The second study, done at the University of Havana, estimated the Amartya Sen Index of severity of poverty in 1995 using the average cost of the food basket, the gap between the latter and the average income per capita, and the distribution of the population by income groups (Togores 1999). The Sen Index combines two variables: poverty incidence and the Gini coefficient of the distribution of average income among the poor. Poverty incidence of the total population, based on two different variants, was estimated as 61 percent or 67 percent, and the severity of poverty as 39.7 percent or 41.8 percent. This study also contended that the Sen Index determined poverty based on insufficient income to acquire the food basket but excluded state transfers of free social services to the population; if such services had been included, both income inequality and poverty incidence (as well as the severity of poverty) would be lower. The study acknowledged that rising prices in 1990-1995 led to a 47 percent decline in the population real income, but sustained that such loss was partly offset by the transfer of free social services and a

[1] Two other studies, supported by UNDP, didn't measure the urban population at risk or poverty incidence (CIEM 1997, 2000). Due to this vacuum, the UNDP has never published estimates of Cuban poverty.

26 percent jump in social-service expenditures in 1989-1998. The latter estimate, however, was in current prices instead of in constant prices but, according to the study own consumer price index, real social-service expenditures per capita declined 40 percent in that period,[2] and the quality of social services severely deteriorated (see 3.1). Moreover, the supply of basic foodstuff through rationing declined from one month in 1989 to ten days per month in the mid-1990s.

Summarizing, there is no accurate measurement of poverty in Cuba. The two studies discussed used diverse methodologies and their results had a wide range: 15 percent urban population at risk, 40-42 percent severity of poverty and 61-67 percent poverty incidence of the total population. The first estimate included the value of free social services and subsidies to food prices (the second study excluded them), but both sharply declined in the 1990s and, hence, their compensatory role must have been lower. The second study estimates used a more sophisticated method and might be closer to reality than those of the first study. Despite the lack of hard data, abundant information indicates that there is poverty in Cuba and that it expanded in the 1990s as a result of the crisis. The expansion of income inequalities in the 1990s and early 2000s has expanded the gap between the poor and the still small but increasing segment of the wealthier population (Mesa-Lago 2002b).

Implementation Process in Access to Social Services

Access to Social Services in 1958

At the eve of the 1959 revolution, Cuba ranked among the top four LAC in social indicators: the lowest infant mortality rate (33.4 per 1,000); the second highest coverage of the labor force on social insurance pensions (62.6 percent); the third highest ratios of physicians (9.2 per 10,000 inhabitants) and beds in public hospitals (4.2 per 1,000 inhabitants); the third highest life expectancy 64 years); and the fourth highest literacy rate (23.6 percent in 1953). These advances helped the later expansion in access to social services, particularly in health care; other facilitators were: the relatively small size of the country, the lack of significant physical barriers, a fairly good communication system, a predominant urban population, and a single language. On the other hand, there were major inequalities in social-service access between urban and rural areas: only one rural hospital; 60 percent of the physicians and 80 percent of hospital beds concentrated in Havana (that had 20 percent of the population); ratios of illiteracy and infant mortality in rural areas four times higher that in urban areas; and a very small part of the rural labor force covered by social insurance pensions. Although there were no statistics on poverty, scattered data indicate that the poor were mostly concentrated in the countryside and largely excluded from those services. Blacks were probably more afflicted by poverty and had less access to social services than whites. Finally, Cuba lacked a social-insurance sickness-maternity program as was typical in

[2] Togores and García (2003) argue that real social expenditures per capita rose 162 percent in 1989-2001.

LAC, although it had developed an extensive system of urban medical cooperatives (Mesa-Lago 2000, 2002/2003, based on Cuban and international statistics).[3]

Universalization in the Access to Social Services in 1959-1989

The government rapidly collectivized all means of production, public utilities and social services; by 1989 only 3 percent of agriculture remained private, one of the highest degrees of state ownership in the socialist world. All political parties were abolished (except the communist); trade unions fell under government control, and political and civic freedoms were curtailed. The government concentrated an enormous political and economic power that was used to pursue key goals; a priority was assigned to the expansion in access to social services, particularly to the population in rural and urban-marginal areas, where the poor were concentrated. All private education, health-care and pension services were collectivized in 1961-1963; the state centralized the administration of those services, fully financed them and made them free to all the population. As many blacks were previously excluded, they benefited from universal and free access. The design and implementation of these policies was done at the top with little participation from below. In the 1960s committees for the defense of the revolution, organized by city blocks, were assigned some educational and health-care functions, such as detection of adult illiterates, and promotion of vaccination and enrollment of children in primary school. In the 1970s, provincial and local organs of popular power (OPPs) were founded and entrusted with some decision-making functions and resources in health care and social assistance. Rather than allow institutions to build up in bottom-up fashion and develop partnerships between the government and civil society, the state took the initiative and made decisions without an open public debate and real input from below. The government has not relied on local experimentation and competition; social programs have been implemented nationally without previous local testing to detect flaws, improve efficiency and cut costs, hence there has not been scaled up of successful programs.

Education

All educational infrastructure, facilities and equipment are state-owned, managed and financed, through the Ministry of Education (the only authorized to offer education), which also hires, promotes, dismiss and pays all teachers and staff. In 1961, all private schools and universities were nationalized and private education banned; in 1993 self-employment was authorized but teachers and other university graduates forbidden to practice their professions (they can work in other legalized self-employment activities). The system is highly centralized (all educational programs are homologous) and there has not been any educational reform to decentralize the system as in many LAC.[4]

[3] Barraclough (2000) questions the accuracy of some pre-revolutionary data (e.g., a better registration of infant deaths in Chile led to a higher infant mortality rate than in Cuba). In general, however, the problems that afflicted Cuban data were typical of the immense majority of LAC at the end of the 1950s.

[4] The educational system includes: day-care centers, pre-school, primary school, basic secondary, pre-university, teacher-pedagogy, technical-vocational and university, as well as adult education and especial education for those incapacitated.

The government established consecutive priorities in education to tackle the existing deficiencies and inequalities. A massive literacy campaign was launched in 1961 properly targeting rural areas, but it was poorly designed, conducted by 270,000 volunteers (mostly urban students) with little or no training, the test of literacy was unreliable and there was no follow up. Allegedly the campaign taught to read and write 700,000 people and reduced the illiteracy rate from 21 percent to 3.9 percent (CIEM 2000: 79), and yet the 1970 census estimated 12.9 percent illiteracy. In 1989 the illiteracy rate was 6 percent, an impressive 15-point reduction since 1960, but 2 points above the rate of 3.9 percent reported after the literacy campaign in 1961. A more efficient and successful policy was to reach universal access to primary education, a target virtually achieved by 1970 (the number of primary schools rose 24 percent in 1958-1989). A free program of day-care centers established in 1961 helped working mothers and supplied meals to the children. The emphasis shifted next to secondary education whose enrollment jumped from 25 percent to 90 percent of the population 12-17 years old in 1970-1990. A program of boarding schools in the countryside considerably contributed to the expansion of rural enrollment. Last was the expansion in access to higher education through free tuition and a scholarship program that provided resources for lodging, food, etc. The number of universities and technical-vocational schools increased four-fold, while university enrollment rose from 5 percent to 23 percent of the population 20-24 years old in 1970-1987. There was a successful effort to increase enrollment of females at all levels (50 percent of total enrollment in 1989-90), and the years of school among workers was also expanded: 38 percent of the labor force had secondary level and 9 percent higher education level in 1986 (CCE 1991; Barraclough 2000; CIEM 2000; Mesa-Lago 2000).

It is difficult to assess the quality and efficiency of educational services. It has been noted that serious flaws afflicted the literacy campaign and that its results were grossly overestimated. Still the illiteracy rate was reduced by 8 points in 1958-1970; the question is how much of this resulted from the campaign and how much from the expansion of enrollment at the primary level. The general ratio of students per teacher decreased from 17 in 1977-78 to 11.8 in 1989-90; the index of retention at the three levels was high and showed a slight increase in the period (CCE 1991; CIEM 2000; Mesa-Lago 2003b).

Health care

Access to health care services became universal and health standards significantly improved (until the crisis), partly facilitated by the relatively advanced health care system existing in 1958 but mainly by government policies to achieve those goals. In 1961, all private hospitals, clinics and medical cooperatives were collectivized and the private practice of medicine prohibited prompting the exodus of one third of all doctors. Only some physicians graduated prior to the revolution and who had a private practice reached individual agreements with the government to continue their practice (by now they have either retired or died). The 1993 authorization of self-employment excluded all medical personnel to practice their professions in that manner. The state owns, finances and operates all health care facilities and hires, promotes, dismisses and pays all health care personnel, but the system is much more decentralized than the educational one.

The government set as a primary goal the expansion of free health care to rural areas and low-income urban groups, which were virtually excluded, as well as massive vaccination of

children. The Rural Health Service founded in 1960 mandated all medicine students to serve one year in rural areas and set the basis for rural health posts. The Ministry of Public Health (MINSAP), reorganized in 1961, directs the health care system (including all medical schools, research institutions and pharmaceutical production), and provincial OPPs manage the corresponding geographical facilities. In 1969 the National Health System (NHS) was established and placed under MINSAP direction, except for a separate scheme that cares for the armed forces, internal security personnel and top echelons of the government and the party (run by the Ministry of Armed Forces: MINFAR). A Community Health Program was organized in the 1970s based on policlinics, where one team of physicians and nurses served all inhabitants in a given area (homes, day-care centers, schools, work places); it focused on prevention and primary care and had community participation. Although improving access, this program faced several problems: the teams didn't know the patients well, prevention actions were not taken timely, emergency rooms at hospitals were overcrowded by users searching better care, and there were complains about the bad service. These flaws prompted a change in policy and the creation in 1984 of the Family Doctor Program, integrated by a team of a physician and a nurse who provide prevention and primary care to several families in each neighborhood, thus making their services closer to users and facilitating personal contact. Reportedly this program has reduced the rate of hospitalization through more efficient prevention; on the other hand there is overlapping with the policlinics, the program does not work well in rural areas (due to dispersion of the population) and costs are very high. These two programs universalized health care to all the population, providing free services. A modern Center of Genetic Engineer and Biotechnology built in 1986 produced 136 items for domestic consumption and exports to the USSR and other countries (CIEM 2000; Sixto 2003).

Resources devoted to health care increased significantly: real expenditures per capita jumped 162 percent in 1976-1989, the number of physicians from 9.2 to 33.1 per 10,000 inhabitants in 1958-1989, hospital beds from 4.2 to 5.3 per 1,000 inhabitants, and the hospitalization rate from 12.6 percent to 15.5 percent. Access became universal and free, except for medicines outside of hospitals, glasses, wheel chairs, and prostheses (dental, hearing and orthopedic). Results in 1958-1989 were remarkable: declines in the infant mortality rate from 33.4 to 11.1 per 1,000, in children born underweight from 11.7 percent (1974) to 7.3 percent, in the maternal mortality rate from 125.3 to 26.1 per 100,000, and in the mortality rate of the population age 65 and above from 52.9 (1970) to 48.4 per 1,000. Most contagious diseases were either eradicated or sharply reduced (diphtheria, malaria, measles, polio, tetanus, tuberculosis and typhoid), although a few increased (acute diarrhea and respiratory diseases, venereal diseases, hepatitis and chicken pox). Finally, the gap between urban and rural areas was greatly reduced on facilities, personnel and health standards, for instance, the number of rural hospital increased from one to 65 (CCE 1991; PAHO 1999; Mesa-Lago 2000, 2002b, 2003a; Sixto 2003).

On the other hand there were several problems and inefficiencies. The health care system was highly dependent on imports of medical equipment, drugs and other essential inputs from the USSR and CAME, while indirectly benefited from generous Soviet aid. The NHS is capital intensive, placing significant emphasis on hospitals, equipment and physicians. The Community Health Program did not achieve the expected results and created some unexpected adverse

effects. Despite the claim that the Family Doctor Program reduced the rate of hospitalization, official data show that in 1984 (the year that the program started) the rate was 14.6 percent but it rose to 15.8 percent in 1986 and stagnated at 15.5 percent in 1987-1989. Hospital bed occupancy decreased from 80.4 percent to 73.9 percent in 1980-1989 (while hospital beds increased from 4.3 to 5.1 per 1,000 inhabitants); in gynecology and pediatric hospitals the occupancy rate in 1990 was even lower: 61.5 percent and 66 percent respectively. The national average days of stay rose from 9.2 to 9.9; if the latter had been cut to a more reasonable average of 7 days, still high by international standards, hospital occupancy had dropped to 56 percent (CCE 1991; MINSAP 1994, 1999; ONE 1998). The ratio of physicians per 10,000 inhabitants tripled in 1975-1989 (the highest in LAC) but enrollment in medical schools kept rising at a high cost. The separate health care scheme for the military, internal security personnel and top officials of the government and the party, as well as their families, provides better services than the NHS is very expensive. There are extensive and costly programs of university medical fellowships to train foreign students as well as health-care aid for countries in need. Questions were raised on improper testing of products from the Center of Biotechnology, export competitiveness in world markets and profitability. The infant mortality rate became the lowest among LAC in 1970, and yet investment continued in order to reduce the rate even further (through costly techniques for early detection of fetal congenital problems and special programs for mothers in risk), hence depleting scarce resources badly needed to ameliorate grave deficiencies such as the deterioration in the infrastructure of potable water and sewage (Mesa-Lago 2000, 2002b, 2003a).

Pensions

In 1958 there were 51 social insurance pension funds for old-age, disability and survivors, covering three groups of the labor force: private blue and white-collar workers, civil servants, and professionals. The funds had diverse administration, entitlement conditions, benefits and financing; many of them suffered from severe deficit and most were not actuarially balanced. The most powerful groups in society enjoyed the largest coverage, the best benefits and the highest state subsidies, while the least powerful groups endured the worst schemes or were not protected at all. Those funds were gradually taken over by the state in 1959-1963, unified into a single system, with homogenous entitlement conditions and relatively equal benefits. A 1963 law extended coverage to all state employees and their families and eliminated worker' contributions; subsequent legislation regulated special schemes for other groups of workers, cooperative members and farmers. A 1979 law, currently in force, expanded coverage to basically all the population (coordinating social insurance and assistance pensions) and centralized the administration in the State Committee (later Ministry) of Labor and Social Security. There is no workers' representation in the administration although the OPPs exercise some control. There are two separate schemes with better entitlement conditions and benefits than the general system: one for the armed forces (MINFAR) and another for personnel of the ministry of interior (MININ). The general system was financed only by a payroll contribution of 10 percent charged to state enterprises, farms and agencies (there was virtually no private sector) and the state covered the deficit. The state also entirely financed the schemes of MINFAR and MININ. No private pension funds were allowed (Enríquez 1997; Peñate and Gutiérrez 2000; Mesa-Lago 2002/2003;Gobierno 2003).

In 1989 Cuba's social insurance pension system was probably the most extended and liberal in LAC. Although there are no statistics, I have estimated that in 1958-1989, coverage of the labor force increased from 63 percent to 91 percent, the highest in the region and probably in the socialist world. Excluded were private farmers, self-employed and unpaid family workers, but they made up only 5.3 percent of the labor force in 1989; these groups had the option of joining the system paying the 10 percent contribution. Ages of retirement were (still are) 55 for women and 60 for men, the same as in most socialist countries, but lower than in virtually all LAC. Furthermore, in 1986-1990, Cuba's ages of retirement were cut for some workers to stimulate their retirement and open new jobs. Pensions are calculated with a generous formula: a replacement rate from 50 percent to 90 percent of the average of the highest five year-salaries in the last ten years before retirement. Furthermore, inflation was very low due to state price control and pensions were supplemented by an ample safety net: subsidized prices for consumer goods, free health care, free or cheap rental housing, and low cost of transportation and other public utilities. In the two separate pension schemes, entitlement conditions and benefits were even more liberal: in the armed forces, only 25 years of service were required, regardless of age, and the pension was set equal to the last salary (Mesa-Lago 2003b).

Such largess led to high and rising fiscal costs. The contribution of 10 percent was one-third of the average paid both in socialist countries and in the most advanced LAC, while salaried workers didn't contribute. The resulting deficit financed by the state grew from 26 percent to 38 percent of total expenditures in 1986-1989 (from 1.3 percent to 2.2 percent of GDP). To balance the system in 1989, the contribution had to be increased from 10 percent to 16 percent. The system is based on pay-as-you-go but lacks even a contingency reserve, all contributions go to the state and benefits are paid out of the state budget. The population growth rate decreased from 2.6 percent to 1.9 percent in 1963-1973 and stabilized at 1 percent in 1982-1989; the ratio of active workers per one pensioner fell from 6.6 to 3.6 in 1970-1989. It was obvious that the system could not be financed in the long run without a substantial parametric reform (Mesa-Lago 2003b; Sabourin 2003).

Social Assistance

Cuba is one of six LAC (eleven including the Caribbean) that have social assistance programs (particularly pensions) for workers and other groups not covered by social insurance, hence, helping the poor (Mesa-Lago 2001). The program was created in 1959 and placed under a new ministry of social welfare. The 1979 law entrusted social assistance to the State Committee (later Ministry) of Labor and Social Security; it is funded totally by the state budget and its benefits managed by the OPPs. The program protects various groups of the population in need: workers who lack a right to a pension at the time of retirement, dependents of a deceased pensioner without a right to a pension, pensioners with very low pensions, the elderly, the disabled and single mothers facing difficulties to raise their children. The social assistance pension is the most important benefit, others are food supplements, medicine outside of hospital, reduced housing rent and internment in asylums. The means test takes into account the family income, and beneficiaries can't have relatives obliged to support them (CIEM 2000; Gobierno 2003). The Catholic Church and other churches manage some old-age homes with some government support.

In 1989 there were 130,000 beneficiaries of social assistance, tantamount to only 1.2 percent of the population (CEE 1991; Togores 1999). Social assistance expenditures accounted for 0.5 percent of GDP in 1989, contrasted with 5.7 percent for education, 5.3 percent for social insurance pensions and 4.3 percent for health care; still Cuba's proportion was the second highest in LAC and the Caribbean. Conversely, the social assistance pension was one-third of the average social insurance pension, the third lowest ratio in the region. Free social services and subsidies to rationed goods are not targeted on the poor but granted to all the population (Mesa-Lago 2001).

Impact Analysis: Access to Social Services Under Crisis

The collapse of socialism in the USSR and Eastern Europe ended Cuban preferential trade with and reception of generous aid from those countries. In 1989, Cuban trade with CMEA accounted for 79 percent of total trade; Soviet economic aid in 1960-1990 amounted US$65 billion, two-third was in non-repayable price subsidies to trade and Cuba paid only $500 million of the remaining one-third in loans. Opposite to market-oriented reforms in the USSR and some Eastern European countries, in 1986-1989 Cuba halted the Soviet-style, timid economic reform of 1970-1985 and moved against the market during the "Rectification Process," with adverse effects on growth. Those two factors provoked an acute economic crisis that sank to its worst in 1993: GDP declined by 35 percent, inflation jumped from 0.5 percent to 26 percent, and the fiscal deficit from 7 percent to 34 percent of GDP. These problems forced an adjustment program ("The Special Period in Time of Peace"), as well as a market-oriented reform but considerably more timid in scope and depth than that in FCSC. Both programs aimed to stop the GDP decline, promote a recovery, and reduce inflation and the fiscal deficit, goals gradually accomplished since 1994, although the recovery was incomplete and oscillating (GDP per capita in 2001 was 18 percent below the 1989 level). Despite positive outcomes, in 1996 the reform was virtually halted, only marginal changes have been implemented, some policies have been reversed and several key measures that were planned have not materialized. Such impasse, combined with adverse external factors (9/11, the world recession, decrease in international tourism), provoked an economic slowdown in 2001-2002. The tightening of the US embargo, particularly since 1996, contributed to the problems (Mesa-Lago 2000, 2003b).

The crisis and fiscal policies had an adverse impact on social services: "The impact is noted, above all, in the reduction of the consumption of foodstuffs and goods [and] the deterioration in the quality of social services (such as health care and education)…[but despite] the change in domestic and external conditions, social policy has not experimented substantial transformations. [T]he state has made an effort to distribute the impact of the crisis, as equitably as possible, minimize social costs and preserve to a maximum the achievements in health, education and social security" (CIEM 1999: 53, 60). The incomplete recovery that began in 1994 has helped to improve social indicators but still in 2002 several of them were below the 1989 level. The government allocated considerable resources to avoid a further deterioration of social services particularly in the midst of the crisis: total social expenditure (including housing and

other services not discussed herein) as a proportion of GDP was 23 percent in 1990-1991, peaked at 30 percent in 1993 (while GDP sharply declined), decreased to 22 percent in 1994-1995 and rose to 23.5 percent in 2000 (while GDP grew), one the highest proportions in LAC (Togores and García 2003). The cost of the social services analyzed in this paper climbed from 15.8 percent to 20.7 percent of GDP in 1989-2000; the distribution in 2000 was 7.5 percent in education, 6.5 percent in pensions, 6.1 percent in health and 0.6 percent in assistance (CEE 1991 and ONE 2001).

The Impact of the Crisis on Social Services in 1990-2002

Education

Real expenditures in education were cut 38 percent in 1989-1997,[5] which provoked scarcity of books, pencils, paper and other school supplies, as well as a halting of investment and maintenance of the infrastructure, deterioration of equipment due to lack of spare parts, cut in students' meals and transportation, and decline in the quality of services (CIEM 2000; ECLAC 2000a). As percentages of the corresponding population age cohorts, enrollment in primary education decreased slightly from 100 percent to 99 percent in the academic years 1989-90 and 1998-99, but enrollment in secondary education fell from 90 percent to 82 percent. University overall enrollment shrank 46 percent between 1989-90 and 2001-02; pedagogy fell 78 percent and agricultural sciences 55 percent; as a proportion of the population of university age, university enrollment decreased from 23 percent in 1987-88 to 12 percent in 1996-1997, although rose to 21 percent in 1998-99 (UNESCO 1999, 2001, 2002).

The fall in enrollment at the secondary level is explained by cuts in school meals (e.g., 40 percent in the schools in the countryside), transportation difficulties, and lack of incentives to continue into higher education. The percentage of graduates from secondary education that enrolled in pre-university schools fell from 83 percent in 1990-91 to 37 percent in 1995-96, although it rose later. The highest desertion rate occurred in technical-vocational and pre-university schools, because of lack of adequate jobs after graduation (CIEM 2000). The sharp decrease in university enrollment is explicated by poor incentives: after 4 to 6 years of study, graduates encounter serious difficulties to find jobs, and those lucky to get employed earn a skimpy state salary. The income ladder has reversed: before the crisis, university professors, physicians, engineers and pedagogues got the highest salaries, but currently private farmers, owners of small restaurants, transporters, and even prostitutes are earning the highest income. As a result, many professionals have left their state jobs and shifted to occupations that are better paid; they are banned to work as self-employed, although can work in other authorized private occupations. The impact of enrollment declines will not be felt immediately, because there is a glut in certain professions such as teachers and doctors, but in the long run it will provoke a shortage of professionals and adversely affect economic growth (Mesa-Lago 2003a, 2003b).

[5] Due to lack of a CPI consistent series for 1989-2002, it is impossible to estimate real expenditures per capita of social services in the entire period. I have used the CPI for 1989-1998 estimated by Togores 1999.

The most important state goal on education during the crisis has been to impede the closing of any school, but we lack data on efficiency in the administration of resources. Fees were introduced in day-care centers, while meals in primary and secondary schools were reduced. A few free services of minor importance were eliminated, such as foreign language schools for adults and some services in semi-boarding schools (now fees are charged for these programs). There was a shift in enrollment of ninth-grade graduates, from pre-university schools to technical-vocational education, enrollment in the latter rose from 28 percent in 1990-91 to 50.5 percent in 1996-97. Graduates from technical-vocational and pre-university schools who abandon their studies, due to lack of jobs at graduation, can continue their training at Worker and Peasant Schools, but these are not attractive. At the university level, the government applied "maximum rigor, through exams, to control enrollment" (CIEM 2000: 53, 81-83). According to a recent regional report, in 1998 Cuba ranked first among LAC on tests of language and mathematics in the third and fourth grade, and on children who finished the fourth grade; conversely, no information was provided on Cuba's graduation rate in secondary school and the average of school years among those 25 years old (PREAL 2001). In the 2001-02 academic year, enrollment in medicine doubled (an astonishing, unexplained jump), and new programs were introduced to train social workers and incorporate to study people 17-29 years old (ONE 2002; ECLAC 2003).

Health care

Health indicators deteriorated in the first half of the 1990s and improved in the second half, but in 2000 several of them had not recovered their 1989 levels. The hospital real bed ratio fell from 5.3 to 4.7 per 1,000 inhabitants and the hospitalization rate from 15.5 percent to 11.9 percent, while the proportion of children born under normal weight rose from 7.5 percent to 9 percent in 1989-1993 (although decreased to 6.1 percent in 2000), the maternal mortality rate increased from 26.1 to 55.7 per 100,000, and the mortality rate of the population age 65 and above grew from 48.4 percent to 55.7 percent (it decreased to 49.7 percent in 2000, still higher than in 1989). Caloric intake sank from 3,130 in 1990 (30 percent above the minimum) to 1,863 in 1993 (22 percent below the minimum) and rose to 2,480 in 1997 (sufficient but below the 1989 level). Protein intake decreased from 73 grams in 1989 (meeting the minimum needs) to 46 grams in 1995 (36 percent deficiency) and rose to 51.5 grams in 1997 (28 percent deficiency). The large majority of diseases continued to be eradicated, but there were further increases in all the contagious diseases that exhibited a rising trend before the crisis, as well as a reappearance of tuberculosis and an increasing rate of Aids. The gross mortality rate from contagious diseases climbed from 42.7 percent per 100,000 in 1988 to 53.9 in 2000. In spite of the crisis, however, the ratio of physicians jumped from 33 to 60 per 10,000 in 1989-2001 and the infant mortality rate decreased from 11.1 to 6.2. These are national averages but the poorest eastern provinces (Las Tunas, Guantánamo, Granma) endure worse standards, for instance, access to water and sewage,[6] as well as ratios of physicians and hospital beds are less than half of those in Havana (Togores 1999; ECLAC 2000a; ONE 1998 to 2002; CIEM 2000; MINSAP 2000, 2001; Mesa-Lago 2002b; Sixto 2003).

[6] In 2000, 83,7 percent of the urban population had access to potable water in their homes but only 24 percent of the rural population.

The deterioration in health care is explained by several causes. Soviet food imports (60 percent of protein and 50 percent of calories consumed by the population) virtually stopped, Cuba's hard-currency allocation for imports was halved in 1989-1997, and domestic food production sharply decreased. These problems had an adverse effect on nutrition: the proportion of Cuba's population undernourished increased from 5 percent in 1990-1992 to 17 percent in 2000; there was an epidemic of optical neuropathy--blindness due to vitamin deficiency--in 1992-1993; the proportion of undernourished pregnant women rose from 8.7 percent to 24.5 percent in 1989-1997, and the proportion of children born underweight also increased. Real health care expenditures per capita shrank 75 percent in 1989-1993 and, despite an improvement thereafter, in 1999 they still were 21 percent below the 1989 level. The cut in real expenditures as well as in imports led to a severe scarcity of medicine (domestic production plunged due to a drastic cut of imported inputs), spare parts for equipment, inputs for tests, anesthesia, hygiene goods, and other essentials. The costly Family Doctor Program (that took close to half of the total health budget in 1992) was left without essential medicines to treat their patients; emergency rooms were flooded with patients and the waiting period for surgery enlarged significantly. Investment and maintenance were cut sharply, and garbage collection, water pumps, and mosquito control also suffered. The breaking down of the infrastructure of potable water and sewerage (badly neglected before), combined with a reduction in chlorine application explain the increase in acute diarrhea and hepatitis. The lack of prophylactics and rising prostitution has led to an increase in venereal diseases. A reduction in vaccination might explicate the jump in chicken pox and tuberculosis (CIEM 2000; FAO 2002; UNDP 2002; Mesa-Lago 2003b).

The percentage of the budget devoted to health care increased from 4.3 percent to 6.4 percent of GDP in 1989-2001, becoming a heavier burden than before the crisis, but some of the pre-crisis indicators of inefficiency have worsened. Hospital occupancy decreased from 73.9 percent in 1989 to 69.4 percent in 2000, while the average days of stay rose from 9.9 to 10.4 in 1993 although declined to 9.4 in 2000 (MINSAP 2000, 2001). If the latter had been cut to a more reasonable average of 7 days, the occupancy rate would have fallen to 51.7 percent. Enrollment at university medical schools decreased 37 percent from 1989-90 to 1999-00, due to tough entry exams and lack of incentives, but in 2001-02 jumped 31 percent above the 1989 level (ONE 2002). In 2000 Cuba had the highest ratio of physicians per 10,000 inhabitants in LAC and FCSC. There is a huge surplus of doctors and, because their state salaries have plummeted, thousands of them are working as taxi drivers, waiters for tourists and other occupations while others have gone to foreign countries with job contracts. Doctors are banned to practice their professions as self-employed, and yet that would provide an economic incentive for them as well as meet the current important need for more personalized medical care. The continuous investment to reduce the infant mortality rate (that in 1989 already was the lowest in FCSC and LAC) aggravates the misallocation of very scarce resources needed to improve the broken down basic infrastructure and meet more urgent necessities. The Center of Biotechnology lost its main client (the USSR) and has been unable to replace it with other buyers; exports are not significant and many of the top Center personnel have left (Mesa-Lago 2003b). The separate and costly health care scheme that provides better services than the NHS (for the military, internal security and top echelons of the government and the party) has not been affected by the crisis and become

thus more privileged and is now resented by the population. A new separate scheme that provides services for foreigners who paid in dollars was created and expanded rapidly; it is profitable but also generates irritating inequalities (Betancourt and Grenier 1999).

"Despite these difficulties, [the government] has ratified two principles of Cuban health care: the system will continue to be totally financed by the state budget, and it will maintain universal and free access to all services". In 1991 a plan was elaborated ("Objectives and Guidelines to Improve the Health of the Population in 1992-2000") and since 1995 the main problems were identified, priorities set and strategies designed to cope with them and maintain health levels (MINSAP 1998). But that plan did not identify specific measures to reduce costs, except the HHS reorientation towards primary care. For instance, despite the decline in occupancy, the official principal target has been to avoid closing hospitals and other health care installations and MINSAP overhead is very high by world standards. The following remedial programs have been implemented to tackle the most severe problems: (a) the SNS gave priority to primary care and maternal-infant care to confront malnutrition among pregnant women and the rise of infants born below the normal weight (the hospitalization rate for 100 children born increased two-fold in 1990-2000); (b) the epidemic of optical neuropathy was halted with a free supply of vitamin supplement to all the population; (c) chlorine was reapplied to potable water since 1996 with a subsequent reduction in acute diarrhea; (d) the severe scarcity of medicine has been fought with herbal medicine, acupuncture and other ready available or low-cost substitutes; (e) an epidemic of dengue was controlled with a fumigation program; (f) a program of integrated services for medical emergency was established in 2000 to tackle unsatisfied demand accumulated during the 1990s, and (g) paid maternity leave was expanded to one year to help mothers take care of their children (CIEM 2000; Sixto 2003; Togores and García 2003). Although these policies are appropriate and have led to positive results, they have not solved the majority of the structural problems of the health care system and there is no discussion on a potential reform. In 2002 a new program was announced to supply more medicines to the population, and expenditures per capita in hospitals were raised to 40.8 percent of total health expenditures vis-à-vis only 27.4 percent in primary care, which reverses previous priorities (ECLAC 2003).

Pensions

The problems that the social insurance pension system suffered at the end of the 1980s were aggravated by rising costs, the rapid aging of the population, unchanged generous entitlement conditions and the crisis. The cost of the general pension system rose from 4.6 percent to 6.5 percent of GDP in 1986-2000, excluding the two separate schemes. Real salaries decreased by 37 percent in 1989-2001, therefore, income from contributions decreased in the same proportion (Togores and García 2003). An increase in the employers' contribution from 10 percent to 12 percent was grossly insufficient to balance the system and the deficit (financed by the state) expanded from 26 percent to 40 percent of total expenditures. Projections made by the ILO (1999) indicate that the current contribution of 12 percent had to be raised to 14.3 percent in 1994 to cover expenses, and gradually increase it to 19.8 percent in 2020 (my own estimates show the need of an average 19.7 percent contribution in 1994-2000). The tax law of 1994 introduced a worker contribution to finance pensions, but it was postponed due to political and social reasons;

since 1999 it began to be imposed on state enterprises under the "system of entrepreneurial perfection" but, by the end of 2002, it operated in only 12 percent of the total number of enterprises. The cost of the separate pension scheme for the armed forces was equal to the entire deficit of the general pension system in 1995, and a salary contribution of 118 percent was needed to finance it. Low retirement ages and rising life expectancy (in 2000 the highest in FCSC and the second highest in LAC) have led to an expansion of the average period of retirement to 20 years for men and 26 for women (the longest among LAC and one of the longest among FCSC). In 2001 the population growth rate was 0.2 percent, the lowest among LAC, and the Latin American Center for Demography projects that, by 2005, 25 percent of the population will be 65 years and above, the oldest in the region, and there will be only 1.5 active workers per one pensioner (CELADE 1999; Peñate and Gutiérrez 2000; Benítez 2001; ONE 2002; Mesa-Lago 2003a, 2003b).

Coverage and benefits have deteriorated also. As a percentage of the civilian labor force, private employment expanded from 4 percent to 15 percent in 1989-2001 (CEE 1991; ONE 2002). As private employment grows pension coverage shrinks, because the large majority of it is not covered by social insurance: self-employed, part of the private farmers, unpaid family relatives, and the illegal informal sector that is the tip of the iceberg. Except for the latter, these workers can join the pension system contributing 12 percent of their income (equivalent to the employer's contribution), but this is a heavy burden and 88 percent of state salaried workers pay nothing. Coverage of the labor force decreased from 90 percent to 65.7 percent in 1989-1997, while the number of workers employed in contributing enterprises declined from 4.3 to 3.1 million. The real average pension shrunk 42 percent in 1989-1998, because the increase in nominal pensions was smaller than the rising cost of living. In 2001, 1.5 million pensioners received an average monthly pension of 110 pesos that could buy only one-half of essential food and one-fourth of the cost of all basic needs. The previous safety net has largely vanished due to the reduction in subsidized rationed goods to one week per month, the deterioration in health care, increasing tariffs of public utilities and difficulties in transportation (Mesa-Lago 2003a). In 2001 those age 65 and above in Havana, only covered the basic nutritional needs: 61.8 percent in calories, 55.4 percent in protein and 17.1 percent in fats (Togores and García 2003). "It is obvious that, currently, pensioners cannot satisfy their basic needs unless they have alternative sources of income (a minority) or are helped by their families" or receive foreign remittances (CIEM 2000: 76).

"The state faces the challenge to redesign the social insurance system, maintaining the fundamental strategies of universality, equity and solidarity, without neglecting economic efficiency" (CIEM 2000: 75). In 1994 a draft for the pension reform was elaborated and the following proposals have being discussion by several ministries, research institutions and experts: (a) a raise of five years in the age of retirement, from 55 for females and 65 for men to 60 and 65 respectively, gradually in a period of 20 years (although positive, the age increase will be insufficient to significantly reduce the deficit and the period of gradual age rising is too long); (b) full imposition of workers' contributions as established in the tax reform law of 1994 (5 percent has been suggested), and (c) the increase in the nominal pension (information on the draft comes from Peñate 2000). There is a debate on whether there should be a funded pension system: two

experts oppose it alleging it would be fictitious because all investment would be made by the state in public securities (Peñate 2000; Sabourin 2003); another argues that social insurance should be redesigned to promote savings, sources of financing in the long-run and the development of financial and capital markets (Tabares et al 1999).

Social Assistance

The state budget allocation to social assistance averaged 0.6 percent of GDP in 1990-2001, by far the lowest share among all social services. An official document sustains that social assistance nominal expenditures rose 85.5 percent in 1989-1998 (CIEM 2000), but real social expenditures (adjusted to the CPI) shrank 29 percent in the same period, despite increasing poverty. The monthly social assistance pension in 2002 was 40 pesos, equal to US$1.50 at the exchange rate in state agencies (CADECA), totally insufficient to buy one extra week of food in non-rationed markets (Mesa-Lago 2003b). State support to old-age homes managed by churches has dwindled and food is scarce.

The government tried to cope with the expansion of the population in need through the development of special programs to elder people living alone, the disabled, single mothers and minors with problems (Gobierno 2003). It has been noted, however, that free social services and subsidies to rationed goods are not targeted on the poor but granted to all the population regardless of income. Due to considerably equality, this was no a serious problem in the 1980s, but became aggravated in the 1990s because a growing proportion of the population earns high income in the private sector, get bonuses in dollars and awards in kind from state or mixed enterprises, and receives foreign remittances (Ferriol 2001). According to an official publication "the idea of targeting is opposed to that of universality" and in most policies (including social assistance), it is better to apply universal rather than targeted policies (CIEM 2000: 72-73). In view of the increasing poverty and inequality, such policy is not only a waste of scarce resources but also an obstacle to provide more help for those who are in severe need. In the early 1990s, some reformist scholars and technicians advocated a shift in policy from indiscriminate subsidies granted to social services and consumer goods, toward targeted aid to those in need (Carranza, Gutiérrez and Monreal 1995). In 2001 the Communist Youth proposed that foreign-remittance recipients be denied free access to education, health care and subsidized consumer goods, but the measure was not approved, perhaps because of difficulties in detecting recipients of remittances and their amount.

Results of Cuban Social Services Compared with FCSC and LAC in 2000

This section assesses the final results of Cuban policy on social services compared with those in two groups of related countries: FCSC and LAC, based on indicators circa 2000: the Human Development Index (HDI) ranking, GDP growth, GDP per capita PPP$, literacy, educational enrollment at the three levels, infant mortality, access to water and sanitation, and life expectancy (data on pensions and social assistance are not available).

In the HDI of 2002 Cuba ranked 55th among 173 countries and 10th among the 28 FCSC,[7] but while Cuban economic outcome was below average, its social results were partly better (see Table 1). Cuba's GDP growth rate in 1990-2001 averaged –1.2 percent ranking 17th (Cuban GDP per capita in 2001 was 18 percent below the 1989 level), and the island GDP per capita in PPP$ ranked 16th among the 28 countries, well below the average in both indicators. A group of countries with strong market-oriented reforms in Eastern Europe and the Baltics, as well as China and Vietnam had much better economic results than Cuba. On education and basic infrastructure Cuba ranked below most FCSC but the opposite was true on infant mortality and life expectancy. Cuba's literacy rate ranked 25th (nine countries with lower GDP per capita than Cuba had higher literacy), while on the combined enrollment at the three educational levels Cuba ranked 13th and tied with two (four poor countries in CIS had higher rates). Cuba's infant mortality rate was the 3rd highest and its life expectancy at birth was the highest. But the basic infrastructure didn't match those achievements: in access to potable water Cuba ranked 8th among 14 countries that provided that data, and in access to sanitation Cuba ranked 9th among 11 countries (three of the poorest countries had better access).

In the comparison with LAC, Cuba comes worse on the economic indicators but ahead of the region in social outcomes (see Table 2). Because of the higher weight placed by the HDI on social over economic indicators, Cuba ranked 6th among 20 countries (if the Caribbean had been added in the comparison, Cuba would have ranked 11th among 33 countries).[8] Cuba had the worst GDP rate in 1990-2001, while its GDP per capita PPP$ ranked 12th. Conversely, Cuba had the 3rd highest literacy, the 7th highest enrollment at the three levels, the lowest infant mortality, the 3rd better access to water, the 3rd access to sanitation (tied with two other countries), and the 2nd highest life expectancy (surpassed only by Costa Rica). Despite a comparatively lower GDP and the crises, Cuba still performed better in social access than the large majority of LAC.

Driving Factors

Commitment and Political Economy of Change

Instrumentals in the social-service policies were a very powerful state, with full political and economic control, combined with the decision makers' strong commitment to expand access and allocate substantial resources to achieve that goal. The success of these policies, until the end of the 1980s, led to widespread support of the population and became a pillar of the revolution. During the crisis of the 1990s, access and quality of social services severely deteriorated; the government assigned a significant proportion of the state budget and a declining GDP to protect them as much as feasible--a social policy different to that followed during crises in most FCSC and LAC. Nevertheless, several social indicators are still below pre-crisis levels and others have

[7] FCSC: former and current socialist countries; former socialist countries are CIS, Eastern Europe and the Baltic states; current socialist countries are China, Cuba, Vietnam and North Korea.

[8] For an evaluation of Cuban HDI and its serious flaws in measuring GDP p/c PPP$, see Mesa-Lago 2002a.

continuing eroding, while many adverse economic effects of the crisis have not been halted, all of which have led to a decline in popular support and increasing internal dissent.

Institutional Innovation

The revolution built many new institutions that were successful to carry on and maintain its social-service policies. The latter departed from many conventional Soviet-style practices, for instance, the literacy campaign, the schools in the countryside, and the priority to expand access in rural areas rather than concentrating such services on the urban industrial labor force. On the other hand, more conventional socialist approaches were followed on pensions, and the use of textbooks from the USSR (for instance in economics). The state politico-economic power overcame all opposition to the radical reform of social services, completely privatizing them, integrating separate providers and fully financing such services in spite of climbing costs. The severe crisis of the 1990s presented a colossal challenge to the government (many experts predicted that Cuba would go the same way than the USSR and Eastern Europe) but was able to confront it and remain in power for 14 years. In order to maintain the regime, the leadership launched a modest economic reform, made compromises and reversed many key policies of the revolution, such as transforming state farms into cooperatives and reintroducing free agricultural markets, allowing foreign investment and joint enterprises, authorizing circulation of the dollar and remittances from abroad, promoting international tourism that excludes Cubans for their premises, all of whom have generated significant inequalities. And yet the reform was halted, some measures reversed and there is strong leadership resistance to restart it.

Learning and Experimentation

There is excessive state centralization in the decision-making and administration of social services, particularly in education and pensions; health care is more decentralized in management but funded by the state budget. Rather than allow institutions to build up in bottom-up fashion and develop partnerships between the government and civil society, the government initially designed and implemented policies, and later changed them during the crisis, without an open public debate and real participation from below. Opposite to India, Cuba has not encouraged local experimentation and competition. A homogeneous education program is applied nationally, allowing little adaptation, inputs to improve it, and individual initiative. OPPs at the provincial and local levels manage health-care facilities and social assistance, but their representatives are not freely elected in competitive elections and key policy decisions are left to the central authorities. The pension system lacks representation from workers in its administration or supervision. Contrary to China that scaled up successful programs previously tested at provincial and local levels, Cuban programs have been implemented nationally without previous local testing to detect flaws, improve efficiency and cut costs; such approach has led to failures or inefficiencies or high costs (e.g., the campaign against illiteracy, the Family Doctor Program). A public informed discussion is needed on the problems confronted by social services and alternative policy solutions, to forge consensus and legitimize those policies.

External Catalysts

The generous financial and technical support from socialist countries facilitated Cuban social policies. The USSR granted US$65 billion in economic aid in 1960-1990, two-thirds in non-repayable price subsidies, and one-third in loans with very low interest, long terms and virtually not repaid. Although such aid was mostly concentrated in developing production and public utilities, it also financed huge trade deficits and freed domestic resources to invest them in social services. Cuba also benefited from subsidized or free imports of health-care equipment, medicines and other inputs from the USSR and CAME. And yet, Cuba's social-service policies were home-grown, with little influence from the lending countries, as they did not impose conditions related to social services. On the other hand, in 1970-1985, the USSR exercised influence on Cuba to implement a timid economic reform, but it was reversed in 1986-1990 despite Soviet pressure; actually, Soviet largesse retarded the market-oriented reform that was not implemented until the crisis exploded. The lost of Soviet and CAME aid turned negative a positive factor. Cuba is not a member of international financial organizations (World Bank, IMF, Inter-American Development Bank), hence has neither received aid and loans from them nor has been submitted to conditions related to social services, such as structural reforms in education, health care and pension implemented in FCSC and LAC. Cuban officials argue that this has been a positive factor, but an interaction with IFOs could have led to bargaining and reassessment of certain policies. Cuba owns about US$12 billion to the Club of Paris and other developed countries in loans unrelated to social services. The United Nations and the European Union have granted relatively small donations in support of some of Cuba's social programs.

Lessons Learned from Cuba: Positive and Negative

The previous analysis shows different performance in access to and quality of social services between the implementation stage (1959-1989) and the crisis stage (1990-2002). The most important and positive actions and results occurred in the first stage, while the most severe problems and adverse effects materialized in the second stage.

Positive Lessons

There is widespread international consensus that Cuban social-service policies achieved remarkable results, especially in education and health care, until the crisis. Even more, most respondents of a 1999 survey among Cuban immigrants in the United States believed that education and health care improved under the revolution, they saw as positive the free and equal access of the population to those services, and supported retaining them in case of a change in government (Betancourt and Grenier 1999).

Universal Access

The most important accomplishments of the social service policy achieved in 20 to 30 years, are universal access in health care and primary education, virtual universal access in secondary

education and pensions, and significant expansion in access to higher education. Such expansion was facilitated by factors present in 1958 and country characteristics: Cuba's comparative advances in access to social services in LAC; the relatively small size of the country, absence of great physical barriers and fairly good system of communications; the predominant urban population, and a single language. But the fundamental factor was the strong commitment of the leadership to implement changes and finance the expansion of access.

Single, Equal and Free Public Systems

The existence of single national equal systems of education, health care and pensions (the last two with the exception of the separate schemes for the military, internal security, and top leaders of the government and party) facilitated the process of expansion in access. Free and equal access to those services by all or virtually all the population allowed the rapid inclusion of the poor and low-income groups, including the rural population and the blacks who were largely excluded, as well as the provision of services without discrimination (with the exceptions noted). In the case of pensions, workers' were exempted from contributions, although it could be argued that employer' contributions and state subsidies came from workers' production and therefore led to lower salaries. This approach avoided the complex process of targeting the poor and low-income groups in need, identifying them and designing means-testing techniques, as well as setting user fees for certain services and according to income. Cuba resorted to these techniques only to provide social assistance to 1 percent of the population; clearly defined groups are eligible with a simple means test.

Setting of Priorities to Achieve Goals

The government set priorities to achieve universal access and most of them were proper. In education the sequence in emphasis was appropriate: literacy first, primary education second, secondary education third, and higher education last (the literacy campaign, however, was not as effective as claimed). In health care a first priority was to expand access to rural areas whose population was virtually excluded, as well as massive vaccination of children against contagious diseases; the Family Doctor Program completed the process of universalization and closer contact between physician and patient albeit at great cost. When the crisis hit, priorities were set to primary care, maternal and infant care and tackling the most urgent and severe problems. In pensions, first the 51 separate schemes were unified and their entitlement conditions standardized; then coverage was extended to all state employees and their families; next special groups of workers and farmers were incorporated. The tiny private sector did not create a significant problem of exclusion and some of their workers were given an option to join the system. Social assistance pensions took care of those who lack a right to a pension.

The Social Safety Net

Supplementing social services, a wide social safety net (SSN) was developed: state subsidies to prices of essential consumer goods supplied by rationing; gradual acquisition of homes by paying rent to the state and, for those without that opportunity and in need, either a reduced rent or no rent at all; low (subsidized) tariffs for public utilities, like transportation, electricity, gas and water (during a brief period, also burials, sport events and public phones were free). Although

food rations were frugal and not always guaranteed, they were equal for all the population. Housing was mostly free although it rapidly deteriorated due to lack of maintenance of the existing stock and insufficient construction. Public utilities were very cheap albeit their supply had limitations and service was deficient. Meager pensions were supplemented by this SSN.

Negative Lessons

The paralysis of the market-oriented reform contributed to the 2001-2002 slowdown and is threatening the recovery of social services. Several Cuban scholars and technocrats argue that without a return to the reform path, the economy will not be able to solve its structural problems, sustain a recovery and consolidate the social gains. Many of them reject a reform a la CIS and Eastern Europe, because their perceived negative socioeconomic and political effects; they are more attracted to the models of China and Vietnam due to their impressive economic performance without relinquishing political control. On the other hand, Cuban top political leaders have publicly opposed the Sino-Vietnamese model arguing that it is unfeasible in the island due to its relative small size and proximity to the United States (Mesa-Lago 2003b).

High, Growing and Unsustainable Social-Service Costs

Free and universal access to social services, regardless of user's income, was financially feasible until the end of the 1980s; the lost of generous Soviet aid and key imports for education and health care, as well as the crisis, made such policy increasingly untenable. Costs of social services climbed to 20.7 percent of GDP in 2000 (excluding housing and others), making them financially unsustainable and jeopardizing access and quality of services. All education, health care and social assistance are fully financed by the state, as well as 40 percent of pension expenditures. Social services need to increase income and reduce expenditures in order to make them sustainable in the long run. Although primary and secondary education could stay free, enrollment fees in higher education could be charged to high-income users and fellowships are granted to good students in need. Health prevention and primary care could be maintained free and universal, but user fees or co-payments for hospitals and laboratories could be charged to those with high income, exempting the poor. The 12 percent employer contribution to pensions is grossly insufficient (to balance the system, it ought to be increased to 15-20 percent and gradually raised); despite a 1994 legal mandate, workers' contributions to pensions are paid only by 12 percent of state enterprises. These problems are compound by rapid population aging: Cuba has the lowest population growth rate among LAC, is projected to have the oldest population by 2025, and the ratio of 2.5 active workers to one pensioner is the second lowest among LAC.

State Fully Owned, Administered and Funded Systems

All social services are owned, administered and financed by the state, which facilitated expansion of access but created other problems, such as high and climbing costs discussed above. The state collectivized all social services and prohibited any private participation in them. When self-employment was reauthorized the government it banned university graduates to practice their own professions although they are allowed to work in other occupations. And yet there is a glut of teachers and physicians and, due to low state salaries, many have shifted to more lucrative jobs,

gone abroad with contracts or emigrated; the nation has lost that talent and the cost of their training. On the other hand, there is a need for personalized services that could be provided by those professionals, keeping them in Cuba working in their careers and earning adequate income. Most FCSC (including China and Vietnam) have authorized private health care activities. Cuba has an excellent health care program paid by foreign patients, but excludes its own citizens who can't pay either for better services within public facilities. Allowing the private sector to have installations (schools, clinics) would open jobs (reducing employment in the overstaffed state sector), offer high-quality services for high-income users, cut fiscal costs (and generate fiscal income through taxes on profits), and promote competition and more efficiency in the public sector.

Inefficient Allocation of Scarce Resources

There is a very low and declining student-teacher ratio at the primary level, but low birth rates and the aging process demand fewer resources for that level, to cut the wage bill and maintenance costs. The two upper education levels are not adapted to the demands of a competitive world market, and the recent shift from pre-university toward technical-vocational schools is insufficient. Scarce resources continue to be invested in further reducing the already low infant mortality rate and maintaining the family doctor program (very costly and with low efficacy), while the infrastructure of potable water and sewage has badly deteriorated, and there is great need to import medicines and prophylactics. Tough entry exams reduced enrollment in medical schools by 37 percent in 1989-2000 to cope with the glut of physicians, but enrollment doubled in 2002. Conversely, there are poor incentives and resources to train business managers, bankers, and other professionals needed for development. A key target during the crisis has been to keep all hospitals open, despite an occupancy decrease from 70.9 percent to 69.4 percent (with a high average of 9.4 days of stay), but maintenance of buildings and equipment has been neglected. Gynecology and pediatric hospitals have even lower occupancy than the national average, while there is great demand for geriatric care and old-age homes. The pharmaceutical and biotechnological industries have suffered from the lack of imported inputs and the lost of the Soviet buyer, they don't seem to be efficient and there are doubts on their profitability; on the other hand there is a severe scarcity of medicines and other needed health goods. The free overseas medical aid program and fellowships for foreign students deplete scarce resources that could be spent at home.

Generous Entitlement Conditions and Costly Separate Schemes

Access to education and health care is granted to all residents, the most generous in LAC. The pension system has ages of retirement of 55 for women and 60 for men, among the lowest two in LAC and, combined with the second highest life expectancy in the region, result in the longest period of retirement. The pension is calculated on the average of the highest five salaries in the last ten years prior to retirement with a replacement rate from 50 percent to 90 percent, among the most liberal in LAC. The proposal to increase five years in the retirement age, gradually in a 20-year period, has not been approved because of its potentially negative sociopolitical effects, but would not significantly reduce the fiscal deficit and make the system financially sustainable. The separate schemes on health care and pensions for the armed forces, internal security and top

leadership of the party and the government enjoy even more generous entitlement conditions or provide better services than the general systems, without an adequate contribution from their beneficiaries. Both schemes introduce unjustifiable inequalities, and the cost of the pension scheme equals the deficit of the general system. On the other hand, pension coverage of the labor force is decreasing with the expansion of excluded private employment, the real average pension has sharply declined and is grossly insufficient to satisfy basic food needs, and the supplementary safety net has significantly eroded, problems that will worsen in the long run due to population aging.

Poor Targeting and Social Assistance

Cuba has given priority to universality over targeting but the former approach is no longer feasible. In spite of growing poverty, real social assistance expenditures shrank 29 percent in 1989-1998, the corresponding state budget share was only 0.7 percent of GDP in 2001, and the per capita assigned to social assistance was 9 percent of that for education, 12 percent of those for health care and pensions, and similar to those for sports and art. The provision of free social services to all the population is a waste of scarce resources because it benefits those who have very high income and savings, are awarded bonuses in dollars and/or receive foreign remittances. Such misuse is an impediment to grant more help to the most destitute. The free provision of social services needs to be transformed in order to take income into account and the unchained resources targeted to provide social assistance to the population under the poverty line, particularly the extreme poor whose income is insufficient to satisfy basic food needs, destitute women and children, pensioners with very low income and the poorest provinces.

Table 1. Comparison of Cuban Economic and Social Indicators with those of FCSC, Circa 2000

Countries [a]	HDI Rank	GDP rate 1990-01	GDP p/c PPP$	Adult Literacy	Enrolln't 3 levels	Infant Mortality	Access Water	Access Sanitation	Life Ex-pectancy
Slovenia	29	2.9	17,367	99.6	83	4	100	98	75.5
Czech Rep.	33	1.1	12,289	99.0	70	5			74.9
Hungary	35	1.9	12,416	99.3	81	8	99	99	71.3
Slovakia	36	2.3	11,243	100.0	76	8	100	100	73.3
Poland	37	4.5	9,051	99.7	84	8		100	73.3
Estonia	42	0.2	10,066	99.8	86	17			70.6
Croatia	48	1.1	8,091	98.3	68	8			73.8
Lithuania	49	-2.3	7,106	99.6	80	17			72.1
Latvia	53	-2.2	7,045	99.8	82	17			70.4
Cuba[b]	55	-1.2	4,519	96.7	76	7	95	95	76.0
Belarus	56	-0.8	7,544	99.6	77	17	100		68.5
Russian Fed.	60	-3.7	8,377	99.6	78	18	99		66.1
Bulgaria	62	-1.5	5,710	98.4	72	14	100	99	70.8
Romania	63	-0.3	6,423	98.1	69	19	58	53	69.8
Macedonia	65	-0.2	5,086	94.0	70	22			70.5
Armenia	76	-0.7	2,559	98.4	80	25			72.9
Kazakhstan	79	-2.8	5,871	98.0	77	60	91	99	64.6
Ukraine	80	-7.9	3,816	99.6	77	17			68.1
Georgia	81	-5.6	2,664	100.0	70	24			73.2
Turkmenistan	87	-2.8	3,956	98.0	81	52			66.2
Azerbaijan	88	2.7	2,916	97.0	71	74			71.6
Albania	92	3.7	3,506	84.7	71	27			73.2
Uzbekistan	95	0.0	2,441	99.2	76	51	85	100	69.0
China	96	10.0	3,976	84.1	73	32	75	38	70.5
Kyrgyztan	102	-2.9	2,711	97.0	68	53	77	100	67.8
Moldova	105	-8.4	2,109	98.9	72	27	100		66.6
Vietnam	109	7.6	3,556	93.4	67	30	56		68.2
Tajikistan	112	-8.7	1,152	99.2	67	54			67.6

[a] Countries are ranked based on the HDI; the first nine countries as "high human development" and the rest as "middle"; the World Bank ranks countries by GNP p/c PPP$, into high, middle and low. [b] GDP rate 1990-2000 from ECLAC (the series was discontinued; my estimate for 1990-2001 is –0.9 percent); GDP per capita PPP$ is a HDI rough estimate.

Source: GDP rates from World Bank 2003 (except Cuba from ECLAC 2000b) rest from UNDP 2002.

Table 2. Comparison of Cuban Economic and Social Indicators with those of LAC, Circa 2000

Countries [a]	HDI Rank	GDP rate 1990-01	GDP p/c PPP$	Adult Literacy	Enrolln't 3 levels	Infant Mortality	Access Water	Access Sanitation	Life Ex-pectancy
Argentina	34	3.7	12,377	96.8	83	18	79	85	73.4
Chile	38	6.4	9,417	95.8	78	10	94	97	75.3
Uruguay	40	2.9	9,035	97.7	79	14	98	95	74.4
Costa Rica	43	5.1	8,650	95.6	67	10	98	96	76.4
Mexico	54	3.1	9,023	91.4	71	25	86	73	72.6
Cuba [b]	55	-1.2	4,519	96.7	76	7	95	95	76.0
Panama	57	3.8	6,000	91.9	74	20	87	94	74.0
Colombia	68	2.7	6,248	91.7	73	25	91	85	71.2
Venezuela	69	1.5	5,794	92.6	65	20	84	74	72.9
Brazil	73	2.8	7,625	85.2	80	32	87	77	67.7
Peru	82	4.3	4,799	89.9	80	40	77	76	68.8
Paraguay	90	2.0	4,426	93.3	64	26	79	95	70.1
Ecuador	93	1.7	3,203	91.6	77	25	71	59	70.0
Dominican Rep.	94	6.0	6,033	83.6	72	42	79	71	67.1
El Salvador	104	4.5	4,497	78.7	63	34	74	83	69.7
Bolivia	114	3.8	2,424	85.5	70	62	79	66	62.4
Honduras	116	3.1	2,453	74.6	61	32	90	77	65.7
Nicaragua	118	2.8	2,366	66.5	63	37	79	84	68.4
Guatemala	120	4.1	3,821	68.6	49	44	92	85	64.8
Haiti	146	-0.4	1,467	49.8	52	81	46	28	52.6

[a] Countries are ranked based on the HDI; the first four countries as "high human development," the next 15 countries as "middle" and the last one as "low." [b] GDP rate 1990-2000 from ECLAC (the series was discontinued; my estimate for 1990-2001 is –0.9 percent); GDP per capita PPP$ is a HDI rough estimate.

Source: GDP rates from World Bank 2003 (except Cuba from ECLAC 2000b) rest from UNDP 2002.

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