Growth Capabilities and Development: Implications for Transition Processes in Cuba

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Introduction

A number of separate strands of literature have raised fundamental questions about the nature of economic development.[1] One of these questions is the distinction between growth and development, which will play an important role in our subsequent discussion. Another one is the definition of the standard of living. This second question has been the subject of a recent treatise by a prominent economic theorist.[2] Concern about poverty has moved the discussion of this question from the philosophical and conceptual realm to the practical realm of development policy. Indeed the United Nations has espoused a particular approach to the subject, which is often referred to as the capabilities approach. This essay will focus on these two questions, the ways of implementing the capabilities approach and its application to Cuba's development.

In Section I we show that an essential distinction between growth and development is independent of any particular definition of the standard of living. In Section II we consider the capabilities view of the standard of living and its relationship to the household production model. In particular, we stress the role of other institutions in providing fixed inputs to households, which leads to a considerable potential for cost shifting between households and other institutions. In Section III we discuss various ways of implementing the capabilities approach available in the literature in light of the ideas in the previous two sections. In Section IV we use the ideas developed earlier to discuss Cuba's role as an outlier from the perspective of the capabilities approach, current economic conditions and the transition processes under way. A brief conclusion highlights one implication of the capabilities approach for Cuba's current situation and

the implications of Cuba's experience for the capabilities approach.

I. The Meaning of Economic Development

Anand and Ravallion provide a recent example of how the discussion of this concept is framed.[3] One view is presented as "Development is often taken to mean rising incomes. A still common view equates development with growth, though there has been a shift in emphasis since the 1970s to a focus on the distribution of incomes." An alternative view is described as "The essence of this view is that human development--what people can actually do and be--is the overriding purpose of economic development." The first view is characterized as mainstream and associated with the World Development Report put out by the World Bank.[4] The second view could be characterized as non-mainstream, by default, and is associated with the Human Development Report put out by the United Nations.[5]

Framing the issue of the meaning of development in this manner may be useful for certain purposes, but it lumps together a potential distinction between growth and development with alternative definitions of the standard of living. The first view implies a narrow definition of the standard of living in terms of income, as purchasing power over goods and services, although allowing for some correction to income on the basis of its distribution. The second view implies a much broader definition of the standard of living which could encompass freedom, health, and education as well as income.[6] Both alternatives, however, are consistent with the existence of a distinction between growth and development.

The distinction between these two concepts has had an uneven history. In an essay on the semantic history of the term "economic development", Arndt points out the Marxist origins of the

term and how it evolved from colonial times through the postwar years.[7] He quotes W. A. Lewis as well as others to show that the terms growth and development were being used interchangeably by the late 1950s. He concluded by noting that in the subsequent twenty years development economists tried to break down the identification of growth with development.

Recent developments in economics suggest, however, that the distinction between growth and development is becoming blurred once more. First, the conventional wisdom of modern economic growth as resulting mainly from the application of science and technology to production processes has been challenged by economic historians, who point to the role of institutions in this process.[8] Having to account for institutions in explaining growth makes it harder to distinguish between growth and development. Second, the development of endogenous growth models opens the door for economic policy to affect outcomes.[9] Once again, accounting for economic policy in explaining growth makes it harder to distinguish between growth and development.

By considering the following working definition of development and what it implies, we can draw a meaningful distinction between growth and development which encompasses the two views of the standard of living implicit in Anand and Ravallion's discussion. To wit, *economic development is a process or set of processes whereby a society consistently experiences increases in the standard of living of a substantial majority of its population.*

If one accepts that economic processes are characterized by novelty, irreversibility and hysteresis,[10] the essential distinction between growth and development falls on whether or not these processes result in an improvement in the standard of living, however defined, over long periods of time, i.e., on the word consistently. The practical significance of this distinction is that

over long periods of time environmental circumstances change, and in modern times dramatically so. Development implies that the set of processes determining the functioning of a society, even if unique to that society, allow it to adapt to this fundamental uncertainty in such a way as to improve the standard of living of most of its members. Growth, on the other hand, can be followed by long periods of stagnation.

No matter what definition of the standard of living one adopts, the relevant question to distinguish between growth and development is how the standard of living of the majority of the population evolves in response to changing circumstances. Hence, any definition of the standard of living, if it is to be useful, should yield mechanisms that permit an improvement in our understanding of these evolutionary processes. In the next section we consider the conceptual basis of the standard of living underlying the Human Development Report and suggest one way of implementing this definition that provides a mechanism for linking the standard of living thus defined and the economic and political processes that determine its evolution.

II. The Standard of Living and the Household Production Model

In the Tanner lectures Sen brings together many ideas developed earlier to suggest a definition of the standard of living in terms of capabilities and functionings.[11] One implication of this view is to question the use of average GNP or GDP as an indicator of the standard of living, especially as the sole indicator. It also provides a conceptual basis for considering social indicators or basic needs standards as measures of functionings or realized capabilities that intrinsically make up the standard of living rather than as supplements to GDP as a measure of true opulence, which is the current view that Sen is questioning.

In a discussion of Sen's arguments in connection with the Tanner lectures, Muellbauer brings out the similarities between Sen's view of capabilities and the household production model.[12] In this context market goods, environmental inputs and personal characteristics are the sources of the capabilities set or the set of feasible functionings.

In his reply Sen accepts the validity of the analogy but questions its usefulness. In particular, he argues that many of the functionings are produced at least as much outside the household as inside it, e.g., public policy against epidemics. This objection lacks substance in many settings. One can view a functioning or level of a fundamental commodity to be produced as the state of health and one can conceive of it as produced with variable inputs chosen by the households and with fixed inputs made available to the household by the state or society. Hence, public policy against epidemics produced by the state can be viewed as providing higher or lower levels of fixed inputs into the household production activities.

It is misleading to ignore or underestimate this connection in either measuring the standard of living, which concerns Sen, or in explaining behavior, which is the concern of some proponents of the household production model.[13] It leads to the neglect of a fundamental economic interaction between households and other institutions that constitute any society. For instance, if a society is so constituted that the public provision of safe water by a community takes place at low or even zero levels, a household's standard of living is negatively affected. One can think of an increase in the provision of this public good as an increase in the level of a fixed input to the household. The latter uses this input to produce health services at a lower cost than it could otherwise and, as a result, its standard of living increases, after allowing for the taxes necessary to cover this public expenditure. Moreover, this view brings out clearly that there is a potential

shifting of costs between the household and society in the production of a given level of this functioning. A particular level of this dimension of the standard of living may be more efficiently provided (in the sense of using fewer resources of every member of the society) if the state employs resources to produce safe water than if every household has to "produce it on its own" through, for example, the purchase of bottled water. Thus, neglect of this aspect of the household production model leads to ignoring important economic considerations in determining the standard of living defined in terms of realized capabilities or functionings.

This fundamental economic interaction between households and other institutions is quite pervasive and it is not limited to the provision of public goods by governments. For instance, in the household's interaction with retail systems one can conceive of the distribution services provided by retail firms as fixed inputs into household production activities.[14] Higher levels of these services lower distribution or purchasing costs for households while increasing production costs for the firms that provide these services. Depending on environmental factors, different societies end up with different configurations in the allocation of these costs between households and retail firms and in attaining different standards of living in terms of the capabilities afforded by these different configurations.[15] Interestingly, a similar point is embedded in Hart's comparison of West African and British society in connection with the Tanner lectures.[16]

Why are we interested in the standard of living? Most economists are interested in the concept as a measuring rod for understanding, guiding or evaluating its evolution or the pursuit of policies aimed at improving well being. If this is the ultimate focus of inquiry, it is not sensible to ignore an important economic mechanism that affects this concept when measured in terms of capabilities. The level of any household's capabilities is going to be substantially affected by the

presence or absence of many fixed inputs provided by other institutions.[17]

III. Implementing the Capabilities Approach

An obvious starting point is the human development index put forth by the United Nations. In their own words, "The HDI is an unweighted average of the relative distances measured in longevity, education and resources. It is a minimal measure. For a country that has achieved a high value of the HDI, the question then arises about other dimensions in which people can grow".[18] Several problems arise with this index: intertemporal comparisons require fixed "goalposts" not relative ones, the equal weights are arbitrary, and the selection of these dimensions over other ones, for example, freedom and human rights, gives predetermined answers to relevant questions which may be inappropriate. The report provides a summary of debates on these and other issues. Here we emphasize first the difficulty of understanding how the standard of living evolves over time if measured in terms of the index and second the a priori relegation of considerations of issues of freedom and human rights to a subsidiary position in the standard of living.[19]

Before proceeding, it is worth noting that the Human Development Report provides very useful information on many individual dimensions of what the standard of living can be. Hence, rejection of a particular version of HDI implies nothing about the merits of the substantial amount of information provided in the report. Empirically speaking, it is only 1 table out of 52; substantively speaking, the issues raised in the report are worthy of attention even if all versions of the index were to be judged as fundamentally flawed for certain purposes.

A somewhat less controversial approach has been put forth recently by Kakwani. He

foregoes the notion of weighting different dimensions of the standard of living into an overall index and concentrates on defining an index of achievements or functionings, for any dimension, that has desirable properties, which are defined axiomatically. Since the aggregate measures of well being considered by Kakwani (life expectancy at birth, infant mortality and literacy rate) have asymptotic limits, reflecting physical and biological maxima (M), he proposes an achievement index for each one that captures this feature as well as the existence of a minimum (M_o). This leads to an index that ranges between 0 and 1. Kakwani also imposes an axiom (5) on the index that is justified as follows: "... as the standard of living reaches progressively higher limits, incremental improvements should require much greater resources than similar incremental improvements from a lower base".[20]

While the property incorporated into this last axiom may be appropriate for indicators of health, for example life expectancy and infant mortality, it is not necessarily appropriate for indicators of other dimensions of the standard of living, for example literacy and average GDP. The main point is a conceptual one. If at a particular level of an indicator there are important thresholds or network externalities or fixed costs that need to be overcome in order to generate a given improvement, the amount of resources required to overcome these factors will be greater than what is necessary to make further subsequent improvements. For example, when the literacy rate is very low it may take greater resources to allow a given improvement than when it is at medium or high levels. A simple example that generates this result is to assume that some fraction of the literate population teaches their own children to read and write. Other things equal, in this setting a country with a 10% literate population has to devote a greater amount of societal resources to provide literacy to an additional 1% of the population than when it has a

20% literate population.

In the case of average GDP, there are also theoretical reasons to expect the nonlinearity in the indicator to exhibit nonconvexities, which violates axiom 5. For instance, Azariadis and Drazen develop a model in which if threshold externalities are due to the attainment of a critical mass in human capital, multiple balanced growth paths and development take-offs become possible. In looking at evidence in support of this model, they note that no countries were able to grow quickly during 1940-1970 or 1960-1980 without the benefit of a highly qualified labor force at the beginning of the period, which was measured by the GNP and GDP to literacy ratio, respectively.[21] Fixed costs due to infrastructure needs can generate the same type of nonconvexities. The achievement index developed by Kakwani assumes away the existence of these possibilities.

Rather than focusing on mechanical indexes and their properties, an alternative approach is to assess, however imperfectly, the efficacy of arrangements aimed at providing basic capabilities to the poor. Dreze and Sen identify two strategies: growth mediated security and support led security.[22] More recently, Anand and Ravallion have identified three views: capability expansion through economic growth, its cousin -- capability expansion through poverty reduction, and capability expansion through social services.[23] Concentrating on life expectancy at birth, they show that evidence from a cross-section of 22 countries indicates that one third of the improvement in this capability arises from poverty reduction while the other two thirds are due to increased health spending. They offer a number of caveats: results may differ from country to country and over time for a single country, the results do not hold up for literacy rates, and the results may be sensitive to certain measurement or econometric problems.

The household production model provides an interesting view of these results. If we define Z_1 as one of the capabilities generating satisfaction and associate it with life expectancy and we define Z_2 as an aggregate of other capabilities, we can describe their results in terms of the following diagram.

Figure 1. Capability Expansion and the Household Production Model [INSERT HERE]

Increases in social services shift the household's production possibility frontier as in C. Poverty reduction through income growth shifts the household's possibility frontier as in B. If one is only interested in achievements in life expectancy, increased social services appears as the superior alternative; if one is interested in expanding capabilities, however, this conclusion no longer follows even within the capabilities framework. Indeed, even in the context of increased social services one can view C as describing opportunities increased through health expenditures and B as opportunities increased through targeted food subsidies. An evaluation of the effectiveness of alternatives in either case has to take into account the potential for cost-shifting between the household and the institutions providing social services.

At least three other issues are worth discussing in connection with these results and the capabilities approach in general: the scope of development economics, hysteresis and the role of freedom and human rights. Poverty and its elimination or amelioration are one of the main topics of development economics, but it is not the only topic. While the capabilities approach may be especially suited to address problems of poverty, conceptually it is not limited to that topic.

Indeed, it would be a significant intellectual loss for both the study of poverty as well as of development if this separation were to take place. At low levels of development, the issue of poverty attracts greater attention because it affects a larger number of human beings and it entails greater suffering. The emphasis on poverty alleviation through the capabilities approach is of special interest because it suggests choices to be made at low levels of development, even measured in conventional ways. Hence, Sri Lanka and other outliers in the sense of greater poverty reduction at comparably low levels of development provide interesting case studies. Do they support the view that "policy intervention can play a role in the promotion of human development independently of the promotion of aggregate affluence"?[24]

From the point of view of development economics the answer is far from settled. Anand and Ravallion note that Sri Lanka's record of government intervention in health and education goes back to the 1920s and obtain similar results to their cross-section results for a time series regression of infant mortality rates (1952-1981). Kakwani also identifies Sri Lanka as an outlier with respect to life expectancy at birth and infant mortality in terms of his achievement index for both 1971-1980 and 1981-1990. He also notes a shift in policies after 1977 from a welfare oriented development strategy to a growth oriented one and a major policy switch from food subsidies to a means tested food stamps program which led to "enormous savings...directed to production and employment activities".[25] If a factor for the change in policies was the drag on growth generated by the earlier welfare policies, one cannot conclude that the role of policy interventions in promoting human development is independent of the promotion of aggregate affluence.[26]

What the above considerations suggest is that the phenomenon of hysteresis is as relevant

to discussions of poverty alleviation as to development regardless of whether or not one adopts the capabilities approach to either or both. If one admits to the possibility of optimal sequences in either instance, one has to confront the reality that a choice for social services provision over poverty reduction through income growth may be a sensible strategy for capability expansion in some stages and not a sensible one in other stages.[27] Incidentally, a switch in policies generated by a democratic process and resulting in a higher standard of living for a majority of the population can be interpreted as an important sign of development.

A similar phenomenon arises when discussions of capability expansion are extended to other countries that can be viewed as outliers. For instance, one of the most significant events of our century has been the demise of communist societies in the former Soviet Union and in Eastern Europe. These societies were characterized by extensive government intervention to secure minimum levels of certain capabilities to the vast majority of their population. If one looks at their achievement in the health area through the main indicator in the capabilities approach, one finds that life expectancy at birth for these countries went from 67.7 in 1960 to 70.3 in 1990. Comparable figures for the OECD countries are 69.6 in 1960 and 76.4 in 1990.[28] By this measure capability expansion was greater in the OECD countries than in the former Soviet Union and Eastern Europe. Even if performance in the early postwar period were to have been superior for the latter compared to the former, the issue of hysteresis with respect to the most sensible choice between poverty reduction through income growth and provision of social services remains.

Discussion of these societies immediately brings to the fore extensions of the capabilities approach to the dimension of freedom and human rights. There is no agreed upon measure of

capabilities in this area,[29] but one can argue that the demise of communist societies after 1989 represents an expansion of the capabilities for freedom and human rights of most of their members. This expansion has taken place at a fairly high cost for many in terms of affluence in the short-run and possibly in terms of basic capabilities.[30]

Alternatively, the accomplishments in expansion of some basic capabilities by right wing dictatorships in South Korea and Chile have been noted by proponents of the capabilities approach.[31] Is there more than a casual connection between the accompanying suppression of freedom and human rights and these successes? Are the democratization processes underway in these two countries capable of continuing or at least preserving the earlier gains in other dimensions? If so, were these sequences necessary or historical accidents? There are no clearcut answers to these questions,[32] but they are worth keeping in mind when assessing policy implementations.

IV. Implications for Transition Processes in Cuba

Cuba represents an outlier in terms of the capabilities approach. From its inception, the Cuban revolution has devoted a substantial amount of resources to improvements in health and education through social spending in these sectors as well as to the maintenance of a minimum standard of consumption through a rationing system. The results in terms of available capability indicators are: life expectancy at birth increased between 1960 and 1990 by 11.6 years; infant mortality rates over the same period declined by 51 per 1,000; and adult literacy rates increased by 7 percentage points between 1970 and 1990. Comparable numbers for Chile and Costa Rica are, respectively: life expectancy increases, 14.7 years and 11.7 years; infant mortality declines,

97 per 1,000 and 70 per 1,000; literacy rate increase, 4 percent and 5 percent.[33] All three countries are grouped as providing support led security by Dreze and Sen.[34]

Some perspective on these improvement indicators is given by the fact that in 1960 Cuba was ahead of the other two countries in the two health indicators and it remains ahead but by a smaller margin in 1990. With respect to literacy Cuba was slightly behind the other two in 1970 and it is slightly ahead in 1990. If we look at indicators of economic well being most observers would place Cuba at the top of Latin America in terms of GNP per capita in the 1950s.[35] Dasgupta notes the similarity in population size and national income during the early 1980s between Chile and Cuba.[36] Nonetheless when we look at GDP per capita in 1990 purchasing power parity dollars we find: Cuba, 2,200; Chile, 5,099; Costa Rica, 4,542.[37] It would take a rather dramatic correction for inequality to bring the other two countries to Cuba's level. Moreover, these two countries are among those singled out by Dreze and Sen for their performance on behalf of the poor.[38]

To sum up, Cuba's performance in the capabilities dimension of health and education from 1960 until 1990 has been similar to Chile and Costa Rica. In the economic well being dimension of capabilities, however, it has been decidedly an inferior performer to the other two during these 30 years. Finally, a similar conclusion follows with respect to Cuba's performance in the area of freedom and human rights relative to Costa Rica or even Chile. These current levels of accomplishment in various dimensions of capabilities, as well as the paths leading to them, have important implications for the transition processes now underway in Cuba.

Current economic conditions in Cuba are dismal. Mesa-Lago presents estimates of decline in GDP for 1990, 1991 and 1992 from nine different sources, including Castro, Cuban

economists (Carranza, Monreal) and outsiders ranging from Mesa-Lago to Zimbalist. The smallest decline in any one of the three years is 5 percent; the largest decline in any one year is 35 percent.[39] Two fundamental economic characteristics of the current situation are dramatic decreases in oil imports and a substantial reduction in revenues from sugar.[40] These considerations suggest that, since 1990, Cuba has fallen farther behind Costa Rica and Chile in the economic dimension of well being. Indeed, by 1990 Cuba already ranked below Ecuador, Paraguay, and the Dominican Republic in this dimension at the aggregate level and it may very well be joining the ranks of the poorest of the poor among Latin American countries in terms of economic well being.

Cuba's levels of achievement in health and education capabilities indicators remained substantially above Paraguay, Ecuador and the Dominican Republic in 1990, for example. Since these indicators are aggregate and reflect long run trends because of their nature as stocks, it is unlikely that the deterioration in economic performance will bring Cuba close to these countries levels of achievement in the next ten years.[41] For instance, Mesa-Lago points out a number of measures available during the current crisis that permit a significant cut in health and education expenditures but help maintain earlier accomplishments.[42] With respect to freedom and human rights, however, there are indications of attempts to increase the level of repression. An example is the creation of rapid deployment squads with special access to oil supplies in order to suppress quickly public manifestations of dissent; another are the acts of public repudiation of dissenters.[43]

One can easily interpret (or misinterpret) the capabilities approach to the standard of living as implying that there are no trade-offs between dimensions. As Dasgupta points out, however, it is not necessary to do so.[44] The current situation in Cuba and the earlier discussion on the

importance of hysteresis in the evolution of the standard of living suggests that the economic dimension of well being is acquiring a priority in Cuba that is very different from any situation that has existed since the population decline due to the War of Independence a century ago. A priority is the beginning of a trade-off.

Reluctantly, the Cuban government has adopted a number of measures indicative of its reassessment of the priority to be given to the economic dimension of well being relative to other aspects. One recent change is the promotion of foreign investment, international tourism and diversification of international trade. While some efforts in these directions existed earlier, they have been identified recently as the three pillars of a new opening.[45] Liberalization of private self-employment activity in some trades was approved during the 4th Party Congress in 1991. A substantial increase in black market activity is a fact of life.[46] An announcement of agricultural sector reforms took place in September 1993 and fiscal reform measures were announced in May of 1994.

Undoubtedly the most dramatic economic measure adopted in the last year was the dollarization of the economy announced in July 1993. It is notable because it gave privileged access to command over commodities to those individuals with ties to the exile community or access to the international sector. It represents a significant redistribution of income from faithful party cadres without access to the international sector toward individuals suspected of doubtful support for the regime. Not surprisingly, in May of 1994 a reversal of this measure was announced. A new convertible peso is proposed together with severe, retroactive sanctions for illicit transactions. By setting the exchange rate, a dollar tax can be collected. By increasing the sanctions for the now illicit dollar transactions, substitution toward the black market is

discouraged. Obviously the current crisis is forcing a number of uncertain trade-offs among Cuba's decisionmakers between improving economic well being and repressing political capabilities.

One of the mechanisms used in Cuba to assure an equitable distribution of a minimum of economic well being has been a rationing system. The importance of its role in the distribution system has fluctuated inversely with the general level of prosperity.[47] A stark view of the economic situation is provided by the changes in the monthly per capita quota that is officially available between mid-1989 and 1991-1992.[48] Clark identifies five items as freely available in mid-1989 (small fish, butter, eggs, bread, beer) that are also reported by Mesa-Lago for late 1991-early 1992. At the latter date small fish is available at 0.67 pounds per month, butter is not available, eggs are available at 20 per month, bread is available at 5 pounds per month, and beer at 24 bottles per month. Beef and chicken were no longer available in the official amounts in 1992, black beans are seldom available although the official quota for beans is higher than in 1989. Rice, milk, coffee and sugar remain the same as in 1989 and officially available cigarettes increased from three packages a month to four. Finally, it is reported by Mesa-Lago that the daily caloric intake declined from 2,835 in 1989 to 2,000 in 1992, which is below the minimum standard set by WHO.

If development implies the ability of a society to consistently increase the standard of living of a substantial majority of its population, in the last 33 years Cuba has done well in terms of the capabilities approach with respect to health and education but not necessarily better than some of its neighbors such as Costa Rica and Chile. In terms of this approach, however, it has not done well with respect to the economic well being dimension in the aggregate, or even

accounting for inequality. It has done miserably with respect to political and civil liberties. The decisionmakers in Cuba are now in the midst of a process of trading off between these different dimensions of the standard of living. Perhaps one of the main lessons of this experience is that at the extremes there are such trade-offs between dimensions of capabilities and that they are usually enforced by the path of events leading to a particular situation.

A critical issue that arises is the role to be played by the rationing system now in place, especially if Cuba reinserts itself in the international community with or without a change in political regime.[49] In their review of the evidence on health and nutrition Behrman and Deolalikar make a number of points that provide useful guidelines for policy design in this area. For the nonrural poor, and Cuba is a relatively urbanized country, price subsidies improve nutrition and improved nutrition has positive effects on productivity in low income contexts, which is an accurate depiction of current status in Cuba. Targeted food programs can be cost effective if the "best commodities" to be subsidized are chosen according to criteria such as availability, price elasticity, share in the budgets of poor households and price per calorie. These criteria qualify so-called inferior cereals, for example cassava, and disqualify products such as beef and vegetable oils. Food coupon systems are more effective if they rely on traditional wholesale and retail systems.[50] These considerations suggest very strongly that modifications to rationalize the current rationing system in Cuba rather than a dismantling of the system are an especially appropriate mechanism to adopt during the present crisis.

In terms of Figure 1, the level of capabilities provided through a modified rationing system, which corresponds to B, can be attained in a more cost effective manner than through social spending alternatives, which correspond to C. That is, a given level of expenditures from the

government budget can be used to support a modified rationing system or a variety of health and educational activities. In both cases the household production possibilities frontier is shifted outwards, but in the former case a higher level of achievement in both dimensions can be attained. This is more likely to happen if the current system is modified to take account of the findings indicated in the previous paragraph. In a well functioning market economy,the system would be limited to food stamps or nutritional programs for a small number of vulnerable groups. Current circumstances in Cuba, however, are far removed from this setting and a rationalization of this part of the safety net must be done cautiously. Incidentally, in principle this argument does not require a government to produce, store or distribute food. It can pay the difference between the market price and a subsidized consumer price to the distributor. Finally, a relevant example of rationalization of a food distribution system is provided by Sri Lanka's experience.[51]

V. Concluding Remarks

Critics of the Cuban regime are quick to point out the likely ineffectual nature of the current reforms and argue or hope for the inevitability of political change. Supporters of the regime point to similar changes and the need for additional ones as creative mechanisms for the survival of the current regime. Meanwhile, Cuba is in the process of joining the ranks of the poorest countries in the economic dimension of well being.

Improvement in economic performance is unlikely in the absence of profound reform. If credibility and expectations play a role in determining economic outcomes, the current reforms will have to go much deeper and be implemented with far greater enthusiasm than at present to be

credible and affect people's expectations. Current stabilization and structural adjustment measures are characterized by their limited scope and their subservient role to political or ideological considerations. Institutional reforms and the provision of economic incentives are at levels comparable to some Eastern European countries in the 1970's.

To conclude, the capabilities approach provides a useful tool for ameliorating the worse human consequences of the current crisis. On the other hand, the Cuban experience provides useful lessons on the limits of the capabilities approach when it ignores the dynamic nature of the standard of living, the existence of cost shifting in the provision of social services to households, the role of hysteresis and irreversibilities in economic processes, and the existence of trade-offs and interactions between different dimensions of capabilities.

Notes

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1. An introduction to these issues is available in A. Sen " The Concept of Development," in H. Chenery and T. N. Srinivasan, Handbook of Development Economics (Amsterdam: North Holland Press, 1988).

2. P. Dasgupta, An Inquiry into Well Being and Destitution (Oxford:Clarendon Press, 1993).

3. S. Anand and M. Ravallion, "Human Development in Poor Countries: On the Role of Private Incomes and Public Services," Journal of Economic Perspectives 7 (Winter 1993):133-150.

4. World Bank, World Development Report 1990: Poverty (New York: Oxford University Press, 1990).

5. United Nations Development Programme, Human Development Report (New York: Oxford University Press, 1990,1991,1993).

6. With either concept one can also make a distinction between the level of living or what is actually attained and the standard of living or what is a desired state or objective. Unless stated otherwise in the text we will be ignoring this distinction and use the standard of living as synonym for the level of living, which is a common practice in the literature.

7. H. Arndt, "Economic Development: A Semantic History" Economic Development and Cultural Change 32 (April 1981):457-466.

8. For example, see D. North and R. Thomas, The Rise of the Western World (Cambridge:

Cambridge University Press, 1973) or D. North, Institutions, Institutional Change and Economic Performance (Cambridge: Cambridge University Press, 1990).

9. For example, see R. Lucas, "On the Mechanics of Economic Development," Journal of Monetary Economics (January 1988):3-42.

10. A process characterized by hysteresis is one where the evolution of the process depends on the actual path or history of the process as opposed to just initial conditions and a principle underlying its evolution. This view of economic processes has been put forth by N. Georgescu-Roegen, The Entropy Law and the Economic Process (Cambridge: Harvard University Press, 1971).

11. In Sen's view a functioning is an achievement, a capability is the ability to achieve and the standard of living is a set of capabilities, see A. Sen, "The Standard of Living: Lecture I,II" in G. Hawthorn (ed.), The Standard of Living (Cambbridge: Cambridge University Press, 1987). In practice the applied literature views the standard of living as a set of realized capabilities or functionings.

12. See J. Muellbauer, "Professor Sen on the Standard of Living," in Hawthorn (n.11 above).

13. See G. Stigler and G. Becker, "De Gustibus non est Disputandum," American Economic Review 67 (March 1977): 76-90.

14. See R. Betancourt and D. Gautschi, "The Demand for Retail Products and the Household Production Model: New Views on Complementarity and Substitutability," Journal of Economic Behavior and Organization 17 (March 1992): 257-275.

15. For an analysis of this characteristic of retail systems see R. Betancourt and D. Gautschi, "Two Essential Characteristics of Retail Markets and their Economic Consequences," Journal of

Economic Behavior and Organization 21 (August 1993): 277-294.

16. See K. Hart, "Commoditisation and the Standard of Living" in Hawthorn (n.11 above).

17. Emphasis on the household production model as a useful analytical tool in this context does not necessarily mean that it is appropriate in all contexts. If one wants to consider issues of intrahousehold inequality, it has to be supplemented or set aside to accommodate bargaining issues, e.g., see Dasgupta (n. 2 above).

18. Human Development Report (n. 5 above,p. 104).

19. For thoughtful theoretical arguments on the role of these factors in well being as well as an attempt at measurement in poor countries, see Dasgupta (n.5 above, chs. 2, 3, and 5).

20. N. Kakwani, "Performance in Living Standards: An International Comparison," Journal of Development Economics 41 (August 1993): 307-329, see p.312 for quotation.

21. This evidence is suggestive but not conclusive on the existence of a threshold due to this factor, because there were countries with high ratios of literacy to GDP or GNP at the beginning of the period that did not grow rapidly. Thus overcoming a threshold for a highly qualified labor force would be necessary but not sufficient for rapid growth in average GDP. Incidentally a regression of a monotonic transformation of GDP growth on literacy, controlling for average GDP, does show a positive and " statistically significant" relationship over the 71 low and medium income countries in their sample, see C. Azariadis and A. Drazen, "Threshold Externalities in Economic Development," Quarterly Journal of Economics 105 (May 1990): 501-526.

22. J. Dreze and A. Sen, Hunger and Public Action (Oxford: Clarendon Press, 1989).

23. Anand and Ravallion (n. 3 above).

24. Anand and Ravallion (n. 3 above, p.144).

25. Kakwani (n. 20 above)

26. As far as the consequences of the switch in policies for capability expansion, Kakwani's results suggest that Sri Lanka's role as an outlier decreased for life expectancy and increased for infant mortality. That is, there was an increase in the ratio of Sri Lanka's achievement index to South Asia's for infant mortality from 1.45 during 1971-80 to 1.58 during 1981-1990 and a decrease in the same ratio for life expectancy from 1.45 to 1.40.

27. For instance, Dasgupta (n. 2 above) concludes his treatise by pointing out the areas of public provision more likely to be successful in poor societies.

28. Both sets of figures are from Table 31 in the Human Development Report, 1993 (n. 5 above).

29. Discussion of some alternatives are available in HDR, 1991 (n. 5 above) and in Dasgupta (n. 2 above).

30. A discussion of these issues is available in L. Summers "The Next Decade in Central and Eastern Europe," and in D. Newbery, "The Safety Net During Transformation: Hungary," both in C. Clague and G. Rausser (eds.), The Emergence of Market Economies in Eastern Europe (Oxford: Blackwell Publishers, 1992).

31. Dreze and Sen (n. 22 above) identify South Korea as engaged in growth mediated security and Chile as engaged in support led security.

32. For instance, a recent theoretical argument establishing a positive link between democracy and economic performance is provided by M. McGuire and M. Olson "Optimization by Autocrats and Majorities,"mimeo,U. of Maryland 1993. An overview of causal mechanisms and available evidence is provided by P. Bardhan "Symposium on Democracy and Development," Journal of Economic Perspectives 7 (Summer 1993): 45-50.

33. These figures are taken from the Human Development Report (n. 5 above, Table 4).

34. (n. 22 above).

35. For instance, even a critic of the ancient regime and sympathetic observer of the Revolution writes about the situation in 1958 "Only Venezuela and Argentina, of the larger Latin American countries, had a higher average income.", see D. Seers "Economic and Social Problems of Twentieth Century Cuba," p. 212 in R. Freeman Smith (ed.) Background to Revolution (New York: Alfred A. Knopf, 1966).

36. (n. 2 above, p. 127).

37. Human Development Report (n. 5 above) Table 1. The figure for Cuba is a UNDP estimate constructed with the help of L. Goldstone of World Statistics, Ltd; the other figures are standard ones from the Penn project. While the figure for Cuba is less reliable than the other ones, it is consistent with other estimates. For example, the Economist Intelligence Unit reports a GDP of $ 23.6 billion for 1991, see M. Font, "The Cuban Structural Crisis," Cuban Affairs 1 (Spring 1994): 7. Using the estimated population of 10.7 million for 1991 from the HDR yields a per capita GDP of $ 2,220 in current dollars.

38. (n. 22 above).

39. C. Mesa-Lago, "The Social Safety Net in the Two Cuban Transitions," in L. Perez (ed.) Transition in Cuba (Miami: Florida International University press, 1993).

40. For instance, imports of oil went from 13.3 million tons in 1989 to 6.1 million tons in 1992 and sugar output is reported to have gone from 7.1 million tons in 1989 to 6.3 million tons in 1992, see J. Carranza, "Cuba: Los Retos de la Economia," Cuadernos de Nuestra America (January-June 1993):131-159. The situation in 1993 was worse, for example a fall in sugar

revenues from $ 1.1 billion to $0.65 billion was reported as one of the reasons for dollarization by a Cuban economist (P. Monreal) during a public lecture at Georgetown University.

41. Of 31 countries showing a decline in GDP per capita between the decade of the '70s and the decade of the '80s, none showed a decline in life expectancy or infant mortality as measured by Kakwani (n. 20 above).

42. (n. 39 above).

43. Two of the best known cases are Maria Elena Cruz and Elisardo Sanchez, for example see J. Blight, B. Allyn and D. Welch, Cuba on the Brink (New York: Pantheon Books, 1993) p. 398.

44. (n. 2 above, Ch. 2, Sect. 3)

45. M. Rua and P. Monreal, "La Apertura Economica Cubana," Cuba Foreign Trade, 1 (1993): 1-11.

46. See Carranza (n. 40 above) and J. Perez-Lopez "The Cuban Second Economy: Methodological and Practical Issues Related to Quantification," in G. P. Montalvan (ed.) Cuba in Transition, vol. 2 (Miami: Florida International University Press, 1993).

47. See R. Betancourt, "The Distribution Sector in a CPE: Cuba," in G. Montalvan (ed., n. 45 above).

48. For mid 1989, see J. Clark, Cuba: Mito y Realidad (Miami: Saeta Ediciones, 1990); for 1991-1992, see Mesa- Lago (n. 39 above).

49. Standard prescriptions for economies in transition suggest the avoidance of rationing systems, for example Newbery (n. 30 above). Textbook analyses of developing countries point to the high costs of food subsidies when available for the entire population, for example, M. Gillis, et al., Economics of Development (New York: W. W. Norton & Co., 1992). Nonetheless, many

variants exist in developing countries, see O. Knudsen and J. Nash, "Domestic Price Stabilization Schemes in Developing Countries," Economic Development and Cultural Change 38 (April 1990):539-558.

50. See J. Behrman and A. Deolalikar, "Health and Nutrition," in H. Chenery and T. N. Srinivasan (n. 1 above).

51. See D. Sahn and N. Edirisinghe, "The Politics of Food Policy in Sri Lanka," in P. Pinstrup-Andersen (ed.) The Political Economy of Food and Nutrition Policies (Baltimore: The Johns Hopkins University Press, 1993).