



**Cuba Transition
Project**

**GROWING ECONOMIC AND
SOCIAL DISPARITIES IN CUBA:
IMPACT AND RECOMMENDATIONS FOR CHANGE**

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Cuba Transition Project – CTP

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Growing Economic and Social Disparities in Cuba: Impact and Recommendations for Change

Executive Summary

Introduction

Until 1989, Cuba had one of the most egalitarian economies and societies in Latin America, but the excessive emphasis on equality caused a lack of incentive to work, labor absenteeism, declining labor productivity, and erosion of the value of money. In the 1990s, the collapse of the USSR and the socialist camp, in combination with ill-conceived Cuban domestic economic policies, provoked the most severe socioeconomic crisis since the Cuban Revolution and prompted the implementation of moderate, but zigzagging market-oriented reforms. These changes resulted in significant increases in income inequality and other socioeconomic disparities, reversing many of the previous accomplishments of the Cuban regime. Although hard data on this issue are extremely difficult to obtain, this paper is based on a comprehensive collection of statistics, documents, surveys, scholarly articles, and interviews conducted by the author. The paper analyzes the impact of Cuba's market reforms on economic and social disparities in 1990-2002, and it proposes measures to alleviate present and future disparities based on two scenarios. Both scenarios involve a further move to the market, but one move would be considerably stronger than the other.

Growing Disparities and their Impact

This paper documents the following eight types of socioeconomic disparity in Cuba, focusing on the period of 1990-2002:

1. Income and wealth. (a) *Income*: Real average wage in the state sector shrank by 44 percent, but extreme salary/income differences grew from 829 to 1 in 1995, to 12,500 to 1 in 2002. (b) *Foreign remit-*

tances: They are received by 50-65 percent of the population in an amount estimated to average US\$103 per capita annually, similar to the average state wage in pesos, but blacks receive only \$31 on average. (c) *Bank accounts*: In 1997, just 3 percent of the accounts (those with more than 10,000 pesos) had 46 percent of total deposits, while 66 percent (those with less than 200 pesos) had only 2 percent of the deposits.

2. Regressive taxes. The tax reform of 1994 generated a shift from direct to indirect taxes (56 percent of income, mostly sales taxes); dollar remittances and earnings by those illegally employed are not taxed, resulting in a regressive impact on income distribution.
3. Deterioration and disparities in social services. (a) *Healthcare*: Deterioration in key indicators (morbidity, maternal mortality, malnutrition, infants born below weight) afflicts an immense majority of the population, but political leaders, the armed forces, and internal security forces are protected through separate special installations and care. (b) *Education*: Real budget expenses fell more than 38 percent; enrollment at the secondary level shrank by 10 percent, and at the higher level by 52 percent, jeopardizing future development; children of the elite are protected though having better schools. (c) *Social security pensions*: The average real pension dropped by 42 percent, and the supplementary safety net (subsidized food, adequate free healthcare, cheap public utilities) has severely deteriorated; the age of retirement is very low; workers don't contribute; the deficit and fiscal subsidy are staggering; the growing private sector is not covered; and the armed forces and internal security have a separate, privileged pension scheme and receive food and other goods. (d) *Housing*: The housing deficit has grown to 1.6 million, and 39 percent of the existing stock does not meet habitability standards; the quality of housing differs significantly within Havana neighborhoods and between Havana and the rest of the provinces.
4. Regional disparities. The City of Havana has better standards than the poorest eastern provinces (Las Tunas, Guantanamo, Granma); the latter endure higher poverty and unemployment, lower investment, worse housing, less access to water and sanitation, and proportionally worse physician ratios and hospital bed availability.
5. Racial disparities. Blacks receive less than one-half the dollar remittances received by whites; blacks are concentrated in poor neighborhoods and suffer discrimination in employment at tourist facilities.

6. Discrimination vis-à-vis foreigners. Cubans have no access to the first-rate healthcare available to foreign patients who pay in dollars, nor to tourist hotels and restaurants; and they cannot operate their own businesses even though the number of foreign joint enterprises is growing.
7. Differences in satisfaction of basic needs. Declining real wages and pensions, a cut in the provision of rationed goods to 10 days per month, higher prices in state dollar shops, and free (private) agricultural markets have led to increasing poverty; the average cost of the food basket rose by 113 percent, and daily consumption of calories and vitamins declined below minimum needs.
8. Poverty and social welfare. Cuban estimates of the incidence of poverty (“population at risk”) in Havana range from 15 percent to 67 percent; real social expenditure per capita has dropped by 40 percent; free social services and subsidies do not target the poor, but are provided to all the population; and expanded income and wealth differences have aggravated socioeconomic inequalities.

Recommendations for Change

Six policy areas are addressed in recommendations for a future transition under two scenarios: the medium term (modest economic changes within the current regime) and the long term (collapse of the regime and much stronger transition to the market orientation).

1. Overall macroeconomic reforms. Cuba must move forward to the market, but it is very difficult for the current regime to undertake strong market reforms like those in China and Vietnam (specific policies are suggested in the paper in case of that type of move to the market in Cuba in the medium term; in the second scenario (collapse of the regime), in the long term Cuba would move faster and deeper into a market economy).
2. Overhaul of the tax system. The following policies are recommended in both scenarios, although they have a better chance of success in the second: (a) Make the tax system more progressive by establishing a general progressive income tax, carefully evaluating the VAT before its implementation, maintaining taxes on tobacco and alcoholic beverages, and introducing an excise tax on hydrocarbons and tax on tourism. (b) Impose a tax on savings and remittances.

3. Changes in social services. (a) In healthcare, maintain the national health system, but reform it to make it financially solvent; improve its efficiency and quality of services; allow private activities and eliminate unfair inequalities; and target poverty-struck and low-income groups for free services (additional specific measures are recommended). (b) In education, maintain a strong public and free educational system, but reformed as in healthcare; adjust education to the demand of a competitive world market; and provide proper incentives in order to train needed technicians and professionals and to discourage enrollment in those fields where there is a surplus. (c) In social security pensions, raise the age of retirement to 65 regardless of sex; reintroduce worker contributions; conduct a financial-actuarial study; establish a minimum pension; facilitate extension of coverage to the expanding private sector; create an optional supplementary fully funded scheme for those who can afford the contributions. (d) In housing, provide freedom and incentives to allow people to repair homes, trade them, and build new ones; allow the poorest dwellers to stay in their houses, or grant them a means-tested housing allowance; and provide small loans for private construction and purchase of new homes.
4. Coping with remaining racial disparities. Open public national discussion in schools, at work, and in the news media on the issue of racial discrimination and ways to solve it, and allow blacks to organize associations and movements to defend their rights.
5. Introduction of a social safety net (SSN). Shift from indiscriminate subsidies (for food, healthcare, and education) for all the population to targeted aid for those in need through use of temporary income supplements, flat and means-tested.
6. The need for foreign aid. The recommended reforms will require economic and technical aid from international and regional organizations, a possibility that would be very limited or impossible in the first scenario, but would increase substantially in likelihood in the second scenario; the Club of Paris and other creditors should consider forgiving all or part of Cuba's debt, provided that needed socioeconomic reforms are implemented.

Introduction

Until the end of the 1980s, Cuba had one of the most egalitarian economies and societies in Latin America. Policies in pursuit of equality had been fairly continuous since the beginning of the Cuban Revolution, although the emphasis on egalitarianism reached a zenith at two points (during the “Moral Economy,” or “Revolutionary Offensive,” of 1966-1970 and during the “Rectification Process” of 1986-1990) and more moderate policies were applied at other stages. Nevertheless, the excessive emphasis on equality had adverse effects such as erosion in the value of money, lack of incentive to work, labor absenteeism, and declining labor productivity.

The collapse of the USSR and the socialist camp at the start of the 1990s, combined with ill-conceived domestic economic policies, provoked Cuba’s most severe socioeconomic crisis since the Revolution (GDP fell by 35 percent and foreign trade, by 75 percent) and led to a moderate economic reform. The Cuban government has implemented the following timid market-oriented policies, although with several reversals and a virtual halt since 1996: (1) legalization of the possession and circulation of hard currency – mainly dollars – featuring remittances from Cubans living abroad, more flexibility in their visits to the island, and government dollar shops and currency exchange agencies open to the public; (2) authorization of specific types of self-employment, although tightly controlled, including the operation of small restaurants, private taxi drivers, and so on; (3) transformation of state farms into state-controlled cooperatives (UBPC), granting of small land parcels to families, and reintroduction of free private agricultural markets (and artisan markets); (4) fiscal measures aimed at reducing the budget deficit, including new taxes, increased public-utility rates, reduction of state subsidies and some free services, consumer-goods price increases, and a reduction in the rationing quotas that previously provided essential, albeit meager, food to the population; and (5) a new foreign investment law with incentives for foreign capital investment, which has led to various joint ventures, particularly in tourism and mining (see Mesa-Lago 2000).

Cuba’s economic reform halted its economic decline and promoted a recovery, although at the end of 2001 GDP per capita was still 23 percent below the 1989 level and the same was true for most products and services except oil, nickel, and tourism. Growth slowed in 2001 and in the first quarter of 2002 (Mesa-Lago 2001, 2002). On the other hand, the

reform resulted in significant increases in income inequality and other economic and social disparities, thereby reversing many of the Revolution's previous accomplishments. In 1993, when the reforms began, Cuban President Fidel Castro stated: "One of the things for which the Revolution can be reproached is that it brought too much equality[;] it managed to establish egalitarianism and this had to be rectified because it wasn't working and it works even less in a situation of poverty. The more poverty [there] is, the less egalitarianism works ... These changes [the reforms introduced] were inevitable and we have to make some more which foster individualism, selfishness, make the value of money more important, [they] have alienating effects, all of this is a fact" (Castro 1993b, 4).

Data on economic and social disparities in Cuba are extremely difficult to get because the Cuban government has never published statistics on income distribution and is reluctant to release information on inequalities that may debunk one of the principal self-proclaimed accomplishments of the Revolution. The statistical yearbook published since the mid-1960s lacks hard data on economic and social inequalities. In the last 44.5 years, only two population censuses were taken (1970 and 1981), and their data on income, housing, and other variables are grossly insufficient for a sophisticated analysis of inequalities (the 1970 census did not publish data on race, although the issue was addressed in the questionnaire). After 21 years without a census, Cuba has scheduled the third one since the Revolution for September 2002, but its publication will take at least one year. Because of these limitations, this paper will rely on indirect statistics and on qualitative evaluations based on public documents, surveys, scholarly articles published in Cuba and elsewhere, and interviews by the author with recent visitors and immigrants from Cuba. The paper analyzes the reforms introduced in the 1990s and their impact on growing economic and social disparities, and then proposes measures to alleviate such disparities in the future when a further move to the market occurs.

Growing Disparities and their Impact

This section reviews the following socioeconomic disparities and their impact in 1993-2001: income and wealth, taxes, social services, provinces, race, satisfaction of basic needs, and poverty.

Income and Wealth Inequalities

Income. The Cuban government has never published statistics on income distribution, and the only available data are rough estimates of dubious reliability by two foreign scholars for selected years from 1962 to 1986.¹ Information is available, however, on real wages in the state sector in the 1990s. Based on the Consumer Price Index (CPI), a Cuban scholar deflated the nominal wage in 1989-1998 and estimated a decline of 44.4 percent, from 131 to 73 pesos, in the average real wage during that period (Togores 1999), which represents a decrease from \$20 to \$3, according to the CADECA exchange rates.² In addition, ECLAC estimated that real average wages in 1989-1998 declined 45.2 percent (ECLAC 2000a; for a comparison of the two estimates see Mesa-Lago 2001). At the same time that salaries in the state sector declined sharply, income in the small, but expanding, private sector grew significantly.

The income of internationally famous artists and musicians, private farmers, owners of small restaurants (*paladares*), private taxi drivers, self-employed workers, employees in tourist facilities, and speculators in the black market and activities similar to the black market has risen dramatically. Conversely, employees in the state sector (67 percent of the total labor force in 2000) have suffered a dramatic decline in their salaries. Based on interviews with recent Cuban visitors and immigrants to the United States, and converting the Cuban peso to U.S. dollars at the CADECA exchange rate in 1995, I estimated monthly incomes in several occupations in Cuba as follows: average wage earner, \$6; teacher, \$8 to \$9; surgeon or university professor, \$11 to \$12; tourist taxi driver, \$100 to \$467; private farmer, \$187 to \$311; owner of small restaurant, \$2,500 to \$5,000. Income inequality expanded significantly in the 1990s: In 1989, the maximum wage differential was 4.5 to 1, while in 1995, the extreme ratio I calculated between the highest income earner and the average wage was 829 to 1 (Mesa-Lago 1998). Cuban scholars have estimated that in 1994, in one day, the lowest income-worker in the informal

¹ In visits to Havana in 1980 and 1990, I asked Cuba's main statisticians why they did not publish income distribution data that could support the generalized view of equality in Cuba, and they answered that they were not interested.

² The official exchange rate is par: 1 peso for US\$1; CADECA refers to state exchange agencies created in October 1995, which charge a rate considerably higher than the official rate, but slightly lower than the black-market rate.

economy made the monthly average wage of a state worker (Carranza, Gutiérrez, and Monreal 1995).³

I have updated my measurement of monthly income inequalities to March-April 2002, based on interviews with recent Cuban visitors and immigrants conducted in Miami and Madrid (see Table 1).⁴ Pesos were converted to dollars using the CADECA exchange rate for those months (26 pesos per \$1). The table separates (a) the public sector, in which the range was from \$4 for the lowest salary/pension to \$23 for a cabinet minister (and \$31 for the best-paid policemen in the special corps protecting tourists from robbers); and (b) the private sector, in which the range was from \$40 for a domestic servant in an exclusive neighborhood to \$50,000 for the owner of a *paladar*. Although the measurements from 1995 and 2002 technically are not comparable, they suggest a significant expansion in income inequality: The extreme income difference was 12,500 to 1 in 2002, compared with 829 to 1 in 1995.

Not shown in Table 1 are the very variable rates, usually charged in dollars, of self-employed persons (electricians, plumbers, auto repairmen and so forth) who work at clients' homes. In an attempt to secure needed skilled manpower for strategic sectors, the government in 1994 started to pay bonuses in dollars to workers in the tourism, mining, electricity, ports, and tobacco industries. In 2000, some 1.2 million workers (about one-fourth of the labor force) received those bonuses (an estimated average of \$19 monthly), and 1.5 million got rewards in kind, such as food and clothing (Rodríguez 2000; Triana 2000). Even so, these incentives (and the even poorer stimuli at the UBPCs) cannot compete with the incentives available in the private sector; hence, the government has steadily increased its control, taxes, and inspections for the self-employed, owners of *paladares*, and other private workers. Members of the armed forces receive monthly allocations of food, and they can buy clothing and other goods at low prices.

³ A survey on the economic conditions of households in the city of Havana in March 2000 found that (1) the average income per capita was 198 pesos (\$9.90 at the CADECA exchange rate), (2) 53.4 percent of households had a per capita income between 50 and 150 pesos (\$2.50 to \$7.50), and (3) 14 percent had an income less than 50 pesos (Oficina Territorial de Estadísticas de la Ciudad de La Habana, *Encuesta sobre la situación económica de los hogares*,” cited by Pérez Villanueva 2001).

⁴ I asked a dozen interviewees to describe the lowest and highest salary/income for the various occupations in pesos and/or dollars. I then compared all the answers and found them to be fairly consistent; however, this cannot be considered a formal survey.

Table 1
Monthly Income in Havana, Cuba (in Pesos and U.S. Dollars):
March-April 2002

Occupations	Pesos (tart & op)	U.S. Dollars^a (26 pesos = \$1)
State Sector		
Lowest pension	100	4
Lowest salary	100	4
Teacher (elementary and secondary)	200-400	8-15
University professor	300-560	12-22
Engineer, physician	300-650 ^b	12-25
Garbage collector	300-500	12-19
Policeman (regular)	200-500	8-19
Policeman (security for tourists)	700-800	27-31
Officer, armed forces	350-700	13-23
Cabinet minister	450-600	17-23
Private Sector		
Domestic servant	520-1,040 ^c	20-40
Private farmer	2,000-50,000 ^c	77-1,923
Transporter (truck with 20-60 seats)	10,000-20,000	385-770
Prostitute (<i>jinetera</i>)	^d	240-1,400 ^g
Landlord of room, apartment, or home	^d	250-4,000
Artist or musician (known abroad)	^d	600-6,000 ^f
Owner of <i>paladar</i>	^d	12,500-50,000 ^h

Source: Interviews by the author, conducted in Miami and Madrid with recent visitors and immigrants from Cuba.

^a Rounded.

^b Older physicians may have signed an agreement with the government to allow a private practice, which earns 10 to 20 times their salary in a public job.

^c Those working in exclusive neighborhoods such as Miramar charge the maximum; in addition, they receive room and board.

^d Normally charged in U.S. dollars.

^e Those with the smallest plots earn the lowest income, and those who have larger plots, grow crops in high demand, or raise hogs earn the highest income.

^f Unknown artists earn \$10 to \$13 monthly. Conversely, Compay Segundo (Buena Vista Social Club) charges \$6,000 net for a one-night performance; Silvio Rodríguez, Jorge Perugorria, and the Van-Van have contracts paying as much as \$200,000, with a percentage of the income going to the government.

^g Monthly estimate based on \$10 to \$50 per night, \$70 to \$350 per week.

^h Based on \$500 to \$2,000 daily; very few are left earning the highest sum.

Incentives paid to employees in foreign-operated enterprises or joint ventures are considerably better than in the state sector, usually 15 to 20 convertible pesos⁵ per month and a basket with food and other goods. Those working in the Sherritt International nickel plant in Moa (Pedro Soto Alba) receive \$30 to \$35 monthly, and managers earn \$50. Many of these enterprises pay additional monthly sums under the table to keep good workers, paying, for instance, \$20 to \$25 to blue-collar workers, \$100 to \$150 to secretaries, \$200 to \$300 to salespersons, and \$600 to \$800 to managers; salespersons and managers also receive commissions on collected sales, drive a company car, and get an allotment of 200 liters of gasoline. High officials of the Export/Import Bank (CIMEX) are paid fully in dollars (Interviews by the author conducted in Miami and Madrid, March-April 2000).

The income inequalities explained above and the lack of proper incentives in the state sector have several adverse effects: regressive income distribution; low labor stability; decrease in productivity (measured in thousand pesos per worker, productivity declined by 30 percent in 1989-1993, then partly recovered; however, in 2000, it was still 12 percent below the 1989 level – CEPAL 2000, 2001); decline in student enrollment, particularly in higher education (see the section on deterioration and disparities in social services); and more crime.⁶

Remittances. In 1993, the government authorized the reception, possession, and circulation of foreign currency (essentially dollars) and, later on, the opening of bank savings accounts in dollars; these measures resulted in a dual monetary system. Cubans living abroad (mainly in the United States) began to send remittances to relatives in the island by three different channels: (1) the most common method, personal delivery of

⁵The "convertible" peso was introduced in the mid-1990s as an alternative domestic currency to the regular peso, officially exchanged at par with the U.S. dollar, but the population prefers the U.S. dollar because of its generalized acceptability. The convertible peso is not actually convertible, in the sense that its value is not set by supply and demand in the world market.

⁶Rising inequalities, combined with a massive arrival of tourists, account for an increase in crime, while the opening of the market to foreign investment has led to fraud and corruption among public officials. Managers and workers in state enterprises steal goods for their own consumption, for sale in the black market, or as inputs for the self-employed; stealing from crops also is frequent. In 1997-1999, some 6,000 policemen were added to the force just in the City of Havana; drug trafficking and pimping became punishable by death; and prostitutes were cleared from the streets for a while. A few scandals involving bribery by government officials have made the press, and severe sanctions were imposed, but this is only the tip of the iceberg (Mesa-Lago 2000; Trumbull 2000).

cash, either by relatives of Cubans visiting the United States or by Cuban-Americans visiting the island; (b) transportation of dollars by individuals who travel to Cuba, either as a favor or for a fee (*mulas*); and (c) direct transfers made by wire or by agencies for a fee. The first two types of transfer cannot be limited, while the third has a maximum set by the U.S. government of \$300 annually. Although no accurate information exists, conventional wisdom is that most remittances are made through the first two channels.

The amount of remittances cannot be calculated precisely because of the informal channels mainly used. An indirect method of calculation uses information from Cuba's state "dollar shops" (*tiendas de recuperación de divisas*, or TRD), which sell merchandise to Cubans and visitors, and from the CADECA agencies that exchange currency. According to a well-known Cuban economic scholar, "Official Cuban statistics on the value of remittances do not result from a real register of transactions, but ... merely [constitute] an estimate with a significant margin of error." These figures ranged from \$300 to \$500 million per year in 1995-1998 (Monreal 1999, 50, 53). ECLAC has published the following series of estimates, which obviously suffer from the same flaws as the Cuban data: \$573 million in 1995, \$630 million in 1996, \$670 million in 1997, \$690 million in 1998, \$700 million in 1999, and \$720 million in 2000 (CEPAL 2001). The amount is said to have declined since the events of September 11, 2001, due to the interruption/decrease in international travel and the world recession. Despite the uncertainty of these figures, remittances seem to be the major source of hard currency in Cuba after gross revenue from tourism, surpassing the value of nickel and sugar exports (ONE 2001). Also speculative are data on the percentage of Cubans who receive remittances; estimates place the figure at 32 to 49.5 percent in 1997, 56.3 to 65 percent in 1998, and 62 percent in 1999 and 2000 (CEPAL 2000; Togores 1999; Pérez Villanueva 2002). In 1999, sales in dollar shops were reported at \$1 billion, that is, \$300 million more than the remittances estimated by ECLAC for that year; the difference was considered to have come from bonuses paid in dollars, earnings of *paladares*, house rentals, black market operators, and so forth (Trumbull 2000).

If the remittances in 2000 were \$720 million and 60 percent of the population (6.7 out of 11.2 million inhabitants) received them, an average of \$107 per capita could be estimated. The latter was close to the \$121 average wage in the state sector at the CADECA exchange rate (21 pesos to \$1) at the end of 2001. This would mean that the average receiver of

remittances could either stay home and have the same income as the average state worker or double his/her income if employed. Obviously, some Cubans receive more than the guesstimate of \$107; some receive less; and still others get nothing, resulting in significant adverse impacts such as regressive income distribution and disincentives to work, particularly in government jobs. The question of how remittances are distributed is impossible to answer herein, but a reasonable hypothesis is that most recipients are whites who live in Havana. Information gathered in interviews with recent visitors and immigrants from Cuba consistently indicates that the farther one is from the capital city, the less the remittances received; this seems to be true even in Santiago, Cuba's second largest city, which is in the easternmost part of the country. Concerning race, according to the U.S. census of 1990, of Cuban immigrants living in the United States, 83.5 percent were whites and virtually all the rest (16.5 percent) were blacks. According to the latest Cuban census of 1981, 66 percent of the population was white and 34 percent nonwhite (virtually all black), but it has been argued that the census underestimated the black population. Assuming that both U.S. and Cuban proportions were correct and had not changed by 2000, and assuming that remittances are evenly distributed regardless of race, whites in Cuba received \$668 million (out of a total \$720 million), or \$81 per capita, and blacks received \$120 million, or \$31 per capita. If the proportion of the black population in Cuba were indeed higher than that given by the 1981 census, the gap between the two per capita figures would be even wider (the idea for this estimate came from De la Fuente 2001).

When the authorization to receive dollars from abroad was fresh, Fidel Castro criticized the inequalities and privileges generated by his policy, but justified it nevertheless: "We need understanding, and not [to] eat our hearts out. That would never be the correct attitude for a revolutionary.... Revolutionaries make sacrifices throughout their lives" (Castro 1993a). A decade later, even when the recipients of remittances probably are a majority of the population and the "revolutionaries eating their hearts out" are a minority, this disparity continues to irritate. Seeking to equalize the situation, in 2001 the Communist Youth proposed that recipients of remittances be denied access to free health and education or to subsidized goods through the rationing system, but the proposal was rejected, probably because of difficulties in implementation due to lack of control over those who receive remittances (Leon 2002).

Wealth: Bank Accounts. No data are available on wealth distribution

in Cuba; however, a Cuban economist has noted: “The structure of the bank accounts shows an expansion of the wide gap among various groups of savers, which in turn is a reflection of differences in income distribution ... This implies inequality in opportunities, which five years ago did not depend on income differences, but only on economic and social opportunities to individuals, such as education.... During the crisis, factors such as income and wealth have had negative effects and [have] diminished the impact of equal opportunities” (Togores 1999, 11). This paper already has analyzed income inequalities. An indirect measure of wealth in Cuba is the bank savings accounts in branches of the state’s Banco Popular de Ahorro: In 1994, 54 percent of the population had 6.3 billion pesos in those accounts, but in 2000 these figures had declined to 37 percent of the population and 5.2 billion pesos (based on ONE 2001 and Pérez Villanueva 2002), and the concentration of deposits in those accounts had increased considerably.

Table 2
Distribution of Bank Savings by Amount of Deposits: 1994 and 1997
(in pesos and percentages)

Bank Savings (in pesos)	Up to 200	201- 2000	2001- 10,000	Over 10,001	Total
1994					
Total accounts (%)	61.7	24.2	11.9	2.2	100.0
Total savings (%)	4.4	17.8	41.8	36.0	100.0
1997					
Total accounts (%)	65.9	20.9	10.2	3.0	100.0
Total savings (%)	2.4	12.6	38.6	46.4	100.0

Source: Togores 1999.

Table 2 compares the percentage distribution of bank savings by the level of deposits, demonstrating their increasing concentration: In 1994, 61.7 percent of the accounts had deposits up to 200 pesos (4.4 percent of total savings), and 2.2 percent had deposits above 10,000 pesos (36 percent of total savings); in 1997, 65.9 percent of the accounts had deposits up to 200 pesos (2.4 percent of total savings), and 3 percent had deposits above 10,000 pesos (46.4 percent of total savings). In 1994, no accounts had more than 50,000 pesos, but in 1997, 0.1 percent of the accounts had

deposits above that sum, equivalent to 5.3 percent of total savings. More recent complete data on savings could not be obtained, but in 2000, 13 percent of all accounts had deposits above 2,000 pesos, equivalent to 85.4 percent of total savings, compared with only 14 percent and 77.8 percent, respectively, in 1994, which represents a clear increase in the concentration of savings (Pérez Villanueva 2002).

Interest rates paid for CDs in pesos (700 million in 2000) ranged from 3.5 percent for 3 months to 7.5 percent for 36 months (75 percent of total CDs), rather high rates in view of the closed Cuban economy and its very low rate of official inflation (BCC 2001). In addition, estimates place the amount in dollar accounts at \$200 million, and part of the population probably hoards a large amount of dollars at home (Ritter 2002). Interest rates for CDs in dollars ranged from 1.75 percent for 6 months to 2.75 percent for 36 months in 2000 (CEPAL 2001). High interest rates contribute to the increasing concentration of bank deposits and CDs (Triana 2000).

Regressive Taxes

Prior to the crisis, government revenue mainly was generated by non-tax revenue such as the transfer of state enterprise profits, but also by indirect turnover taxes (“circulation” taxes) collected by state enterprises and by social security contributions, labor-benefits contributions, and foreign trade taxes. Only 1.7 percent of revenue came from direct “population taxes” (charged on some public utilities). The crisis provoked the closing of a large percentage of enterprises or a significant decline in their output; hence, government revenue plummeted. To cope with the problem of declining revenues, a tax reform law enacted in 1994 changed the sources of fiscal revenue. A sales tax replaced the turnover tax, and additional taxes were imposed on alcohol and tobacco, profits of all enterprises, labor and social security (paid by enterprises), exploitation of natural resources (e.g., mining), hard-currency earnings from abroad (excluding remittances), real estate, inheritances, and public utilities. Although worker contributions for social security were included in the law, enforcement was suspended for social and political reasons. Several taxes were imposed later on self-employment, paladares, house rental for tourists, and other private activities (Mesa-Lago 2000).

Table 3
Percentage Distribution of Tax Revenue by Source: 2001

Taxes	%
Indirect	55.7
Sales	29.8
Alcohol and tobacco	20.5
Public utilities and services	5.4
Direct	44.3
Profits	15.4
Social security	11.0
Labor ^a	9.1
Airport, highways, and others	6.2
Personal income	2.6
Total	100.0

Source: Based on MINFP 2001; CEPAL 2001.

^aSickness and paid maternity leave, labor safety, and hygiene.

The essential outcome of the tax reform was a shift from direct to indirect taxes. Thus, in 2001, the percentage distribution of tax revenue was as follows: 56 percent from indirect taxes, of which 30 percent was on sales, 21 percent on alcohol and tobacco, and 5 percent on public utilities (electricity, water, telephone); and 44 percent from direct taxes, of which 20 percent came from social security and labor contributions, 15 percent from profits, 6 percent from various fees, and only 2.6 percent from personal income (see Table 3). Most taxes, therefore, are indirect and have a regressive effect on income distribution because they are proportionally heavier on those who have lower income (Pérez Villanueva 2002). Those who paid personal taxes in 2000 were 107,000 self-employed workers, 33,830 private transporters, 16,250 artists, 12,000 land lessees, 7,740 small sugar producers, and 1,730 operators in the free agricultural markets (CEPAL 2001). In total, these 176,820 workers in the private sector, tantamount to less than 4 percent of the labor force, paid 2.6 percent of total taxes. The heavy taxes and fees on self-employed workers and owners of *paladares* have gradually reduced their numbers and their contributions. For instance, the number of self-employed workers declined from 208,500 in November 1995 to 109,562 in 2000, and their tax contributions dropped from 207 to 135 million pesos (Espinosa

2001b). Those who are paid in dollars or receive bonuses in that currency or are illegally self-employed (nonregistered, probably the large majority in this activity) or are speculators in the black market do not pay personal taxes.

Deterioration and Disparities in Social Services

Cuban social services policy from the beginning of the Revolution until the end of the 1980s was characterized by continuous expansion in coverage, free provision, and rising fiscal costs, except for housing. ECLAC explains: “In part the viability of the social policy was facilitated by the special and privileged relationship that Cuba had during [three] decades with the socialist countries, particularly with the USSR.... [They] contributed resources that raised the welfare of the population above the level of economies with the same and even higher income levels.... [In addition] there was the political decision of building an egalitarian society.” According to ECLAC, such strategy was not exempt from errors that had negative welfare effects, among them the imposition and expansion of rationing, the deterioration of the basic infrastructure, the significant housing deficit, and inefficiencies that did not impede the continuous expansion of free services (CEPAL 2000, 275-276). I have estimated that in 1960-1990, Cuba received from the USSR alone \$65 billion, 40 percent in nonrepayable price subsidies and 60 percent in loans that were not paid. The disappearance of the USSR, the socialist camp, and the CMEA provoked the ensuing crisis and has had a severe adverse effect on social services despite the government’s attempt to protect them (Mesa-Lago 2000). The deterioration in social services and its impact on inequality and other aspects of Cuban society are analyzed below.

Health Care. It is widely recognized that, under the Revolution, Cuba significantly improved its health services and standards, but it is little known that in 1958 Cuba already led Latin America in most of the same indicators. In the 1960s, the government established a National Health System (NHS) that rapidly universalized health care for all the population, providing free services except for medicines for patients not hospitalized. In the 1980s, the introduction of the Family Doctor Program expanded primary services considerably and brought them closer to the patients. From 1959 to the end of the 1980s, virtually continuous

improvement took place in all health indicators. The number of physicians rose from 9.2 to 33.1 per 10,000 inhabitants; hospital beds went from 4.2 to 5.3 per 1,000 inhabitants; the hospitalization rate increased from 12.6 percent to 15.5 percent. Infant mortality rates declined from 33.4 to 11.1 per 1,000; maternal mortality rates declined from 125.3 to 26.1 per 100,000 births; and mortality rates went from 52.9 to 46.3 per 1,000 for the population aged 65 and older. Most contagious diseases were eradicated or else became either insignificant or dramatically reduced (diphtheria, malaria, measles, rubella, scarlet fever, tetanus, tuberculosis, typhoid fever, and polio), although other diseases increased (acute diarrhea and respiratory diseases, venereal diseases, hepatitis, and chicken pox). Furthermore, the gap between urban and rural areas narrowed significantly in terms of facilities, personnel, and health standards (Mesa-Lago 2000).

The crisis of the 1990s adversely affected health care and several of its indicators. While the physician rate continued to increase and the infant mortality rate declined throughout 1990-2001, various indicators slipped, with most of them (including maternal and over-65 mortality rates) worsening until 1993-1995 and showing some improvement later, but in some cases not recovering the pre-crisis level. The hospital bed rate fell from 5.3 to 4.7, and the hospitalization rate fell from 15.5 to 11.9; the maternal mortality rate rose from 26.1 to 55.7; the mortality rate of the population aged 65 and over rose from 48.4 to 55.7 and later dropped back to 49.7. Although the large majority of diseases remained in check, all the contagious diseases that had exhibited a rising trend before the crisis increased further; also, tuberculosis reappeared, and the AIDs rate increased. Causes of this deterioration included the severe scarcity of medicine, spare parts for equipment, inputs for tests, anesthesia, and other essentials; the breakdown of the basic infrastructure of potable water and sewerage, which had been neglected before; the lack of prophylactics and the reduction in vaccinations; and serious nutritional deficiencies (on the latter, see the section on differences in satisfaction of basic needs). These problems have resulted in long waiting periods for surgery, and the good, but very costly, family doctor program lacks medicines essential for treating its patients. In addition, while real healthcare expenditures per capita increased by 162 percent in 1976-1989, they shrank by 75 percent in 1989-1993, and despite a later improvement, in 1999 they still were 21 percent below the 1989 level. Finally, inefficiency increased, and thus hospital occupancy dropped from 83.9 percent to 69.4 percent, and the

average days of stay rose from 9.9 to 10.4 although it declined to 9.4 in 2000 (Mesa-Lago 2000, 2003; Sixto 2002).

Parallel to the NHS, a separate healthcare scheme covers the armed forces and the top hierarchy of the government and the Communist Party with better services and care than the national system. In addition, the pressure to get badly needed foreign exchange moved the government to introduce and expand paid healthcare for foreigners (“health tourism”), and they receive excellent treatment. The crisis has not affected these two programs. Earlier, the programs were not resented so much because of the universal, free, and high-quality services of the NHS; now, however, in the midst of severe scarcity of medicine and deterioration of healthcare, they have become an irritating expression of inequality.

Physicians and university graduates are prohibited from practicing their professions on a self-employed basis (they can work in other authorized occupations), which is absurd in view of their surplus numbers, the dramatic drop in their state salaries, and the need for more personalized care. Nevertheless, physicians who graduated before the Revolution and had a private practice may have been allowed by the government to keep it (though most of them have died or retired by now), and some who graduated after 1959 illegally conduct private practice. Therefore, people who earn or receive dollars do have access to private medicine and can buy all kinds of medical products in the dollar shops, but those who earn state salaries cannot afford those same goods and services and are caught up in another source of inequality.

Education. The educational budget in real pesos contracted by 38 percent in the 1989-1997 period, which led to scarcity of educational materials (books, pencils, paper), paralysis in investment and maintenance of the physical plant, deterioration of equipment and laboratories, lack of spare parts, reduction in transportation and meals, and decline in the quality of services (CEPAL 2000). Enrollment in primary education decreased slightly, from 100 percent to 99 percent in 1989-1999. Enrollment in secondary education fell from 90.2 percent to 74.5 percent in 1989-1994, but rose again in 1997 to 80 percent, still 10 percentage points below the 1989 level (based on ONE 1998-1999; UNESCO 2001). The children of the elite escaped such deterioration, for the most part, since the best schools (for instance, the Lenin school in Havana) were protected from drastic cuts. In addition, high-income groups had the means to hire private tutors to teach their children.

The income inequalities examined above (see the section on dispari-

ties in income and wealth) have inverted the income pyramid in Cuba. Prior to the crisis, physicians, engineers, and university professors were at the top of the ladder, but now domestic servants, transporters, owners of *paladares*, and prostitutes earn several times more; therefore, many professionals have abandoned their jobs and shifted to well-paid occupations. University enrollment has declined sharply because it does not pay to spend six years studying medicine or five years studying pedagogy and then after graduation face serious difficulties in finding a professional job, or else settle for a miserable salary in the state sector.

Table 4 shows the decrease in university enrollment between the 1989-1990 academic year and the period of worst decline, as well as small increases that occurred in the 2000-2001 academic year. Overall enrollment shrank by as much as 58 percent and in 2000-2001 still was 52 percent below the previous level; some fields, such as pedagogy, fell by as much as 70 percent. As a percentage of the population of university age, enrollment decreased from 23 percent to 12 percent between 1987 and 1997 (Mesa-Lago 2000; UNESCO 2001). The impact of these declines will not be felt immediately because of a glut in certain professions such as medicine and teaching, but in the long run Cuba will experience a shortage of professionals with adverse effects on economic growth.

Table 4
Decline in University Enrollment in Cuba: 1989/1990-2000/2001

Sciences	1989/90	1995/00 ^a	2000/01	% ^b	% ^c
Natural and Math	6,399	4,019	3,828	-37.2	-40.2
Agricultural	11,606	4,680	5,125	-59.7	-55.8
Economics	18,789	4,893	11,061	-74.0	-41.1
Technical	29,819	13,020	14,514	-56.3	-51.3
Medical	37,305	23,457	24,606	-37.1	-34.0
Pedagogy	115,529	35,068	38,892	-69.6	-66.3
Total ^d	242,366	102,598	116,734	-57.7	-51.8

Sources: Based on CEE 1991; ONE 1998, 2001.

^a Lowest enrollment during the covered period.

^b Percentage of 1995/2000 over 1989/1990.

^c Percentage of 2000/01 over 1989/1990.

^d Excludes humanities, social sciences, and physical education.

Social Security Pensions. The state unified, standardized the entitlement conditions for, and centralized the administration of 54 social insurance pension funds (old age, disability, and survivors) that existed before the Revolution. Coverage was extended from 63 percent to 91 percent of the labor force between 1958 and 1989; the only persons excluded from mandatory coverage were the self-employed, private farmers, and unpaid family workers, who all could join voluntarily. By the end of the 1980s, the Cuban pension system was probably the most universal, liberal, and costly in Latin America. The age of retirement is 55 for females and 60 for males (among the lowest in the region). Salaried workers do not contribute, and employers pay only 12 percent of the payroll (one-fourth of the total contribution paid in comparable Latin American countries, such as Argentina, Costa Rica, and Uruguay). Although pension payments were small in 1989, the pensions were supplemented by an ample safety net, subsidized prices for consumer goods, free health care, free or cheap housing, and low cost of transportation and other public utilities (Mesa-Lago 2000).

The apparently positive features of the pension system turned negative because of the crisis and the aging of Cuba's population. The non-state sector grew from 5.3 percent to 19.4 percent of the labor force in 1989-2000; of those, only a small segment is covered, and as the non-state sector expands, coverage diminishes. Self-employed workers can join, but by paying 12 percent of their income while state-salaried workers pay nothing. The low retirement age, combined with a steady rise in life expectancy, has resulted in the longest average pension period in Latin America: 20 years for men and 26 years for women. In addition, by 2025, Cuba is expected to have the oldest population in the region: one elder citizen per four persons in the population. Because of the rising cost of living and the small increase in nominal pensions, real pension values shrank by 42 percent between 1989 and 1998, and the safety net has largely disappeared due to limitation of rationed goods to 10 days per month, the increasing cost and difficulty of transportation, and the deterioration in healthcare. The cost of social security in relation to GDP rose from 1.3 percent to 2.6 percent between 1986 and 1998, and insufficient contributions have provoked a growing deficit (up from 26 percent to 40 percent of total expenditures), which must be financed by the state. To cover expenses, the actual rate of enterprise contribution had to be raised from 12 to 20 percent in 2000, and it will have to keep increasing as the ratio of active workers to one pensioner dwindles from 6.6 in 1970 to

approximately 1.5 in 2025. To cope with these problems, the government is discussing a legal draft proposal for reform of the system, whose main features are a raise in retirement age to 60 for women and 65 for men in 20 years, introduction of worker contributions (these were approved by law in 1994, but have not been enforced), and an increase in the nominal pension. These measures are grossly insufficient to cope with the system's flaws (Peñate and Gutiérrez 2000; Benítez 2001; Mesa-Lago 2003).

In the same way as for healthcare, the armed forces and internal security workers have a parallel pension scheme that is much more generous and proportionally costlier than the general system. For instance, if a man enters the armed forces at age 17 and accumulates 25 years of service, it is possible for him to retire at the age of 43, or 17 years younger than in the general system; the average pensioner is retired for 37 years, or 12 years more than his or her years of service. The pension is equal to the last year's salary, and the pensioner can work in the civil sector; in the general system, the pension is based on the last five years of salary, and pensioners cannot perform salaried work in the state sector. It has been estimated that in 1995 this armed forces/internal security retirement scheme cost as much as the deficit of the entire general system. To finance it, a salary contribution of 118 percent would have been needed (actually, the state has financed all expenses of this scheme). In 2001, more than 1.4 million pensioners in the general system were receiving an average monthly pension of 110 pesos (\$4.20 at the CADECA exchange rate). Estimates of how much they need per month vary from 190 pesos to buy essential nutrients (see the section on differences in satisfaction of basic needs) to 432 pesos to cover all basic needs; therefore, the average pension provides only from one-half to one-fourth of what is needed. These pensioners cannot survive unless they receive dollars from abroad or help from their families, and they are probably the group enduring the most difficult conditions in Cuba today. In contrast, the armed forces/internal security scheme constitutes a costly privilege enjoyed by a tiny minority (Mesa-Lago 2003).

Housing. As one Cuban economist says, "Housing is recognized as the gravest social problem afflicting the nation.... The accumulated needs [housing deficit] are substantially higher than the new housing construction, among other reasons because of the deterioration in the existing stock" (Triana 2000, 10). Statistical series on housing have been changed several times, which makes it difficult to assess annual dwelling construction⁷; in addition, the size and features of the units built have not

been released. Even before the crisis (1985), there was a deficit of 880,000 homes. In 1991-1992, the number of dwellings built decreased by one-half in relation to 1990 (and cooperative housing shrank by 85 percent); hence, the deficit should have surpassed the 1-million mark by then (1992). Although the number of units built increased by 20 percent between 1993 and 2000 (or about 39,000 annually) in relation to 1990, that number not only failed to reduce the existing deficit, but actually increased it because population growth and the deterioration of existing stock required construction of 100,000 dwellings per year just to keep up with demand (Mesa-Lago 2000; CEPAL 2001; Bauza and Collie 2002). Table 5 estimates that the cumulative housing deficit in Cuba jumped to 1.6 million in the 1981-2000 period. This estimate does not deal with qualitative deficiencies, such as houses that do not meet habitability standards; these deficiencies are estimated at 39 percent, well below the regional average of 54 percent (Dammert 1997). Conflicting data exist for the number of houses destroyed or damaged by Hurricane Michelle in November 2001; the official numbers are 12,579 destroyed and 45,000 damaged, but other estimates place the number of dwellings destroyed or damaged at 450,000. In any case, the construction of only 20,500 dwellings is planned for 2002 (Rodríguez 2000; Bauza and Collie 2002).

Table 5
Estimate of the Housing Deficit in Cuba: 1981-2000 (in thousands)

	Population	Dwellings	Deficit
1981	9,724	2,290	877
1981-2000			
Houses built	794 ^a		
Estimate of houses destroyed (10%)	79		
Net houses added	715		
2000	11,217	3,005	
Difference (2000 - 1981)	1,493	715	778
Cumulative deficit (1981 + 2000)			1,655

⁷In 1988, Cuba's statistical yearbook dropped the series of houses without a certificate of habitability built by the population, which accounted for 46 percent of total houses constructed in 1981-1987 (ECLAC does not include these homes in its series).

Sources: 1981 from Mesa-Lago 2000; 1981-2000 based on CEE 1991 and ONE 1998 to 2001.

^aBased on total houses built in 1981-1987, including those without certificates of habitability; in 1988-2000, those without certificates were not reported. If the average number of houses built in 1981-1987 is added to the 1988-2000 houses built, the net houses added increases to 983,000, and the deficit in 2000 is 510,000, for a cumulative deficit of 1.4 million instead of 1.6 million.

Differences in housing are significant in Havana neighborhoods. In neighborhoods where high-income groups live (Miramar, Nuevo Vedado, parts of Vedado), good and well-maintained homes are seen, but in low- and middle-income neighborhoods (Habana Vieja, Centro Habana, Cerro, la Víbora), which contain the majority of the population, houses are in terrible shape, often propped up and surrounded by debris from collapsed dwellings. In 1999, of 575,795 dwellings in the city of Havana, 57 percent were in good shape and the remaining 43 percent were “so-so” (*regular*) or in bad shape, but in old Havana (Habana Vieja), 75 percent were ranked so-so or bad (Pérez Villanueva 2001). In the two least-developed provinces, Guantanamo and Granma, the proportion of dwellings in good shape was 34 percent and 38 percent, respectively (see next section, on regional disparities).

Those who earn or receive dollars can buy construction materials, paint, and other supplies needed to maintain and repair their homes, or they can swap homes, paying considerable sums under the table to get better houses. Conversely, those who get no dollars and receive a regular salary in pesos cannot afford materials for repairs, so their homes gradually deteriorate and often collapse. (Note that the state agency in charge of house repairs is virtually useless.) Because of the government’s failure to provide housing, few changes have occurred in the prerevolutionary distribution of dwellings by race. Consequently, the majority of blacks continue to be concentrated in poor neighborhoods, such as old Havana, with overcrowded and dilapidated housing (De la Fuente 2001).

Regional Disparities: Provinces

Socioeconomic disparities among Cuba’s 14 provinces have been reduced during the past 40 years, but several indicators shown in Table 6 demonstrate that the three eastern provinces (Las Tunas, Granma, and Guantanamo) still are considerably below the remaining 11, while the City of Havana continues to rank best in the immense majority of indicators. According to a study on poverty in Cuba, in 1996, the percentage of the urban population at risk in Havana (11.5 percent) was one-half of the percentage at risk in the eastern provinces (21.7 percent), which include the three provinces in Table 6. An index that measures the homogeneity of the 14 provinces in terms of numerous socioeconomic indicators ranks Havana as the most homogenous and Granma as the least, followed by the other two eastern provinces. While Havana’s population is 100-per-

cent urban, the urbanization of the other three provinces is slightly above 40 percent. Investment per capita in Havana is three times that of Las Tunas and five times that of Guantanamo and Granma. While 56 percent of the houses in Havana are in good shape, only 34 percent have that rating in Guantanamo, and 38 percent in Granma. Home connection of potable water is 99 percent in Havana, but decreases to 48 percent in Las Tunas and Guantanamo. Access to sewage in Havana is 64 percent, but only 18 percent in Las Tunas and 26 percent in Granma. Havana has 91 physicians per 10,000 inhabitants, but the other three provinces have only 41 to 44 ; and Havana has 9.2 hospital beds per 1,000 inhabitants, but the other three provinces have only 4.0 to 4.4 beds.

Table 6
Socioeconomic Disparities among Extreme Provinces: 1996-2000

Indicators of Disparity	City of Havana	Las Tunas	Guantanamo	Granma	Cuba
Urban population at risk, 1996 (%)	11.5	21.7 ^c	21.7 ^c	21.7 ^c	14.7
Human Development Index, 1996 ^a	0.7278	0.4348	0.3724	0.4641	0.7260
Index of homogeneity, 1997 ^b	1.000	0.282	0.000	0.034	
Urban population, 2000 (% of total)	100.0	41.1	42.3	40.2	24.7
Investment per capita, 1997 (pesos)	435	130	87	89	
Housing in good shape (% of total)	56.1	44.3	33.8	38.0	
Water, home connection, 1997 (%)	98.6	48.0	48.1	65.5	93.8
Access to sewage, 1997 (%)	63.7	18.1	38.4	25.7	
Physicians, in 2000 (per 10,000 inhabitants)	90.7	43.3	41.3	44.0	58.2
Hospital beds, in 2000 (per 1,000 inhabitants)	9.2	4.0	4.4	4.3	5.2
Net internal migration, 1997 (%)	+7.3	-3.1	-7.4	-11.4	

Sources: Based on Informe 1997; CIEM 1997, 2000; and ONE 2001.

^a Estimated in Cuba following the methodology of the HDI.

^b Homogeneity of provinces based on multiple socioeconomic indicators: most homogeneous, 1, and least, 0.

^c Oriental (eastern) provinces.

In addition, Havana had the highest income per capita in 1997, while the other three provinces had the lowest. In 2000, the three worst provinces had the lowest average elementary school enrollment rates and the highest infant mortality and under-5 mortality rates per 1,000 live births. Granma also had the highest mortality rate among those aged 65 and over and the highest open unemployment rate (14 percent, or 2.5 times the national rate). Guantanamo had the highest proportion of infants born underweight in Cuba (ONE 2001; MINSAP 2001; Mesa-Lago 2003). It is not surprising, therefore, that while Havana has the highest internal immigration (7.3 percent), Guantanamo and Granma have the highest *emigration* (7.4 percent and 11.4 percent, respectively) (see Table 6).

Racial Disparities

The Revolution did not enact a specific law against racial discrimination, but it did implement various policies geared to the poor, among whom blacks were overrepresented; and their socioeconomic conditions improved significantly. Those policies included opening recreational facilities (private beaches, clubs that excluded blacks) to all the population; nationalization of private schools (where virtually no blacks were enrolled); reduction of illiteracy, combined with significant expansion of free education at the secondary and higher levels (blacks had higher illiteracy rates and lower enrollment than whites); expansion of employment (blacks were more affected by unemployment than whites); and universalization of free health care (De la Fuente 2001).

In 1962, the Cuban government proclaimed that discrimination had disappeared with the eradication of “class privileges” and that the so-called racial problem was solved. A taboo was imposed thereafter on public discussion about race, and the government took several negative measures that included the banning of Afro-Cuban religious sects, allegedly for being socially dangerous and linked with a culture of criminality (they were reauthorized later, but under tight restrictions), and the closing of black associations and clubs. By the 1980s, however, despite some other remarkable improvements, the concentration of blacks in dilapidated housing in poor neighborhoods was unchanged for the reasons explained. In addition, blacks remained underrepresented in managerial positions, but overrepresented in menial jobs and in the prison population; televi-

sion and cinema had few black actors and directors; and racial jokes reflected past negative images of blacks. “The lack of a public debate about race and racism facilitated the survival and reproduction of the very racist stereotypes the revolutionary leadership claimed to oppose” (De la Fuente 2001, 295).

The severe crisis of the 1990s reversed some previous gains and created new inequalities. Although foreign remittances are crucial for survival, 84 percent of Cubans abroad are whites, while 34 percent of those who live in the island are blacks, and blacks therefore receive less than one-half, per capita, of what whites get. The access of blacks to tourism jobs is limited due to local prejudices that are exacerbated in foreign companies. The concentration of blacks in poor neighborhoods impedes them from opening *paladares*, and relatively few blacks own private farms. The expansion of the private sector, where the government does not control employment, contributes to job discrimination by race, and black women make up a high percentage of prostitutes. A few signs of black discontent can be observed. For instance, most rioters in the summer of 1994 in Havana were Afro-Cubans; surveys show that young blacks might resort to the organization of all-black societies to resist a setback in their rights; and a “Fraternity of Blackness” was created in 1999 to make the government fully aware of the growing inequalities (De la Fuente 2001).

Disparities vis-à-vis Foreigners

Cuban citizens experience discrimination in relation to foreigners in various ways. We have already discussed the excellent healthcare services available for foreigners, in contrast to the severe deterioration in access and quality of healthcare for Cubans. Furthermore, Cubans are prohibited from entering or using hotels and restaurants, and from taking advantage of other services exclusively available for foreign tourists; Cuban-American visitors are not even allowed to secure a tourist room for a relative or friend. Such discrimination has been labeled “tourist apartheid” by some observers. Last, but not least, the 1995 Cuban investment law allowed foreigners to own businesses in Cuba (as much as 100 percent of total shares), yet Cubans are prohibited from owning and operating even small family businesses (except for *paladares*). It is an irony that the 1995 law technically does not exclude Cuban-Americans who are U.S. citizens from owning businesses in Cuba (though U.S. law forbids it), but the 1995 law denies that right to Cuban citizens. In 1995, a legal draft was

circulating, which would have granted that right to Cubans, but the measure was not approved and has not been mentioned in the past five years (Mesa-Lago 2000, 2003). Interestingly, the Proyecto Varela, based on the political constitution and signed by more than 10,000 Cubans, requests the holding of a referendum on several crucial human rights and civic freedoms, including this resolution: “That necessary changes be made in the law to guarantee citizens the right to organize and operate private businesses, for individuals as well as cooperatives, to carry out economic activities either in production or services” (Proyecto Varela 2002).

Differences in Satisfaction of Basic Needs

The impact of the reforms on the satisfaction of basic needs differs among various groups. Those who earn dollars, receive bonuses in convertible pesos or dollars, or obtain remittances from abroad, and have substantial bank savings, more than cover basic needs. However, those who draw only a regular salary or a pension in pesos and lack bank savings cannot satisfy even basic food needs. (Those who do have savings have withdrawn money from their bank accounts in order to survive, and, as Table 2 indicates, the deposits of 87 percent of savers have declined, whereas the deposits of only 3 percent of savers have increased significantly). Four factors have contributed to the deterioration of the situation since 1993: (1) the decrease by 44 percent in the average real wage and in its purchasing power; (2) the reduction in rationing quotas (goods subsidized at a price below production cost), which now cover only about 10 days per month, forcing people to purchase essential foodstuffs in other markets for the remaining 20 days; (3) excessively high prices, due to a 140-percent sales tax plus huge profit-taking in dollar shops (TRD) charged for essential consumer goods; and (4) the high prices still charged in agricultural free markets despite the declining trend of such prices in 1995-2001. The high agricultural prices are attributable to the very low prices paid by the state for purchases from private farmers and members of UBPC, which act as disincentives to increased output; the scarce supply by UBPCs and the state farms to those markets; and price agreements among sellers before the market opens, which ensure profits of 20 percent and discourage increased production (Togores 1999; Pérez Villanueva 2002).

Table 7
Prices in Pesos under Rationing and in Non-rationed Markets:
December 2001-February 2002

Goods	Rationed	Non-Rationed^a	Difference^b
Milk (liter)	0.25	3.57	14.3
Bread (small roll)	0.05	0.66	13.2
Eggs (1)	0.15	3.00	20.0
Rice (1 pound)	0.24	4.26	17.8
Beans (1 pound)	0.30	7.09	23.6
Oil (1 liter)	0.40	19.45	48.6
Lard (1 pound)	0.30	22.60	75.3
Pork (1 pound)	6.00	28.00	4.7
Lamb (1 pound)	4.50	20.00	4.4
Fish (1 pound, low quality)	0.50	9.20	18.4
Sugar (1 pound, refined)	0.14	2.44	17.4
Salt (1 pound)	0.10	2.00	20.0
Potatoes (1 pound)	0.30		
Taro (Malanga), 1 pound)	c	2.00	
Plantain (1)		1.00	
Pumpkin (1, middle-sized)		7.00	
Guava (1 pound)		2.50	
Soap (one, for bath)	0.25	7.30	29.2
Chinese TV		4,000.00	

Sources: Mainly Pérez Villanueva 2002; also Espinosa 2001a and 2002; and interviews by the author in Miami with Cuban visitors and immigrants.

^a Includes goods sold in government stores, free agricultural markets, and state agricultural markets.

^b Ratio of the non-rationed price to the rationed price of the same good.

^c Available only for children.

The prices of rationed goods and of non-rationed goods sold by state stores and markets or free agricultural markets at the end of 2001 and early 2002 are compared in Table 7. The difference between the two sets of prices consists of multiples ranging from 4 to 49.⁸ Until the end of the 1980s, rationed goods barely covered the essential minimum for one

⁸ A comparison made in 1995-2001 between certain rationed and non-rationed prices of 14 goods showed that the total cost of the rationed goods was 9 pesos, and the total cost of the non-rationed goods was 109 pesos, representing a 12-to-1 ratio. Virtually all market prices declined until 2000, but some of them increased in 2001 (Pérez Villanueva 2002).

month, and the population had to line up long queues because rationing quotas were not guaranteed and goods were sold on a first-come, first-served basis. In 1992-2002, quotas of rationed goods shrank, the queues worsened, and many goods that had been sold freely (non-rationed) became rationed. For instance, bread formerly was sold freely, but now only a small roll per person is sold daily for 0.05 pesos; if more is needed, the price goes up 13 times as high. Fish also was abundant, but now a quota of a half-pound per person sells for 0.50 pesos and costs 18 times more if bought in the non-rationed market. Eggs also were plentiful until 1993-1994, when they became rationed; in December 2001, one egg cost 1.74 pesos; in February 2002, the price jumped to 3 pesos, if any eggs could be found. Furthermore, many goods are available only in dollar shops (TRD), which are affordable only if one earns or receives foreign currency from abroad (TRD prices are as much as 100 times higher than rationed prices). The average monthly salary of 241 pesos at the end of 2001 (equivalent to \$9.63 at the CADECA exchange rate) could be spent buying one bar of soap (\$1), half a litter of oil (\$2.40), and a pound of taro or *malanga* (\$6). At the beginning of 2002, Chinese TV "Pandas" were sold for 4,000 pesos each in the state non-rationed market, a price equivalent to 1.5 times the average annual salary of a state worker; some sets were sold in the TRD at \$470 (equivalent to 12,000 pesos). The price of the TVs in China was \$100; thus, the Cuban government made profits of either 50 percent or 370 percent, depending on the market in which the TV set was sold (Maseda 2002).

According to Cuban economist Togores, "Income is insufficient to meet basic needs of a typical family of four persons, and some groups of the population are very badly affected; this refers to minimum needs for food and hygiene and excludes expenses such as rent, electricity, clothing, transportation, and other essentials.... There has been a deterioration of the caloric intake of the population as well as in the proportions of its nutritional composition.... Statistics reveal that the consumption of a set of important nutrients required as a minimum diet for a healthy functioning of the body are well below the needed levels" (Togores 1999, 13). Daily consumption of calories per capita decreased from 2,955 in 1984 to 1,863 in 1993 and rose to 1,993 in 1995, still 32 percent below the 1984 level and 10 percent below the minimum required (Sixto 2002; Togores 1999). In 1995, Togores found serious deficiencies in fats and acid fats, vitamin B and niacin (available in fruits and meats, important for the neurological system), vitamin B12 (important in the generation of red cells),

and vitamin A (important for growth, vision, and the immune system). The average cost of the food required to fill the nutrient deficiencies in 1995 jumped from 73 pesos to 189 pesos. The difference of 116 pesos (61.6 percent of the total needed) ought to have been satisfied by buying the goods in dollar shops, agricultural free markets, or black markets, but the average per capita income was estimated as 113 pesos, leaving a gap of 76 pesos just to satisfy basic food needs. The situation in 2002 is considerably worse than in 1995.

Poverty and Social Welfare

The first report on poverty, which was published in Cuba in 1997, referred to “population at risk of not covering some essential need” rather to poverty incidence. The report argued that Cuba’s case was unique because the government guaranteed a monthly minimum level of basic foodstuffs at subsidized prices, because the government provided free health care and education and social security or social assistance protection, and because most people either owned a home or paid low or no rent. The *urban* population at risk was defined as people with insufficient income to buy a basic basket of foodstuffs, which determined the poverty line. An estimated value of all the social services was added to the average income of the population, while calculation of the value of the food basket took into account the subsidized prices of food bought through rationing (rationing supposedly supplied 70 percent of total available food, and the remaining 30 percent came from free agricultural and similar markets and from self-supply).

The study did not show its full calculations, and even the scattered data provided were confusing and contradictory. The average monthly *income* of the urban population was not given, but the transfer of the value of social services was estimated “between 110 and 160 pesos ... the equivalent of 40 percent of the average *income*.” As two considerably different values for the transfer were given, the average income could be calculated at 275 to 400 pesos, quite high since the average state salary was only 220 pesos; total income, therefore, was from 375 to 560 pesos, an obvious overestimation. The value of the food basket was calculated as 74 pesos, which was underestimated. Based on this flawed information, the urban population at risk was calculated at 14.7 percent, with some of the following characteristics: children below age 14; those living in

households with more than six members; more women than men; those with primary education only; and those either unemployed or not economically active. A comparison of the population at risk in the city of Havana in 1988 and 1995 showed deterioration, increasing from 4.3 percent to 20.1 percent because of expanding inequalities; and yet a similar comparison of 1995 and 1996 indicated improvement, from 20.1 percent down to 11.5 percent, attributed to a “reduction in inequality” (Informe de Cuba 1997).⁹ The latter is contradicted by the data analyzed in this paper’s section on disparities of income and wealth.

The unreliable 1997 study discussed above was followed by a much more sophisticated and recent study authored by Togores. Utilizing the average cost of the food basket, the gap between that cost and the average income per capita, and a distribution of the population by income groups, Togores estimated the Amartya Sen Index of severity of poverty in Cuba for 1995. The Index combines two variables: poverty incidence or the percentage of the total population under the poverty line (based on a basket of essential foodstuffs), and the Gini coefficient of the distribution of average income among the poor.¹⁰ Cuba’s poverty incidence in 1995, based on two different variants, was estimated as either 61 percent or 67 percent of the total population, and the severity of poverty was calculated as either 39.7 percent or 41.8 percent. Togores argued (in the same vein as the 1997 study) that the Amartya Sen Index determined poverty based on insufficient income to acquire the food basket, but excluded state transfers of free social services such as education, health care, social security, and social assistance (she did not include housing). Taking these services into account, therefore, both income inequalities and poverty incidence would be reduced. Togores acknowledged that increasing prices had an adverse effect on the population, but contended that the transfer of free social services partly compensated for those losses (she did not include state subsidies of consumer goods). Finally,

⁹ The first version of this study was developed by a team led by Angeles Ferriol, Director of Social Studies at the Instituto de Investigaciones Económicas of the Ministry of Economics and Planning, and was released in June 1997. The final version, analyzed in this paper, was published in October without any named author.

¹⁰ The equation is: $SI = H [I + (1 - I) G]$, where H is in the poverty incidence (poor population/total population), I is the percentage gap between the average income of the poor and the poverty line Z (determined by the value of a basket of essential goods), and G is the Gini coefficient of the distribution of average income among the poor population.

Togores asserted that expenditures in social services rose by 26 percent during the crisis (1989-1998), for an annual average increase approaching 3 percent (Togores 1999, 16-18). The problem with this last argument is that Togores calculated the value of social services in current prices instead of adjusting them with her own consumer price index (CPI).

Table 8 demonstrates that real expenditures per capita declined by 78 percent in 1989-1993 (the worst point of the crisis) and, although expenditures increased in 1994-1998, by 1998 they still were 40 percent below the 1989 level. Not only did real income per capita plummet by about 45 percent in 1989-1998 (see the section on disparities of income and wealth), but real social expenditures also shrank by 40 percent during the same period. As this paper has demonstrated, the quality of social services also has deteriorated severely since the early 1990s (see the section on deterioration and disparities in social services). The upshot of all this is that free social services, the “missing factor” in estimating both poverty incidence and the severity of poverty, did not play a significant compensatory role in either estimate, so both likely are close to reality. Furthermore, the expansion of income inequalities in the 1990s and early 2000s (see the section on disparities in income and wealth) has aggravated the gap between the poor and the still small, but increasing, wealthier segment of the population. The reappearance of mendicancy on the streets of Cuba since the mid-1990s and the government’s struggle against beggars who ask tourists for money and goods, particularly in Havana, provide additional indicators of poverty and income inequality. Last, but not least, the supply of basic consumer goods though rationing declined from one month in 1989 to 10 days per month in the 1990s; therefore, this potential compensatory factor claimed by the 1997 study actually shrank by two-thirds. In conclusion, the poverty incidence of 61 percent to 67 percent and the severity of poverty index of 40 percent to 42 percent estimated by Togores for 1995 are much closer to reality than the 14.7 percent “population at risk” rate calculated for 1996 in the 1997 study.

Table 8
Nominal and Real Social Expenditures: 1989-1998
(in millions of pesos)

Expenditures	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Nominal										
Education	1,650	1,620	1,504	1,427	1,385	1,335	1,359	1,421	1,454	1,510
Healthcare	904	937	925	938	1,077	1,061	1,108	1,190	1,265	1,345
Social security	1,094	1,164	1,226	1,348	1,454	1,532	1,594	1,630	1,636	1,705
Housing ^a	406	383	281	248	260	315	411	462	488	566
Social welfare	101	96	88	96	94	94	119	128	135	145
Total	4,156	4,200	4,024	4,059	4,268	4,337	4,591	4,831	4,978	5,271
CPI	1.443	1.509	1.830	3.515	6.578	5.575	2.940	2.883	2.904	2.903
Real total	2,880	2,784	2,199	1,288	648	778	1,561	1,676	1,714	1,815
Per capita ^b	272	260	204	106	59	71	142	152	154	163
Index ^c	100.0	95.9	75.0	39.1	21.8	26.1	52.2	55.9	56.9	60.0

Source: Author's calculations based on nominal expenditures (not adjusted for inflation) from ONE 1998, 2000; CPI from Togores 1999; and population (used to estimate per capita figures) from ONE 2001.

^a Togores excluded housing from social services, but I decided to include it.

^b In pesos.

^c 1989 = 100.

It should also be noted that free social services provided by the state and subsidies of rationed goods and transportation do not target the poor, but are received by everyone, including workers who earn very high income in the private sector or receive bonuses and awards-in-kind provided by the state sector and mixed enterprises, and/or who get foreign remittances (Ferriol 2001). In view of the increasing inequalities and poverty in Cuba, this universal-access policy is both a waste of scarce resources and an obstacle to the provision of more help for those in desperate need. Table 8 shows that the nominal amount spent by the government on social welfare (for those who are in severe need) averaged 2.4 percent of total social expenditures in 1989-1998, by far the lowest share of all the social services provided. Furthermore, real social welfare expenditures shrank by 29 percent, from 70 million pesos in 1989 to 50 million pesos in 1998, in spite of increasing poverty. The monthly amount paid for welfare in early 2002 was 40 pesos, which was grossly insuffi-

cient to buy even one extra week of food in non-rationed markets (see Table 7); at the CADECA exchange rate, this amounted to \$1.60, or one-fourth of the cost of one pound of *malanga* in the dollar shops.

Recommendations for Change

Reforms within the Current Regime and in a Future Transition

Whether we agree with their views or not, many Cubans believe that socioeconomic equity was one of the most important accomplishments of the Revolution. The current crisis of the regime's legitimacy partly results from the violation of the principle of equity, which has led to the significant inequalities analyzed in this paper. In order to design policies to correct, or at least ameliorate, current socioeconomic disparities in Cuba, two different scenarios must be considered: (1) in the medium term, the continuation of the current regime, albeit with a resumption of market-oriented reforms, and (2) in the long term, the potential collapse of the regime and further transition toward a true market economy. In both scenarios, we assume a move to the market, but a significantly smaller move in the first scenario than in the second. If the first scenario does not materialize in the medium term, socioeconomic disparities will continue to increase, aggravating the current situation.

As the introduction to this paper noted, the economic reforms that began in 1993 induced a halt in the dramatic GDP decline and led to a mild recovery after 1995. Despite these positive economic results, the move to the market was stopped in mid-1996, and only marginal changes have occurred since then; indeed, some reform policies have even been reversed. Measures planned in 1995-1996 which had not been implemented by May 2002 include the establishment of a true convertible peso, the dismissal of 500,000 to 800,000 unneeded workers in the state sector, a general price reform, the reintroduction of worker contributions to social security, the approval of self-employment in university-graduate occupations, and authorization for Cubans to own and operate their own businesses. The reason for the stoppage and even the reversal of some reform policies is the Cuban leaders' fear that a continuous move to the market would demand delegation of economic power and further weaken the feeble regime. Political logic, therefore, has taken precedence over economic logic and people's welfare. And yet, as several Cuban reformist

scholars and technocrats agree, without a return to the reform path, the island's economy will be unable to sustain its recovery, which slowed in 2001 (when GDP per capita was still 23 percent below the 1989 level). The tragic events of September 11, 2001, combined with the world recession and a decrease in world travel, provoked a decline in nickel and sugar prices, international tourism, and foreign remittances, all of them crucial for the Cuban economy, and raised the specter of another severe crisis (Mesa-Lago 2001, 2002). As in 1993, such a predicament might force the Cuban leadership to resume its move toward the market. In such a scenario, certain changes can be recommended to ameliorate some of the nation's socioeconomic disparities.

In the long run, the Cuban regime should be transformed, preferably in a peaceful manner and toward a pluralistic democracy. At that time, the scenario of a stronger move to the market could materialize, allowing the enactment of more far-reaching policies to cope with socioeconomic disparities. The experience of Eastern European countries suggests that unless proper policies are implemented, inequalities will increase during such a transition. An adequate set of policies must therefore be designed to meet the needs of the second scenario (for a previous approach to the "second transition," see Mesa-Lago 1993).

Overall Macroeconomic Reforms

In order to cope with the current socioeconomic disparities in Cuba, overall macroeconomic reforms must be implemented to increase GDP, output of goods, employment, real wages, government revenue, and satisfaction of basic needs, and to reduce poverty and improve the quality of social services. Although this crucial issue goes beyond the scope of this paper, general guidelines are offered below.

In the first scenario, continuation of the regime with some modest reforms, the changes would be limited by the situation described above, but Cuba could follow the path of China and Vietnam and move toward a socialist market economy with the following changes: (1) expansion of productive and service activities in the private, cooperative, and mixed sectors, plus introduction of competition within the state sector; (2) transformation of UBPCs into truly autonomous cooperatives (able to decide freely what to produce, to whom they sell their produce, and what prices to set), thus providing economic incentives for increased production and

delivery of goods to free agricultural markets; (3) granting of more land parcels to individuals and families in order to increase both self-consumption and delivery of produce to free agricultural markets; (4) increased food production and competition, which would push prices down and help to raise consumption and meet basic food needs by means of measures 2 and 3; (5) authorization of Cuban citizens and groups of workers to manage small and medium-sized businesses, elimination of current restrictions imposed on self-employment work, and granting of permission for university graduates to practice their professions as self-employed, thereby creating enough jobs in the non-state sector to permit the dismissal of non-needed workers in the state sector while expanding the supply of goods and services; (6) allowing foreign enterprises and joint ventures to hire, promote, and pay their employees directly, using both salaries and other economic incentives, all of which should be declared for tax purposes; and (7) completion of the banking reform, implementation of a comprehensive price reform, and a move to the establishment of a truly convertible peso tradable in international markets, resulting in gradual elimination of the current dual monetary system.

In the second scenario, Cuba would move much faster and deeper into a market economy, and more radical changes in property and market relations would be introduced. These changes would include selective privatization of state enterprises, the setting of most prices by supply and demand, more flexible rules for foreign investment, the free practice of all professions and occupations, monetary and banking reforms, assured convertibility of the peso and unification of the exchange rate, free entry of foreign remittances at the unified exchange rate, introduction of capital markets, and more. Under this scenario, Cuba would be able to rejoin international financial organizations and receive economic and technical aid (see the section on recommendations: the need for foreign aid). This transition should be gradual and in combination with a social safety net, not based on a “shock therapy” approach. In Latin America, Costa Rica provides a successful example of this kind of gradualist approach (Mesa-Lago 2000; see also the numerous articles on this issue published in *Cuba in Transition*, volumes 1 to 11).

Regardless of the scenario considered, the need is serious and urgent to fill the enormous vacuum of data on socioeconomic disparities in Cuba by collecting and analyzing statistics on the subject. These data will be needed to identify the most vulnerable population, design adequate corrective policies, and estimate their costs. In addition, an informed public

discussion must address disparities and ways to cope with them. The participation of the populace in this process will constitute an important step toward democracy and in the forging of a national consensus.

Overhaul of the Tax System

In either of the two scenarios, proper economic incentives are essential for promotion of growth and development, which means that some level of income and wealth inequality should be maintained. To reject differences in wealth would hark back to the nefarious egalitarianism practiced in past stages of Cuban socialism, but to ignore or permit such inequalities without taking any corrective action would be tantamount to preserving the current situation in Cuba, which could worsen during the transition (second scenario). The question is how to reach an optimal level between needed economic inequalities and the adverse social effects they cause. This problem would be aggravated in the transition, as happened in almost all Eastern European countries, which experienced a rapid decline in tax revenue because of losses in state-enterprise profits and turnover tax revenue as well as lack of institutional capacity to collect taxes in the new market economy (Gallagher 1999). The proper approach would be to reform the tax system completely in order to provide resources needed for market reforms, including the implementation of a social safety net and other social changes. The tax policy is discussed in this section, and the remaining policies are addressed in sections containing recommendations for changes in social services, coping with racial disparities, introducing a social safety net, and the need for foreign aid.

Making the Tax System More Progressive. The tax law of 1994 did not include a general income tax, although it stipulated other progressive taxes, such as those on inheritance and hard-currency income from abroad. Because of the enormous restrictions on wealth accumulation in Cuba, however, inheritance of a sizable amount is virtually unknown in Cuba today, and so is tax revenue from that source (the same is true for real estate taxes). Hard-currency income earned abroad mainly comes from famous artists and musicians and likewise is not a very significant source of fiscal revenue (professionals working abroad pay as much as 50 percent in taxes on income of \$60,000 and above in order to retain the right to return to Cuba). On the other hand, several taxes and other meas-

ures imposed on self-employment, owners of *paladares*, and house rentals for tourists have backfired by reducing, rather than promoting, those positive activities and resulting tax revenues. All these independent activities and others not authorized today (such as self-employment of university graduates, ownership of small and medium-sized businesses by Cuban citizens, and, in the second scenario, ownership of large enterprises) should be promoted, instead of discouraged, and their income taxed properly. At this time, however, only 3 percent of tax revenue is generated by direct personal income.

Indirect taxes contribute 56 percent of tax revenue, and this paper already has examined their general regressive impact on distribution. Taxes on alcohol and tobacco, in contrast, generate 20 percent of fiscal revenue and should be retained because of their additional positive health effects. Sales taxes, which contribute 30 percent of fiscal revenue, impose a heavy burden on the lowest-income groups and do not correct income inequalities. The value-added tax (VAT) has not been a major fiscal revenue generator during the early years of the transition because it has developed slowly, but it could become significant once economic reforms are implemented successfully. Current sales taxes should be limited to a minimum and should be replaced by a combination of progressive personal income tax and corporate tax. All residents, as well as Cubans who earn income abroad, should pay income tax, and the tax should have few rates and exemptions (for those below a minimum income) and should be withheld on salaries, interest, and dividends. The 1994 law also included a tax on natural resource extraction, which covers activities such as mining, forestry, and fishing, but apparently generates little revenue although the expanding nickel industry, for instance, should be an important generator of tax revenue. Other taxes to consider include import duties, excise tax on hydrocarbons, and tourism taxes collected either as special taxes or as part of the VAT. Technical aid will be needed to develop the institutional capacity of the Cuban government to collect taxes (Gallagher 1999).

Taxing Savings and Remittances. In 1995, three Cuban economists who ironically were purged for their advanced reformist ideas recommended a measure to avoid excessive concentration of savings in bank accounts: a change in currency, which in practice would result in confiscation of savings above a given level (Carranza, Gutiérrez, and Monreal 1995). The income tax explained above should handle savings properly

by taxing the interest income. Capturing income from remittances, on the other hand, is problematic because of the informal nature of most remittances. Currently, part of the remittance income is taxed in state dollar shops, but at a very high rate. In the second scenario, as more consumer goods become available and private shops are established, the sales tax rate should be reduced because increased sales volume ought to make up for the tax cut without any decline in sales tax revenue.

Changes in Social Services

Perhaps the most important accomplishment of the Revolution, and one generally praised both domestically and by foreign experts, was universal free access to health care, education, and social security pensions. However, this paper has analyzed the severe problems now faced by those services, problems such as deterioration of healthcare and education, reduction in pension coverage and the real value of pensions, and escalation of costs and state subsidies. We have seen the steady increase in the housing deficit since the Revolution, and we have noted expanding disparities in social services. In this section, policies are suggested to address these problems.

Healthcare. The national health system (NHS) should be preserved, but with some changes that will make it financially solvent, improve the quality of services, increase efficiency, allow the functioning of private activities, and eliminate current disparities (for various approaches, see Alonso, Lago, and Donate Armada 1994; Mesa-Lago 2003).

Currently, all healthcare services are free for all the population regardless of income, which increases costs and reduces the quality of the services provided, thus making the NHS financially untenable. To make the NHS financially solvent and to improve efficiency and quality of services, it is essential to take user income into account when providing health services, particularly curative care. The following measures, which are feasible under both scenarios outlined above, are recommended to reduce expenditures of the NHS: (1) Place more emphasis on prevention, particularly regarding the infrastructure for potable water and sanitation, instead of emphasizing the more expensive curative medicine; (2) cut the overhead of the Ministry of Public Health, which is two or three times the international average; (3) halt investment in new physical plant because of the current low occupancy rate and high number of days of stay, and give priority to maintenance of buildings and equipment (and buy the

most needed equipment); (4) convert unneeded hospitals (particularly those specializing in gynecology and pediatrics, which are the most underutilized) into asylums for old people in need; (5) shift scarce resources invested in reducing the already-low infant mortality rate (and those devoted to the extremely expensive and relatively unnecessary family doctor program) to other areas in need, such as basic infrastructure, prevention and care of contagious diseases with high morbidity rates, and importation of essential medicines and prophylactics; (6) establish entry quotas in schools of medicine until the current glut of physicians subsides, encourage the enrollment of nurses and paramedics, and reduce the number of physicians in the state sector by facilitating private practice (see further recommendations below); (7) terminate the free overseas medical assistance program and fellowships for foreign students, since Cuba lacks resources for these expensive programs and needs to spend its resources at home; and (8) maintain the pharmaceutical and biotechnological industries, but in an efficient manner and on a competitive basis in order to make them profitable.

The following changes are needed to increase income: (1) Introduce user fees and copayments for hospitals and laboratories (not in prevention and primary care) according to the users' income, exempting the lowest-income groups; (2) charge the full cost of upgraded hospital rooms and services (single rooms, better food, and so on) to high-income groups wanting better quality of service and able to afford it (these two measures would be very difficult to introduce under the first scenario); (3) maintain and extend contracts of medical personnel working abroad, and collect tax on their income; and (4) attract Cubans living abroad, particularly those who are retired, to obtain healthcare in Cuba and pay for services, negotiating the transfer of insurance costs with foreign governments (this is more likely in the second scenario).

The promotion of the private healthcare sector not only would reduce costs in the state sector, but also would create competition and allow high-income groups to get more personalized attention by paying for services. The national health system then would target low-income groups and could improve the quality of their care. To achieve these goals, the following steps should be taken: (1) Authorize the private practice of physicians, dentists, and other healthcare personnel as self-employed or members of cooperatives (first scenario) and in private clinics and hospitals (second scenario), with their income subject to the general income tax; (2) encourage large enterprises to provide primary

healthcare to their employees by deducting those expenses from their corporate taxes (both scenarios); and (3) allow the private sector to provide paid services to foreigners, in competition with the state sector (unfeasible under the first scenario).

To cope with current disparities in healthcare, the parallel, privileged, and costly scheme for the armed forces, internal security, and top leaders should be integrated with the NHS, which would reduce costs and promote equality of treatment. Members of these three groups who have high income and want to have more personalized care and upgraded hospital services should pay for them in either the NHS or the new private sector. This measure will be politically difficult to implement, albeit more under the first scenario than under the second; if the armed forces play an essential role in the transition, they would strongly oppose such integration. Persistent healthcare inequalities among the Cuban provinces (particularly in those with the worst situation, such as Las Tunas, Granma, and Guantanamo) should be the subject of targeting policies that establish priorities in the allocation of resources, initially for the first and second levels of care and later on, when more resources are available, for the third level as well.

Education. A strong public educational system should continue, although with policies similar to those proposed in the previous section to make the system financially solvent and improve efficiency and quality of services. Cuba still has plenty of teachers, and declining population growth and the aging process mean fewer resources are needed for elementary school. However, it is important to reestablish economic incentives (adequate wages) to cope with future demands at the elementary and secondary education levels. Education (particularly at the secondary and higher levels) should be adjusted to the requirements of a competitive world market (including some shifts from formal toward vocational education), and resources should be reassigned accordingly. Internal efficiency must be improved; rates for dropouts and grade repetition must be reduced; and rigorous quality standards should govern the evaluation of educational attainments. Proper incentives should be provided for university-level training of the technicians, agronomists, business administrators, bankers, and other professionals needed for development. As with all higher-education graduates, teachers should be allowed to practice either as self-employed or in their own schools. Private education, under general rules set by the state, should be allowed, and cost recovery in

higher education should be introduced for those who have high income (this would be rejected under the first scenario). Concentration of educational resources on the most needy population, the poorest provinces, and the most needed jobs is essential (Castañeda and Montalván 1997).

Social Security Pensions. Cuba's unified and fairly universal pension system is an important accomplishment that should be preserved. At present, the system has been besieged by a sharp decrease in real pensions, the virtual disappearance of the supplementary safety net, declining coverage of the population as the non-state sector expands, and intolerable costs that require increasing state subsidies. The situation is aggravated by the rapid aging of the population (for divergent approaches, see Alonso, Lago, and Donate Armada 1994; Peñate and Gutiérrez 2000; Mesa-Lago 2003).

To cope with the problems, it is essential first to reduce costs and increase income in order to balance the system and secure resources to raise the level of pensions. On the expenditure side, the most important measure to be taken, regardless of the scenario, is the gradual increase in the age of retirement from 55 for females and 60 for males to 65 years for both sexes, over a period of 10 years for females and 5 years for males; if this step were politically unfeasible, then ages should be raised to 60 and 65 over a period of 5 years. This action would substantially reduce the costs of the system, but would be insufficient to cover expenses particularly in the long run, given the aging process. It is urgent, therefore, to implement the 1994 tax reform law's clause stipulating the reintroduction of contributions by workers to pensions, which were suspended for political and socioeconomic reasons. Such contributions would have to be from 3 percent to 8 percent of salary (based on two different estimates) and would increase over time. An alternative would be to close the current pension system, make the state responsible for ongoing pensions, and create a new mandatory system with younger insured and at lower cost, at least for a fairly long time. The new system would be financed by employer and worker contributions and by a reserve fund that would be invested and have its yield used to help finance future benefits. A supplementary voluntary pension program financed by worker contributions could be made available to high-income groups. The very low level of pensions could be increased gradually by the combination of all these measures and by an economic expansion that may be possible if the other kinds of measures recommended in this paper are implemented. The

expanding non-state sector, both formal and informal (self-employed, owners of *paladares*, and small businesspersons, private farmers, and their potential salaried employees) should be covered mandatorily by the new system, with special conditions and benefits for informal workers (Mesa-Lago 2003).

The cost of separate privileged pension schemes for the armed forces and internal security equals the deficit of the general system and creates unjustifiable inequalities because conditions of entitlement and benefits for these groups exceed those available in the general system. These schemes should be integrated with the general pension system, and if this is not politically feasible, their members should make appropriate contributions to support their privileges.

Housing. In 2000, the housing deficit in Cuba was equal to half of the existing stock, and half of the existing stock was not in good shape – making this problem one of the island’s worst. Furthermore, the very low rate of housing construction since the Revolution, combined with the destruction of part of the previous stock due to lack of maintenance, preserved the prerevolutionary disparities in housing, particularly among blacks. Disparities among provinces and within Havana neighborhoods, in terms of the quality of housing, also are significant. In per capita current pesos, the 2001 budget allocated 12 times as much to education and 10 times as much to healthcare as the amount allocated to housing (MINFP 2001). The government’s incapacity to ameliorate, much less solve, this problem has been compounded by its excessive regulations and restrictions on housing construction, repair, trading, and leasing.

According to the 1970 census, 86 percent of families in Cuba either owned their homes or were paying monthly installments to buy one (in the form of rent to the government), while 8 percent paid rent for public housing (fixed at 6 percent of monthly household income), and 6 percent were exempt from paying any rent because their monthly income was below 25 pesos. The 1981 census did not provide data on this distribution. A housing law passed in 1984 allowed tenants to convert state leases into purchasing contracts with monthly installments equal to the rent they were paying; by 1988, between 200,000 and 500,000 contracts had been signed (Mesa-Lago 1993). The combined data that is available indicates that in 2002 the overwhelming majority of Cubans owned their own homes, but endured significant overcrowding, structural deterioration, and even risk of structural collapse.

Clearly, the state is incapable of solving the existing housing problems; therefore, more freedom has to be granted for people to repair their own homes, trade or rent them, and build new ones. The degree of such freedom under the first scenario would be considerably less than under the second scenario. In any case, the poorest segment of the population, who currently occupy public dwellings without paying anything, should be allowed to either continue with that arrangement or be paid a means-tested housing allowance to replace rental exemption. The amount the government spends on housing must be increased, but its allocation and use must be changed. Part of the resources available for direct housing construction by the government should be used to help the households in most need (the poor, blacks, and inhabitants of the least-developed provinces). Preferably, aid recipients should repair their own dwellings under minimal building norms. Funds also should be allocated for small loans to repair and build modest dwellings. The Banco Popular de Ahorro provides personal loans to buy new housing units, as well as for self-construction and maintenance, but no data are available on those loans and their amounts. Furthermore, the Bank does not provide credit to purchase existing houses or land or to build new houses or for trading homes. It would be better to create a bank specializing in housing, which could provide loans for all those purposes (Dammert 1997).

Coping with Remaining Racial Disparities

Despite significant advances by blacks in Cuba (in education, health-care, employment, and equal access to recreational facilities), important disparities remain (for example, concentration in poor housing, underrepresentation in top managerial and political positions, overrepresentation in prisons). The crisis of the 1990s and 2000s reversed some previous gains and created new inequalities (blacks are underrepresented in reception of foreign remittances and in jobs in tourist facilities). The government improperly claims that the racial problem has been solved, and the proscription of public discussion on this issue has blocked solutions that might reduce disparities.

A public discussion must take place in schools, at work, and in the news media to address remaining issues of racial discrimination in Cuba and the ways to resolve them. Blacks should be allowed to organize associations and movements to defend their rights and continue their advance-

ment in the same manner as they have done in South Africa, the United States, and other countries. Particular attention should be given to providing housing for blacks and ensuring that they are treated equally in job hiring and promotion, especially in foreign enterprises. Existing discrimination against Cuban citizens, including blacks, in terms of access to tourist facilities should be terminated in both scenarios.

Introduction of a Social Safety Net

In view of the nation's increasing inequality and poverty, Cuba's policy of providing free social services and subsidies to rationed goods for all the population, including those who have very high income and savings, receive awards in kind and/or get foreign remittances, wastes scarce resources and obstructs the provision of help to those who are desperately in need. Real social welfare expenditures shrank by 29 percent in 1989-1998, and the state budget share spent on social welfare in 2001 was only 2 percent of total expenditures, or 0.7 percent of GDP. In the 2001 budget, the per capita expenditure, in current pesos, allocated to social welfare was 9 percent of the allotment for education, 12 percent of the benefits for healthcare and social security, and roughly equal to the amounts devoted to sports and art (MINFP 2001).

The policies suggested in this paper would transform the free provision of social services and subsidies to rationed goods by taking income into account. Those considerable resources that would be freed up by the policy changes in the social services area should be shifted and targeted to provide social assistance to in the population under the poverty line, particularly to the extremely poor whose income cannot even satisfy food needs. The change from indiscriminate subsidies for social services and consumer goods toward targeted aid for those in need would alleviate current inequalities, have a progressive impact on distribution, and correct many current price distortions. Since Cuban reformist scholars and technicians advocated such shifts in policy in the early 1990s, it should be feasible under the first scenario (Carranza, Gutiérrez, and Monreal 1995). Under the second scenario, in which market forces would operate much more freely, prices of consumer goods, services, and housing would rise significantly, which would therefore increase the need for a social safety net (SSN).

The SSN should provide temporary income supplements, preferably

in the form of flat payments targeted to the poor (means-tested) and guaranteeing a subsistence minimum (food, housing, energy). The SSN also should have a simple administration and careful monitoring to ensure its restriction to those in need. Cash payments should be supplemented by continuous free healthcare and education for the poor, as explained above. The SSN is a key instrument for facilitating the other reforms suggested in this paper and ameliorating their potential harmful effects. This reform should be accompanied by a widespread, intelligent information campaign addressed to the population, explaining the human logic and priorities of the SSN program and other reforms (Mesa-Lago 1993; Alonso, Lago, and Donate Armada 1994).

The Need for Foreign Aid

Most of the reforms recommended in this paper require substantial international aid and technical support. However, although Cuba is a member of the United Nations agencies, the country does not belong to international financial organizations (IFOs) such as the International Monetary Fund (IMF), the World Bank, and the Inter-American Development Bank (IDB), nor to the financial-aid institutions of nations that belong to the Club of Paris. The Cuban government withdrew from the IMF and the World Bank in 1962 and never signed the founding agreement and does not belong to the IDB, and its 1986 suspension of debt payments to Club of Paris members impedes Cuba's ability to become a beneficiary of their financial-aid institutions. The possibility of becoming a member of the major IFOs under the first scenario is slim because of the prominent role that the United States plays in them and the stipulations of the Cuban Liberty and Democratic Solidarity (LIBERTAD) Act of 1996 (Helms-Burton). The situation would be more propitious under the second scenario.

In any case, Cuba would have to apply for membership in the IFOs, and it would take time to be admitted and have membership quotas set. Still, although Cuba has a significant foreign debt (\$11 billion in 2001) that would have to be negotiated and restructured, it has the advantage of having no debt with the IFOs. This means that a Cuban government committed to the reforms suggested in this paper could expect to receive aid in a

shorter-than-normal period. Furthermore, Cuba could gain admittance to the International Development Association and become a beneficiary of the Highly Indebted Poor Countries (HIPC) Program, provided that it signs an agreement with creditors to reduce the debt and introduce economic and social reforms (see the proposal in Castañeda and Montalván 1997). In view of the widespread poverty suffered by Cubans and the enormous difficulties Cuba will face in reforming its economy and launching a program of sustained development, the Club of Paris and other creditors should consider forgiving part of the Cuban debt if the island nation will agree to make needed reforms, including those that will alleviate its significant socioeconomic disparities.

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