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Unctad - United Nations

27 October 2010

Online at <https://mpra.ub.uni-muenchen.de/26359/>
MPRA Paper No. 26359, posted 04 Nov 2010 09:18 UTC

THE EXAGGERATE SOCIALISM OF RAUL'S CUBA and the unique role of the services sector ¹

Abstract

Cuba's post-revolutionary economic history was penalized by the twin sets of distortions stemming from its former, artificial trade relations with the CMEA and from the very nature of the state socialist model, let alone the severe costs imposed by the US embargo. Conversely, Cuba's centralized resource allocation system and the consistent priority accorded to the satisfaction of basic needs were instrumental in engineering a remarkable accumulation of human capital and an extraordinary development of public services, and serendipitously endowed the country with a lingering comparative advantage in some advanced, knowledge-based services sectors. However, the tension between Cuba's exceptional human development achievements and the weakness of their material foundation cannot be maintained indefinitely. The intrinsic deficiencies of the central planning mechanism, the need for expanding the role of the market and of monetary-commercial relations, and the inescapability of respecting the law of value and the socialist principle of distribution according to work should be fully acknowledged and translated in a structural reform program. The ultimate goal of such a program should be that of definitely superseding the traditional state socialist model, leading to a transition towards a specifically Cuban form of market socialism.

¹ The subtitle is inspired by that of a Peruvian novel of the 70s, [La vida exagerada de Martín Romaña](#) (1981), by the Peruvian writer [Alfredo Bryce Echenique](#) (see Bryce Echenique 1981).

Introduction The foundations of Cuba's state socialism model

This goal of paper is to discuss the past and present problems and contradictions of Cuba's socialist economic fabric and the endogenous policy alternatives that might contribute to their overcoming². To this purpose, this introductory section briefly identifies a few key features of Cuba's model of state socialism.

Not differently from other revolutionary experiences in the XXth century, Cuba's socialist experiment after the 1959 revolution shared with the previous experiences in the USSR and in China the challenge of building a structurally new type of economy under conditions of technological backwardness, underdevelopment of capitalist production and exchange relations, and isolation from well-established international capitalist markets. Such very hard initial conditions were soon aggravated by the sudden exodus of the former ruling class, and with it of most of the country's knowledge endowment, especially in the area of economic organization.

Moreover, in spite of the fact that the Soviet economy had already been in existence since more than four decades, the understanding of its structural pitfalls among socialists and leftists worldwide, and especially in the Third World, was hampered by the perception of its ultimate success in contributing to the victory against Nazism in WWII, by the intellectual climate of the Cold War, and by the specific historical contingency prevailing in the late 1950s and early 1960s, when the relative performance of the USSR vis a vis the US and other capitalist powers looked quite good. Such circumstances contribute to explain why the revolutionary Cuban leadership was not endowed with substantially more advanced theoretical tools in the economic domain than their Russian counterparts in 1917 or the Chinese ones in 1949.

Conversely, Cuba differed from the former Russian Empire and from China in other two key, mutually interrelated aspects. First, it was a small country. Second, its form of underdevelopment was not stemming mainly from a dearth of capitalist

² Consistently, a relatively minor emphasis is put on the role of exogenous factors. This choice of an essentially endogenous focus, of course, does not imply any underestimation of the devastating impact of the US embargo.

relations of production and exchange (as it had been the case in pre-revolutionary Russia and China) but from the articulation of the bulk of production and exchange relations – which were already prevalently capitalist in nature - around the axis of the island's dependency from the US.

Cuba's economy, in fact, represented one of the most egregious examples of “dependencia”- style underdevelopment³, according to the then-fashionable theory elaborated by Prebisch and the CEPAL school⁴. The almost immediate implementation of the US embargo after the revolution suddenly turned a condition of dependency into one of dramatic struggle for short-term survival, a goal that could not possibly be achieved through a long-term pursue of relative economic independence, self-sustainability, and trade diversification through a gradual process of reforms.

Such objective and subjective conditions contribute to explain why post-revolutionary economic policies were characterized by a sort of haphazard approach, and the creation of a more or less central planning mechanism took a long time. In the 1970s and early 1980s a trend towards moderate liberalization, de-centralization, and the utilization of material incentives emerged, only to be abruptly reversed in the mid-1980s⁵.

In general terms, three deep structural faults can be identified in Cuba's state socialist model. The first was its foundation as a replica of Soviet-style state socialism, thereby implying an over-reliance on the potentialities of central planning and a denial of the need for maintaining an adequate role for market regulation and for monetary and commercial relations of production and exchange (especially in small scale activities) in the domestic market.

The second one was the paternalistic economic relationship established with the USSR and the CMEA which led Cuba to further concentrate its already high

³ The term underdevelopment is to be understood more as hinting to a distorted and hetero-directed unfolding of productive forces than to a sheer lack of it whatsoever. By the late 1950s, Cuba was in fact relatively advanced with respect to their Latin American and Caribbean countries in terms of income per capita, standards of living, and social indicators.

⁴ See Prebisch, 1949, and CEPAL 1950.1951.

⁵ See Dominguez 1987, 2005, Ritter 2004, Mesa-Lago 2005a,b., . Recurrent de-centralizing and re-centralizing trends were common in all state-socialist economies .

degree of dependence on primary commodity exports⁶, on the basis of a fully artificial terms of trade relationship almost totally de-linked from the evolution of world prices. The de-linkage of Cuba's terms of trade from the world structure of relative prices, besides deepening the island's dependence on exports of sugar and of few other raw or primary commodities and traditional commodity-based products (such as ron, cigars, nickel, cobaltum), contributed to distort the range of technological alternatives faced by planners.

Goods-producing sectors, and agriculture in particular, adopted more capital- and energy-intensive techniques than those that would have prevailed under "normal" market-based capitalist conditions. Dependency on imports intensified both in the primary and the secondary sector. Food self-sufficiency was very low, in spite of Cuban lands' relatively good natural potential. Previously existing export-oriented services sectors, such as tourism, were almost completely dismantled, while most of the human capital and infrastructural resources were earmarked to the direct, non-market provision of basic services to the population. As a result, problems such as the lack of economic diversification and of international competitiveness in nontraditional sectors inherited from Cuba's traditional dependency status were exacerbated. These contradictions were going to be paid very dearly after the fall of the USSR.

The third key problem with Cuba's socialist construction was the failure to grasp the very basic and (at least theoretically) well-established distinction between the socialist and the communist principles of production and distribution. This idealistic fallacy led to a recurring egalitarian policy bias in favor of state-mandated, non-market distribution of goods and services, to a degree that was not consistent with the objective level of development of production forces, while neglecting and despising (material) incentives-based policy tools.

Nevertheless, for almost three decades, thanks to Soviet support and probably also – to an extent that is obviously hard to quantify – to the partial effectiveness of the moral incentives based on the socialist humanistic principles, Cuba was able to advance towards the progressive realization of its ambitious social development agenda. Things started falling apart only in the early 1990s.

⁶ Pre-revolutionary Cuba, along with sugar and a few other agricultural commodities, also exported services, mainly tourism and related services. The role of services in Cuba's export structure would recover only in the 1990s.

1. Partial reforms, slow recovery, and crisis

During the early years after the fall of the USSR and the CMEA the Cuban economy all but collapsed. Exports, imports, the GDP, real wages, and consumption, all were reduced to a fraction of their former size in a matter of 2-3 years. The magnitude of the external shock is made evident by just a few figures. In 1990-1993, Cuba lost 85% of its former export markets, and its terms of trade deteriorated by 50%. Any access to external financing vanished (see ONE 2004 and Galbraith et al. 2006). Exports fell by almost 80%, imports by over 70%. GDP also shrank abruptly (- 35% in 1990-1993) and, notwithstanding the subsequent partial recuperation of the economy, by 2000 it was still about $\frac{1}{4}$ lower (in real terms) than in 1990 (ONE 2002). Total consumption decreased 25%, gross capital formation 70%.⁷ Mass starvation was only avoided thanks to the lack of class differentiation, the strength of the Cuban state and the effectiveness of its selective rationing mechanisms⁸. This dramatic phase of Cuba's economic history, and especially the most dramatic years of quasi-famine, are often referred to as a "special period in times of peace".

The government reacted to the catastrophic exogenous shock of the early 1990s with a coping strategy revolving around two key goals: to preserve the basic tenets of state socialism and to minimize the social cost paid by the population. Growth eventually resumed in 1994, on the basis of a completely different pattern of insertion in the international trade web, yet one that was not matched by a correspondently radical structural change in the social relations of production and exchange prevailing in the bulk of Cuba's economy.

⁷ According to official ONE statistics, GDP and consumption recovered their 1990 level by 2004. Conversely, capital formation remained depressed at less than 40% their 1990 level (See Galbraith et al., 2006 and ONE 1996, ONE 2000, ONE 2004). However, the interpretation of 2004 figures is made problematic by the puzzles created by the introduction of the new GDP valuation methodology in 2003. Actually, it is unlikely that GDP and total consumption ever recovered their peak level reached at the end of the 1980s. In this respect, the fact that the average real wage in 2008 was still much lower than its 1990 level is telling.

⁸ The term "Effectiveness" is to be intended with respect to the overarching goal of avoiding mass starvation, and does not imply that the libreta rationing mechanism was ever efficient, neither in the 1990s nor presently.

In the domestic domain, policy-makers launched a significant yet limited liberalization and de-centralization drive. The two main macroeconomic objectives were to re-orient the structure of Cuba's trade to cope with the new reality of world market prices and to rein in the ballooning fiscal deficit (33% in 1993). The latter one was pursued mainly cutting the subsidies to SOEs, that in the early 1990s had rose to the point of representing over 1/3 of GDP and ½ of public expenditure (see Galbraith 2006, ONE 2004). Subsidies to non-essential goods and services were also slashed. Notwithstanding its the dramatic scale, this massive subsidies reduction was essentially only a form of fiscal retrenchment, and did not seriously modify the structure of Cuba's economy.⁹

Conversely, the endeavour of completely rearranging - and, to a large extent, re-inventing - the export-oriented component of the Cuban economy did amount to a major structural change. The main actions launched to achieve such a change were a (cautious) open door policy vis a vis foreign capital, the creation of joint-ventures and the legalization of the possession of foreign currency. They were preceded by constitutional changes that formally eliminated the state monopoly over foreign trade and recognized non-state property rights. From the point of view of urban Cuban households, the most relevant de-regulating measures were probably the legalization of the individual possession of foreign currency, the setting up of Currency Exchange Houses, and the creation of a retail trade chain in foreign currency..

Several other de-regulating and liberalizing measures were enacted both in urban and rural areas. Yet, they were half-hearted, and domestic consumption markets never developed very much. In part, this failure is to be seen as consequence of the lack of substantial reforms in agriculture and in and rural-urban production and exchange relations, that crippled the growth of food supplies and the development of food markets (see Carriazo 1994, Enriquez 1994, 2003, Garcia Alvarez A., 2006, Alvarez 2009, Arias Guevara 2009, Nova 2006, 2009a,b) .

In sum, the reforms selectively aimed at resuscitating tourism and a few other foreign-exchange earning and infrastructural sectors on the pragmatic basis of attracting FDI and cooperating with foreign capitalistic firms, while allowing the population to engage in a limited set of market and monetary relations, in order to

⁹ The reduction of support for SOEs was not accompanied by a significant employment shift to the barely-existent non-state sector.

relieve the State from the impossible burden of ensuring everybody's survival (see Figueres Perez 2004). Production and exchange relations in the bulk of Cuba's economy (public services, sugar, manufacturing, agriculture) changed little. As a result, the linkages between the core and the rest of the whole edifice of production and exchange relations became more tenuous. In turn, this trend contributed to an increasing degree of domestic economic de-integration, and to the surge of the typical schizophrenia that characterizes the livelihood strategies of most ordinary Cubans, always oscillating between state and (mostly black) markets, Cuban and convertible pesos (formerly US dollars), formality and informality, legality and illegality.

Notwithstanding their purely defensive and circumscribed scope, the limited market-oriented reforms¹⁰ of the 1990s allowed Cuba to overcome the most difficult moments of the Special Period end to re-embark on a positive growth path. The recovery kept momentum and delivered increasingly encouraging results until the early 2000s, helped by a favourable evolution of Cuba's terms of trade.¹¹

Yet, in 2008, the economic situation worsened again. (see Tables 1, 2). The deceleration and subsequent crisis of Cuba's recovery path can partly be attributed to unfortunate exogenous shocks (such as the hurricanes and the sharp terms of trade deterioration that both hit the island in 2008), but it was mainly caused by economic policy mistakes and uncertainties.

Table 1. GDP and sectoral growth rates, 2000-2009

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|------------|------|------|------|------|------|------|------|------|------|------|
| GDP | 5.9 | 3.2 | 1.4 | 3.8 | 5.8 | 11.2 | 12.1 | 7.3 | 4.1 | 1.4 |

¹⁰ On the reforms carried out during the special period, their partially positive results and the persisting structural problems of the Cuban economy see, among others, CEPAL 1997, Ritter 2004, Burki and Edison 2004, Perez Villanueva, 2006, 2009, Mesa-Lago 2005a,b, 2008, Hershberg E., 2008, Barberia, Dominguez, Perez Villanueva 2005, Triana Cordoví J., 2008, Vidal P., 2008a,b, Perez Villanueva 2006, 2009, Mesa-Lago 2005 a,b, 2008.

¹¹ To estimate the evolution of Cuba's terms of trade during the special period and until the mid-2000s is not a straightforward exercise, and depends on the base year utilized. However, it is likely that an initial decline gave way to improvements in the early 2000s (see (CEPAL 2009, Mesa-Lago 2008). A major positive shift occurred in 2005 with the beginning of massive exports of professional services to Venezuela and other countries. In the late 2000s, exports of professional services kept rising largely offsetting the ever-increasing food import bill, and Cuba's terms of trade improved further. This positive trend reversed rather suddenly in 2008, causing a balance of payments crisis the in turn fuelled a banking crisis (see CEPAL, 2009, 2010, Mesa-Lago 2008).

| | | | | | | | | | |
|----------------|------|-------|-------|------|-------------|------|------|------|------|
| Agriculture | -0.2 | -2.3 | 3.6 | -0.2 | -12.4 | -7.5 | 19.6 | 0.6 | 3.3 |
| Sugar industry | -0.3 | -11.5 | -38.9 | 12.2 | -37.8 | -9.9 | -3.4 | 15.8 | -1.4 |
| Manufacturing | -0.9 | 1.3 | 2.6 | 2.4 | 4.2 | 5.3 | 10.1 | 4.9 | -0.1 |
| Health | 2.2 | 0.7 | -2.6 | 14.8 | 79.9 | 12.1 | 21 | 12.7 | 3.4 |

Table 2 Trade and investment, 2000-2009

| % of GDP | 2000 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Imports | 16.9 | 16.1 | 18.2 | 19.6 | 18.1 | 18.6 | 15.1 |
| Exports | 14.1 | 18.3 | 24.3 | 22 | 23.3 | 25 | 25.7 |
| Investment | 12.5 | 10.6 | 12.7 | 14.3 | 13.6 | 15.9 | 12 |

Growth rates

| | | | | | | | |
|----------|--|----|------|------|------|------|-------|
| Imports | | 13 | 25.8 | 20.4 | -1.1 | 7.4 | -17.7 |
| Exports | | 19 | 47.5 | 1.3 | 13.8 | 11.6 | 4.1 |
| Goods | | | -1.7 | 8.1 | -2.9 | 12.2 | 2.6 |
| Services | | | 77.8 | -1 | 20 | 11.4 | 4.6 |

In 2003, emboldened by the partly satisfactory results obtained until that moment and by the new, more favourable economic and financial conditions created by a vastly changed regional and global geopolitical scenario, Cuban policy-makers embarked once again in an excessively ideology-driven recentralizing policy turn. The results, as usual, were disappointing: traditional distortions and inefficiencies were exacerbated, the impact on economic growth was negative, and progressively mounting real and financial disequilibria created the pre-conditions that would lead to crisis in the late 2000s.

Yet - both in Cuba and abroad - the perception of this policy failure was obfuscated by the one-time boost stemming from the boom in professional services exports and by the confusion created by the new GDP evaluation methodology, that was introduced almost contemporarily to the launching of the new policy course. A new financial crisis has been again unfolding again since 2008, , and one of its prime victims has been the newborn financial system itself and its international credibility. This crisis is largely the product of the shortcomings of the 2004 monetary reform -

which left a legacy of monetary duality and currency overvaluation - and of other subsequent mistakes in the domains of monetary, exchange rate, and trade policies.¹²

During the first years, actually, the key objective of monetary stability was basically achieved, as the convertible pesos (CUCs) segment of monetary circulation was backed by sufficient foreign exchange reserves. This equilibrium, however, began to unravel in 2008. Due essentially to a lack of flexibility in import and investment planning, the government failed to react promptly to an unforeseen deterioration of the terms of trade, which was in turn partly caused by the

¹² The 2004 monetary reform led to the so-called "de-dollarization" of Cuba's economy and to the creation of a new currency, the convertible peso (CUC in Spanish), which parity with the US dollar was initially set at an official exchange rate of 1-1. The reform can be criticized with respect to four mutually interrelated issues.

First, in a relatively favorable macroeconomic and international situation like that prevailing in the mid-2000s, the chance was lost to proceed more boldly towards a reasonable unified exchange rate for the Cuban peso (CUP in Spanish), avoiding monetary duality.

Second, ordinary state enterprises were not allowed to purchase CUCs with their CUPs in order to finance their imports. This prohibition confirmed the preference for an over-centralized planning approach, severely undermined enterprise autonomy and artificially created two almost completely separated monetary sectors, the "enterprise sector" and the "population sector", thereby further contributing to the segmentation and de-integration of Cuba's economy.

Third, the CUP/US dollar exchange rate parity was maintained at the outlandish rate of 1-1 for planning and inter-enterprises accounting and transaction purposes, just while an official exchange rate of 24-1 was set in the newly-established Cuban pesos/CUC monetary market. The main result was to deepen the chasm between enterprise accounts and the external reality, thus making it still more difficult to enterprise managers and workers to adopt economically virtuous behaviors (see Piñeiro Harnecker 2010).

Fourth, possibly due also to dubious non-economic prestige considerations, the CUC exchange rate was subsequently re-valued in 2005 by 8% when the balance of payments was in surplus, and kept fixed afterwards, when the external accounts deteriorated.

The result was a substantial currency overvaluation that doubly jeopardized the country's economic performance. On one hand, as it would have happened as well in any other country, the currency overvaluation implied an anti-tradables bias and damaged Cuba's international competitiveness. On the other hand, as the bulk of foreign exchange was administratively allocated to enterprises by the state, the overvaluation increased the leverage of the central planning mechanism, thereby further weakening the relative autonomy of enterprises and the role of prices in overall resources allocation (See Vidal 2008a, 2009, 2010a, Canler 2008, Orro 2008, Morales Pita 2008)

Thus, "the fixed exchange rate policy did not contribute to the balance of payments and foreign exchange market objectives, and added to other previous decisions to provoke a crisis in Cuban banks" (Vidal 2010b, p.16). Among them, the most negative one was the 2004-2005 re-centralization of enterprises foreign exchange receipts in the hands of the state, probably the most egregious example of the counter-reformist policy stance launched in 2003. Under the new system (which was in fact a re-edition of the old one that had preceded the 1990s reforms) once again the enterprises lost their partial autonomy, and could only have access to foreign exchange reserves via a rigid and very centralized mechanism, obtaining their quota of funds only upon approval of a special body, the foreign exchange allocation committee (CAD in Spanish).

repercussions of the world capitalist crisis (Vidal 2010b). The monetary counterpart of this policy mistake was an excess of emission of convertible pesos, which inevitably eroded the major quality of the young currency : convertibility itself.¹³

Already by mid-2008s Cuba was forced to default on various external debt obligations with creditors from Japan, Germany, Canada, and France. This trend became progressively more generalized, and the amount of non-payments might have reached up to 1 bn US\$ by year-end (CEPAL 2009). Most foreign investors' bank accounts were frozen and a full-fledged banking crisis erupted in early 2009. As a result “ the Cuban banks are trapped in a systemic liquidity crisis, which could not be completely overcome so far” (Vidal 2010a, p.1).

Moreover, the centralized foreign exchange allocation system increasingly penalizes the ability of most firms to perform their basic functions. The foreign exchange approval committee (CAD) has been eliminated and its functions reverted to the ministries, but little has changed in terms of enterprise autonomy. The present two-tier foreign exchange allocation process is still vertical and centralized. The central planning machine, through the Cuenta Unica de Ingresos en Divisas del Estado (only/unified foreign exchange state account), allocates the funds to the various ministries, who in turn distribute them to their subordinate enterprises (see Vidal 2010a,b and Piñeiro Harnecker 2010).

Yet, this is not the end of the story. As the foreign exchange is fact rationed, firms need liquidity certificates (Certificados de Liquidez (CLs) in Spanish) to convert CUCs into foreign exchange. CLs are issued in limited quantities by the ministries, on a ad hoc, discretionary basis. In practice, thus, not all convertible pesos are convertible. The Cuban economy is thus left in the unenviable and probably unique situation of functioning on the basis of two different national currencies, neither of which is fully convertible. Besides CUCs accounts, many foreign exchange-denominated accounts belonging to foreign and joint venture enterprises were also frozen in a desperate attempt to control the financial crisis, and have only partially be reactivated since 2009 (Gazon 2010, EIU 2010).

¹³ Econometric evidence shows that, in the very peculiar and segmented context of Cuba's centrally planned economy, external shocks do not affect inflation or the exchange rate in the short term, but tend mainly to increase pressures and disequilibria in the exchange rate market where CUCs are traded for other currencies (see Vidal 2008b).

The crippling implications of such a monetary and banking mess are self-evident. Besides exacerbating the already widespread distortions stemming from the double currency regime¹⁴, it negatively affects the country's present and perspective access to foreign financing sources, the flows of foreign direct investment, the functioning of domestic credit operations, and the provision of capital, intermediate and final goods to both enterprises and households. Therefore, the foreign exchange constraint has become even more binding.¹⁵

Economic growth has decelerated markedly with respect to the promising results achieved in the 2004-2007 favourable cycle. The GDP growth rate was 4.1% in 2008 and 1.4% in 2009. These moderately positive figures, however, were pushed up by the resilience of many services sectors and by a modest pick up in agricultural production¹⁶, and partly mask a harsher reality. In 2009 the government was forced to cut drastically both imports and investment. For the first time in the decade, manufacturing production decreased (see Tables 1, 2)¹⁷.

In this difficult predicament, the government (always distracted and constrained by the urgency of micro-managing the crisis in the short term) has had the merit of halting the previous re-centralizing policy bias and of starting moving in the opposite direction. Yet, there has been so far until recently a hiatus between the boldness of the public acknowledgment of the dramatic and structural inadequacy of many key components of the state socialism model, on one hand, and the shyness and excessive cautiousness in the area of concrete policy measures, on the other hand (see Pérez Villanueva 2009, 2010). The major reform initiatives so far have been the pro-peasant agrarian reform and the liberalization of petty, small scale activities (most of them in the sector of commercial services). Both have the potential to generate large

¹⁴ Most SOEs (i.e., the vast majority of Cuban firms, excluding joint ventures) operate both in Cuban pesos and in CUCs. The official CUC exchange rate with respect to the dollar and the other major international currencies has been overvalued during most of its short existence, and its degree of "real" overvaluation can only have increased since the inception of the banking crisis. However, the existence of two domestic currencies with two reciprocal parity rates provokes far worse distortions than the overvaluation of the CUC. Some inter-firm transactions take place on the basis of a given exchange rate between the two Cuban currencies, and some at another rate, which differs from the first by a factor of 24. Even under rigid central planning conditions, where the role of price signals is minimized, the virtual impossibility of carrying out basic economic calculations and the consequent distortionary impact on the behaviour of firms, managers and workers cannot be underestimated.

¹⁵ As Cuba cannot borrow from IFIs or from most international banks, the binding linkage between foreign exchange earnings and growth is particularly strong (see Vidal and Fundora, 2008).

¹⁶ The minor improvement of agricultural production in 2009 might be an encouraging sign that the limited reforms in the rural sector are beginning to bear fruit.

¹⁷ The sugar and mining industries also recorded negative growth in 2009.

economic benefits, and are very relevant from an ideological, theoretical and political viewpoint, as they run counter the basic tenets of traditional state socialism. Yet, their impact so far has been marginal. In the case of the agrarian reform and the other pro-peasantization agricultural policy initiatives, the main reasons for the scarcity of productive results are the dearth of financial resources to support the peasant farms and the reluctance to radically restructure the state farms, the cooperatives, and the centralized system of inputs and outputs commercialization. Moreover, more time is needed for the new production and exchange relations to establish themselves in the Cuban countryside. The (mostly urban) liberalization of self employment and petty private activities has been purely experimental and extremely circumscribed so far, but the government appears now favourable to deepen and widen its scope.

In this respect, , contradicting most observers' expectations, a major policy decision appears to have been taken in the summer of 2010. On September 14 the government declared that in a few months up to half a million state employees (about 10% of the country's workforce) would be laid off, and invited to fence for themselves¹⁸ in the newly-encouraged small scale commercial sector (see Morrissey 2010, Wilkinson 2010). 178 types of activities will be authorized (more than in the 1990s), and the overall regulatory framework will be made more flexible, including with respect to the sensitive issue of hiring non-relatives

It has been observed that these measures are still too limited and timid, as - besides other limitations - the list of authorized activities is too narrow and excessively detailed, and does not cover knowledge-intensive activities (Vidal and Pérez Villanueva 2010). Nevertheless, this dramatic policy move probably heralds the beginning of a new and far more radical round of economic reforms.

2. *Tertiarization*

¹⁸ The Cuban government has stated its political willingness to avoid simply throwing redundant workers out on to the street, and stressed that nobody will be left without some form of social protection. Yet, the State cannot afford to be very generous. It is envisaged that the workers who lose their jobs will be granted an allowance corresponding to between one and five monthly wages, and those with 25 or more years of service will be offered an option of early retirement (Sánchez Serra 2010).

The crisis and the reforms of the special period have led to a pronounced tertiarization¹⁹ and de-industrialization process. The relative weight of services GDP and employment in Cuba is exceptionally high, and that of industry is particularly low, in comparison to other Latin American countries. The contrast with the two Asian market socialist countries is even starker (see Table 3).

During the 2000s decade, major changes also occurred in the relative weight of different sectors inside the services macro-sector (SMS)²⁰. In this respect, it is useful to distinguish between two services sub-macro-sectors, on the basis of the strength of their respective linkages to the goods macro-sector (GMS). The first one is constituted by infrastructural and other goods production supporting services (IGPSSs), and the other by directly needs-oriented services (DNSs).

Table 3 Cuba's tertiarization in a comparative perspective

| | VAI/GDP (%) | | VASERV/GDP (%) | | ESERV/ETOT (%) | |
|------------------|-------------|------|----------------|------|----------------|------|
| | 2000 | 2005 | 2000 | 2005 | 2000 | 2005 |
| Cuba | 19.4 | 14.6 | 73.8 | 79.9 | 62 | 67 |
| Argentina | 28 | 36 | 67 | 55 | 76 | 75 |
| Brazil | 28 | 29 | 67 | 65 | 59 | 58 |
| Colombia | 30 | 34 | 60 | 56 | 60 | 56 |

¹⁹ By the beginning of the 1990s, Cuba's economy was already dominated by services, which contributed more than 70% to GDP. The term tertiarization (tercearización in Spanish) refers to the increase in the relative weight of the services sectors taking place in most contemporary developed and developing economies. Among the latter, this process is particularly pronounced in the Latin American and Caribbean region. See, for instance, Bonet (2007) on tertiarization in Colombia.

²⁰ I refer to services as a whole as a macro-sector (SMS). The other macro-sector (GMS) covers good-producing activities.

| | | | | | | |
|-------------------------------------|----|----|----|----|----|----|
| *Latin America and Caribbean | 30 | 34 | 65 | 60 | 65 | 60 |
| China | 46 | 48 | 39 | 40 | 13 | na |
| Vietnam | 41 | 37 | 39 | 38 | 39 | 38 |

VAI **Value Added in Industry**

VASERV **Value Added in Services**

GDP **Gross Domestic Product**

ESERV **Employment in Services**

ETOT **Employment, Total**

Sources: WDI 2010, ONE 2010

Note. Data for Cuba are from Tables 3 and 4, calculated on the basis of ONE 2010, 2006. Data for other countries are from WB 2010. Yet, the two sources are broadly comparable, taking into account that the methodology used to compile in tables 3 and 4 is based on a relatively broader definition of services macro-sector than that used by WB 2010. Most data on Cuba during the 2000s decade are not available in WB 2010, with the exception of those on the employment structure. WB 2010 reports a percentage share of services in total employment of 54 and 61 in 2000 and 2005 respectively. Both figures are lower than those reported in the table, yet they confirm a strong increasing trend.

Most²¹ IGPSs, on one hand, rely for their functioning on the availability of a consistent amount of dedicated physical capital. On the other hand, they are not directly aimed at the satisfaction of human needs, as they are rather ancillary to the production and transportation of goods. Thus, their output can be seen an intermediate product entering an enlarged macro-production function of goods. Given the strength of their reciprocal backward and forward linkages, the performance of this group of services tends to go hand in hand with that of the GMS.

²¹ The validity and applicability of this aggregation criterion is limited by the availability of data. The strength of forward and backward linkages with the production of goods varies from one services sector to another. To some extent, for instance, services such as transport and communications cater directly to household's needs. Physical capital intensity also varies across this sub-group of services.

DNSs are labor intensive and, in many cases, skills and HK-intensive as well. This is especially true for education, health, and S&T, but also the tourist sector has increasingly been attracting some of the brightest and most entrepreneurial young professionals and skilled workers. Conversely, DNSs are not very physical capital-intensive. The latter observation particularly applies (so far) to professional services such as health and education, where knowledge and direct human contact traditionally constitute the essential conditions for service provision, with comparatively little need for any material support.²² Therefore, the sub-macro-sector of services directly aimed at satisfying basic (health, education, social assistance and security) and non-basic (such as hotels, restaurant, and other tourism-related activities) needs is the most de-linked from the sphere of material goods production.

By the year 2000, the IGPSSs sub-macro-sector was the largest, as it contributed 43.5% of the total GDP and almost 60% of the services GDP. The other services sub-macro-sector, DNS, was correspondingly smaller (about 30% of total GDP and 40% of the services GDP).

During the decade, two major changes unfolded in the structure of Cuba's GDP, showing a worrying trend towards a progressive disarticulation and segmentation of the country's economy. The first trend is the continuation of the increase in the relative weight of services in GDP, that reaches further in the early 2000s, reaching almost 80% in 2005, and oscillates around this high level until the rest of the decade. Correspondingly, the share of goods keeps shrinking until 2005, and stabilizes therefore at around 19% (see Table 4).

The second trend reflects the internal evolution of the services macro-sector. IGPSSs are pulled down by the dismal performance of goods production. Their contribution to GDP declines by over four percentage points between 2000 and 2005, (from 43.5% to 39.3%), recovers ephemerally in 2006, and falls again afterwards, reaching a low of 38.4% in 2009. Consistently, IGPSS's relative weight as a component of the services sector as a whole falls by ten points between 2000 and 2005, and appears to stabilize at just below 50% by the end of the decade.

²² This line of reasoning cannot be pushed too far, especially in the XXI century. In the old times, knowledge was mostly transmitted orally from an individual teacher to one or few pupils, and doctors tried to save patients mostly prescribing health-enhancing behavioural changes or feeding them home-made herb potions. Modern health and education services are increasingly dependent on access to goods such as drugs, medical equipment, books, journals, and computers.

Conversely, by 2005, DNSs increase both their GDP share (to over 40%) and their share in total services (to just over 50%), and subsequently maintain these gains. However, not all DNS follow the same trend. Hotels and restaurants, S&T, and Other personal, community, and association activities experience a slight decline in their respective GDP contributions. The shares corresponding to public administration, defence, social security, and education increase moderately. What really pushes up DNS as whole is the more than doubling of the GDP share of culture and sports (from 2% in 2000 to 4.3% in 2009) and the spectacular rise of the share of health and social assistance (from 7.7% in 2000, to 15.1% in 2005, to 15.8% in 2009).

Actually, the bulk of Cuba's services macro-sector is constituted by social and other public sectors. Among them, the size of the education and health sectors in particular has traditionally been very high by international standards. However, their respective behaviors in the 2000s differ markedly. The weight of education in GDP remains basically stable, oscillating around 9-10% of GDP, while that of health²³ increases even further. In fact, the estimated contribution of health to Cuba's total GDP increases from 8.4% in 2001 to 10.1% in 2003 (mainly as a result of the new evaluation methodology), and keeps growing even more afterwards, reaching about 16% in 2008-2009 (see Table 3). Such a relative weight of health in the national economy is extremely high²⁴ and appears to be matched only by one country in the world, the US.²⁵

Conversely, the GDP contribution of agriculture, which was already very low at the beginning of the decade, declines even further. The already moribund sugar industry also kept faring very badly²⁶, and its already marginal relative GDP

²³ "Health and social assistance", according to the ONE terminology.

²⁴ The number of doctors and stomachologists in Cuba kept increasing since the early 1970s. By the year 2000 there were almost 66000 doctors and 1000 stomachologists. As result, Cuba had ratios of 169 habitants/doctor and 1124 habitants/ stomachologist. The number of doctors and stomachologists kept increasing during the 2000s, reaching over 74000 and 11000 respectively, and the theoretical corresponding ratios with respect to the population fell to 150 and 971 respectively. These figures are very high by international standards. Yet, it has to be taken into account that a large share of this huge contingent is now working abroad, meaning that the real availability of highly qualified medical professionals attending the needs of Cuba's population has been significantly reduced (Source: ONE 2010).

²⁵ See WHO 2010.

²⁶ Recent zafras were about 15% of those of the early 1990s, and the 2010 zafra appears to have been the worst since the revolution..

contribution halved - just in a period when world prices were high and the profitability of the sugar industry in other developing countries (such as Brazil) was very satisfactory. The relative - and, in some cases, absolute - decline of other parts of the Cuban economy during the 2000s was more evenly spread, as the contribution to GDP of most other goods and services sectors decreased slightly. The contribution to GDP of the (non-sugar) manufacturing sector fell by two percentage points (from 15.4% to 13.4%) in 2000-2005 and recovering slightly afterwards. Most industries declined or stagnated, the exceptions being the export-oriented sub-sectors where Cuba traditionally has a comparative advantage (nickel, rum, cigars) and a few others that benefited from inward FDI flows. The GDP contribution of IGPSs as a whole also decreased, along with that of the GMS(see Table 4).

**Table
4**

| | GDP structure, 2000-2009 | | | | | | |
|--|---------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 2000 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| GDP | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Agriculture and Fishing | 6.6 | 5.7 | 4.4 | 3.4 | 3.9 | 3.8 | 3.9 |
| Mining | 0.8 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 |
| Sugar industry | 2.2 | 0.9 | 0.5 | 0.4 | 0.3 | 0.4 | 0.4 |
| Manufacturing (Non-Sugar) | 15.4 | 14.2 | 13.4 | 13.1 | 14.2 | 14.3 | 14.5 |
| Goods macro-sector (GMS) | 25 | 21.6 | 19 | 17.5 | 19 | 19.1 | 19.4 |
| Construction | 5.8 | 5.3 | 5.6 | 6.3 | 5.5 | 5.4 | 5.4 |
| Electricity, Gas, Water | 2 | 1.5 | 1.3 | 1.9 | 1.9 | 1.7 | 1.6 |
| Transport, Storing, Communications | 9.6 | 9 | 8.8 | 7.8 | 7.8 | 8.1 | 8.3 |
| Trade, maintenance, repairs | 19.5 | 19.2 | 18.5 | 23.2 | 21.5 | 19.4 | 18.6 |
| Financial services | 2.8 | 2.2 | 2.1 | 1.8 | 1.9 | 1.9 | 1.9 |
| Entrepreneurial and real estate services | 3.8 | 3.5 | 3 | 2.7 | 2.7 | 2.7 | 2.6 |
| Infrastructural and other goods production supporting services (IGPSSs) | 43.5 | 40.7 | 39.3 | 43.7 | 41.3 | 39.2 | 38.4 |
| % of total services | 0.59 | 0.52 | 0.49 | 0.54 | 0.52 | 0.49 | 0.48 |

| | | | | | | | |
|--|------|------|------|------|------|------|------|
| Hotels and restaurants | 5.2 | 5.5 | 5.1 | 4.2 | 4 | 4.3 | 4.5 |
| Public administration, defence, social security | 2.9 | 3.4 | 3.3 | 3.6 | 3 | 3.1 | 3.4 |
| Science and technological innovation | 0.5 | 0.5 | 0.5 | 0.5 | 0.3 | 0.4 | 0.4 |
| Education | 8.5 | 10.3 | 10 | 8.9 | 8.5 | 9.3 | 9.6 |
| Health, social assistance | 7.7 | 10.1 | 15.1 | 14.5 | 15.7 | 16.3 | 15.8 |
| Culture and sports | 2 | 3.4 | 3.2 | 3.5 | 3.9 | 3.9 | 4.3 |
| Other personal, community, and association activities | 3.5 | 3.7 | 3.4 | 2.6 | 3 | 2.9 | 3 |
| Directly needs-oriented services (DNSs) | 30.3 | 36.9 | 40.6 | 37.8 | 38.4 | 40.2 | 41 |
| % of total services | 0.41 | 0.48 | 0.51 | 0.46 | 0.48 | 0.51 | 0.52 |
| Services macro-sector (SMS) | 73.8 | 77.6 | 79.9 | 81.5 | 79.7 | 79.4 | 79.4 |
| Import tariffs* | 1.3 | 1 | 1.2 | 1.1 | 1.1 | 1.5 | 1 |

Source: ONE 2010

* The interpretation of "import rights", the last item included in the GDP structure by ONE, is puzzling. Apparently, it is considered a source of value added just as goods-producing and services sectors (the totals do not even approximately add up at 100 otherwise), but why should it be so is unclear.

3. *The goods-services dichotomy*

Along with tourism, the goods-producing sectors are those that, even in an indirect fashion, are the most integrated with the world economy. Thereby, owing to Cuba's small size of Cuba and to its pronounced import dependency, and notwithstanding the ubiquitous distortions in the domestic arena, their process of value creation cannot ultimately be divorced from the structure of relative prices prevailing in international markets.²⁷ Conversely, the price structure along the whole value chain leading to the supply of services different from tourism is mainly

²⁷ Both goods-producing and services in Cuba were in fact amply divorced from the price structure and trends prevailing in the capitalist world during the time when it was integrated in the CMEA and received large Soviet subsidies. Basically, this is not an option any longer for the goods-producing macro-sector, but it is still true in part for the services macro-sector.

determined by non-market factors, such as the discretionary power of Cuban planning authorities²⁸ and the largely – albeit not exclusively – extra-economic motivations which shape the bilateral intergovernmental agreements with Venezuela and the other countries who buy the bulk of Cuba’s professional services exports.²⁹ As a result, one of the dimensions of the lack of intersectoral integration of Cuba’s economy is a degree of segmentation between the GMS and the SMS, and thus of their respective price structures, that is higher than in most other countries. This peculiarity might help to explain why, in practice, the two macro-sectors tend to exhibit scarcely correlated performance trends.

In sum, taking also into account the already-mentioned statistical uncertainties linked to the change in GDP measurement methodology which took place in 2004, it is likely that since the mid-2000s the static and dynamic estimates of value creation in the two macro-sectors of Cuba’s economy have been diverging, with figures relative to goods-producing activities being more easily amenable to international comparisons than those relating to services.

Another peculiar consequence of the divergences in the mechanisms of price formation in the two macro-sectors is that Cuba’s external trade balance is now primarily dependent on activities (medical and other professional services) which are among the least integrated with the rest of the economy, along the dimensions of the value chain and other inter-sectoral linkages. Yet, in practice, these services activities show ex post, a significant degree of international competitiveness. This apparent paradox is in fact a necessary consequence of the skewed and poorly integrated structure of Cuba's economy as a whole. As the goods-producing, internally integrated macro-sector is in shambles due to lack of investment and the systematic disrespect of the law of value³⁰, it cannot possibly be internationally competitive. On the contrary, scarce resources have been allocated for decades on a non-market basis to prioritized social services that are blessed by a relative isolation from the rest of the economy, as they are intensive in human capital but not in physical capital, and are not very

²⁸ The new macroeconomic protagonism of professional services is taking place in the framework of an ad hoc price structure set up originally mainly for social, rather than economic goals.

²⁹ Cuba also exports medical services and medical tourism services to mostly Western and Latin American customers on a basically “normal” market basis, and is very active in promoting this kind of activity. The role of intra-sectoral and inter-sectoral cross-subsidization in the formation of the export price of these health services exports is difficult to gauge, but their very existence is a clear sign of effective international competitiveness.

³⁰ See below, note 53.

dependent on the supply of inputs from the goods-producing macro-sector. The most potentially tradable components of these intrinsically social services (health and other professional services) eventually achieved international competitiveness.

As it is presently structured, the stellar professional services export performance since the mid-2000s has powerfully contributed to release almost overnight the crucial external constraint³¹ which structurally limits Cuba's economic development. Professional services exports allowed Cuba to grow handsomely in spite of the negative contribution of many aspects of domestic economic policies, at least until the unfolding of the largely home-made³² banking crisis, which led to the present economic downturn. Still now, professional services exports are the strongest positive factor that prevents the economy from nose-diving in an otherwise grim picture..

Yet, the exceptional prominence acquired by professional services in the structure of Cuba's trade also implies a distortion – even if one that might include good potential for a further, more integrated development of the services macro-sector, and especially of its export-oriented component.

As a pivotal export sector, professional services has two main drawbacks. First, so far it has worked basically on the basis of shifting towards exports a sizeable part of the supply potential created by huge past and present human capital investments, a part which would have been underutilized otherwise.³³ But doctors are not micro-conductors, cellular phones or Ipods (as opposed, as will be argued

³¹ This constraint is partly exogenous, a product due to the US embargo and to a number of unfavorable characteristics of the world economy that are biased against small underdeveloped countries, and especially so in the case of small island countries. Yet, the external constraint can be seen also as partly endogenous, as there is in Cuba a fair potential for export promotion and import substitution that might be exploited by more suitable economic policies.

³² Due to Cuba's isolation from the money and credit flows and from the very institutions who dominate world financial capital, the modalities and peculiarities of Cuba's banking and financial crisis were substantially de-linked from those of the global capitalist financial crisis. The same cannot be said for the broader, real economic consequences of the financial meltdown. The so-called "food crisis" that led food prices skyrocket and inflated Cuba's food import bill was a relatively independent phenomenon rooted in long-term changes occurring in food-producing and energy industries. It was only mildly related to the world financial crisis (mainly via the price hikes and volatility increases caused by an enhanced role of financial speculation in food markets). The fall in the price of nickel and the less-than-expected performance of Cuba's tourism were surely due to the overall retrenchment of effective demand, originating mainly from OECD countries.

³³ Of course, such a process could only proceed at quasi-zero cost to a point, and Cuba has already gone very far in a very short time. People routinely complain that as too many of the best doctors have gone abroad, the functioning of the public health system in Cuba itself (due also to the lack of drugs and medical equipment, now aggravated by the crisis) has markedly worsened.

below, to medical and professional services (seen as in a more comprehensive, holistic way). They require many years of highly specialized training, and productivity in the “doctor’s production function” can hardly improve.³⁴ This is a clear, specific example of a general economic principle, stating that material productivity can improve markedly in the domains where humankind applies its ever-increasing knowledge to manipulate and transform nature, thereby creating more and more goods of improving quality.³⁵ In the area of specialized human capital formation such rapid productivity gains cannot be achieved (at least in terms of numbers of doctors or other specialists trained), due to the very nature of learning and to the heavy dependence of teaching from reciprocal human interaction, which is itself very human capital-intensive (see Triana Cordoví 2008a,b, 2010).

The second drawback stems from the paucity of professional services' forward and backward linkages, which weaken their multiplier and spillover effects on the rest of the Cuban economy (see Gabriele 2010).

In sum, the jump in Cuba’s professional services exports, unless it is accompanied by a series of complementary “industrial” policies aimed at further transforming, enriching and diversify this and other services sectors, is a once-and-for-all occurrence. It is not intrinsically unsustainable per se, but it cannot constitute an adequate basis for further development, because essentially it has already reached the upper limits of its potential. In theoretical terms, it constitutes a unique jump of Cuba’s production frontier that cannot be simply replicated.

4. Falling wages, deteriorating distribution, and improving human development: is the Cuban paradox sustainable?

³⁴ It can rather improve indirectly, as far as better and more updated medical education and training can produce more modern and informed doctors who are better equipped to heal patients. Anyway, the reform of universities and other third grade education centres is a long and complex process.

³⁵ Of course, this kind of man/nature interaction is far from idyllic, and sooner or later it is inevitably constrained by the entropic principle and by the physical limits imposed by the planetary environment

The state socialist system has allowed Cuba to advance impressively in terms of social and human development, particularly from the view point of the universal satisfaction of basic needs. Even according to this relatively narrow but crucial measure of well-being and social justice, as there is a small group of developing countries, some of them in Latin America, that are better off than Cuba. Yet, Cuba's experience is truly unique and amazing precisely because it achieved so much in this domain notwithstanding its poor economic development record.³⁶

During the special period,, real wages first collapsed and then recovered only a fraction of their previous purchasing power³⁷, and personal income distribution seriously deteriorated (see Espina Prieto 2006)³⁸. Yet, the government managed to maintain and even increase its support to basic social services, and Cuba's human development indicators kept improving, in spite of the impoverishment of most of the population.³⁹

Table 5 shows a few basic human development and economic indicators for Cuba and a few other countries. According to the most recent UNDP estimates, Cuba's Human Development Index (HDI) in 2007 was 0.863, much higher than the regional average. . Yet, it was still lower (in absolute terms) than that of 1990 (0.877) (Alonso 2009).Cuba's ranking with respect to this well-known (albeit not universally appreciated and arbitrarily aggregated) indicator was 51 out of 182 countries.⁴⁰

Thus, Cuba's present human development level is good in a comparative perspective, but not as outstanding as it was two decades ago, when it was almost

³⁶ Cuba's social outcomes, even if achieved under a non-liberal regime, can be seen as basically consistent with Rawls' second principle of justice. See Rawls 1971.

³⁷ According to a recent and reliable estimate, the average real wage, in particular, fell from 188 to 19 pesos in the 1989-1993 and slowly recovered thereafter, reaching a level of 45 pesos by 2008 (see Vidal Alejandro 2009, Ritter 2010a,b). Thus, even by the late 2000s the purchasing power of wages was only about ¼ its pre-crisis level.

³⁸ According to (obviously questionable) available estimates, Cuba's Gini index would presently be of the order of 0.40, low by Latin American standards but not so much by more general international standards. Estimated income inequality appears to be moderately higher in China, but lower in Vietnam (see UNDP 2008, 2009)

³⁹ [As Cuba's socioeconomic system combines a high level of human development with a low level of environmental impact, it can theoretically be seen as a champion of ecologically sustainable development \(see Halle Loh., and Goldfinger \(eds.\), 2006, Fiala 2008\).](#)

⁴⁰ Cuba's ranking peaked at 39 in 1990, deteriorated during the Special Period, bottoming at 89 in 1994, and progressively recovered afterwards.

universally hailed as an at least partially positive example even by otherwise unsympathetic critics (see Mesa-Lago 2000, 2003). Three countries in Latin America do better (Argentina, Uruguay, and Chile), although Costa Rica does slightly worse, and two semi-industrialized, resource-rich giants such as Mexico or Brazil do much worse⁴¹. Yet, all these countries have a level of economic development (roughly represented by the GDP per capita in PPP terms indicator) between 40% and 100% higher than that of Cuba. The ranking of Colombia - a Latin American country with a per capita GDP comparable to that of Cuba - is 82, more than 30 points lower.⁴² The level of human development in Cuba is also still much higher than in both Asian fast-growing market socialist countries. The differences in terms of HDI ranking are huge, in spite of the fact that China's per capita GDP is now approaching that of Cuba and that Vietnam's measured income inequality is lower than that of Cuba⁴³ (see Table 5).

The uniqueness of Cuba's schizophrenic development experience is well represented by the last indicator in Table 5, the rank differential between human and economic development respectively. If positive, this indicator shows that a country is faring better in terms of human development than in terms of economic development than the world average, and vice versa.⁴⁴ Cuba's rank differential is 44, the highest in the whole sample of 182 developed and developing countries. The best performing (in terms of human development) Latin American countries also have high positive rank differentials, but they are all less than half that of Cuba⁴⁵.

Such an acute contradiction between human and economic development cannot be sustained forever. Notwithstanding their multiple synergies and complementarities⁴⁶, beyond a certain point a trade off occurs if human and economic

⁴¹ Brazil's marked inferiority with respect to Cuba in the realm of human development is particularly remarkable, taking into account that the South American country has experienced many years of strong growth and moderately progressive social policies.

⁴² There is another social domain where Cuba outperforms most other Latin American countries, although it is a very controversial one. Cuban women have free and rather easy and safe access not only to family planning devices, but also to abortion. The diffusion of abortion, besides helping to contain population growth, also contributes to Cuba's extraordinarily low level of infant mortality and to reduce the prevalence of births with severe physical and mental defects. This point is acknowledged by Mesa Lago (2008), who nevertheless appears to criticize what he sees as an excessive recourse to abortion on the part of Cuba's public health services.

⁴³ See above, note 41.

⁴⁴ Most resource-rich African and Asian countries exhibit a negative ranking differential.

⁴⁵ The rank differential in China and Vietnam is also positive, yet it is just about 1/4 of Cuba's one. The rank differential for Mexico, Brazil and Colombia is barely positive.

development respective trends keep going towards opposite directions. Alas, there are many signals⁴⁷ that Cuba is now approaching a limit beyond which its very social and human development achievements risk being fatally undermined, unless its economic performance improve substantially.

Table 5 Human development indicators

| | HDI 2007 | HDI 2005 | Rank | GDP pc 2007 (PPP) | Rank differential * |
|-----------------------------|---------------------|---------------------|-------------|----------------------------------|------------------------------------|
| Cuba | 0.839 | 0.863 | 51 | 6876 | 44 |
| China | 0.756 | 0.772 | 99 | 5383 | 10 |
| Vietnam | 0.715 | 0.725 | 115 | 2600 | 13 |
| Chile | 0.872 | 0.878 | 43 | 13880 | 15 |
| Argentina | 0.866 | | 49 | 13238 | 13 |
| Uruguay | 0.865 | | 50 | 11216 | 20 |
| Costa Rica | 0.844 | 0.854 | 53 | 10842 | 19 |
| Mexico | 0.844 | 0.854 | 54 | 14104 | 5 |
| Brazil | 0.805 | 0.813 | 75 | 9567 | 4 |
| Colombia | 0.785 | 0.807 | 82 | 8587 | 4 |
| LA and Caribbean | 0.821 | | | 10077 | |

*GDP per capita rank - HDI rank

Source: UNDP 2009

5. *Overcoming the infantile disease*

Without underestimating the severity of the 2008 terms of trade shock and the perpetually crippling impact of the US embargo, it is fair to acknowledge that the

⁴⁶ Think, for instance, at the positive impact on labor productivity of investments in health, women education, and human capital in general.

⁴⁷ For instance, the temporary migration of so many among the most experienced health workers, while decisively benefiting the balance of payments, is also inevitably taking a toll on the quality of health services supplied to the Cuban population (see above, note 33).

present Cuban crisis is essentially an endogenous phenomenon. It is just the most recent in a long series of events showing the inadequacy of the traditional state socialism planning mechanism, which proved unable to react with sufficient promptness and flexibility to relatively minor and physiological changes in the international prices of a few key commodities⁴⁸. In this context, the stubborn refusal to address the contradictions stemming from the artificial level of the CUC official exchange rate (let alone the structural distortions produced by currency duality itself) is paradigmatic. The very convertibility of the CUC, and ultimately the trustworthiness of the Cuban State itself vis-à-vis foreign partners⁴⁹, was sacrificed to this totem, dramatically demonstrating the persistence of an old-fashioned penchant to address any problem through administrative, rather than price-based policy initiatives.

Hopefully, a new lender of last resort will eventually help Cuba to regain a workable short-term equilibrium position without recurring to further painful and ultimately inconclusive retrenchment measures in the foreseeable future (see Vidal 2010a,b). However, in my view, a structural reform of the very state socialism model should not be indefinitely postponed.

The guiding theoretical principle should be the rational and realistic recognition of the need for any economy - but, a fortiori, for a small, peripheral, and underdeveloped socialist economy - to abide by the "law of value"⁵⁰, with respect to

⁴⁸ The negative consequences of such a lack of flexibility are particularly severe in small, peripheral, underdeveloped countries, that are more dependent on the vagaries of international world markets than larger and more powerful countries.

⁴⁹ Including relatively friendly State partners.

⁵⁰ The debate on the validity of the "law of value" under socialism is as old long as the history of socialism itself (see, among others, Marx 1894, Stalin 1972, Mao 1977, Guevara 2005, 2006). In this respect, my view is as follows. Notwithstanding their profound differences, both socialism and capitalism are modes of production based on the production and exchange of commodities (and services). Thus, in both regimes the relative prices of different types of products must broadly reflect the underlying structure of production costs. As only live labor can create value, such a cost structure can be seen as correspondent to the average amount of human labor-time currently required to produce different goods and services, under the environmental, technological, and institutional conditions prevailing in a given society in a certain period of time. The bottom line is that if live and dead labor (i.e., workers and machines) are not allocated properly across the socialist economy, and are not remunerated according to their contribution to social production, basic economic equilibria are violated, and the socialist economy can no longer function.

both to domestic and external equilibria . Therefore, radical departures from the traditional state socialism model are required.

Almost one century of experience in the former USSR and many other socialist countries, including Cuba itself, have taught a couple of sobering lessons. The first is that the State's planning capabilities are limited. In order to achieve development outcomes superior to those stemming from the spontaneous and anarchic interplay of market forces, they should be parsimoniously focused on a pragmatic and selective form of strategic planning. The second lesson revolves around the centrality of the socialist principle of distribution according to work, which implies the urgency of abandoning any unrealistic attempt to implement communist relations of production and exchange on the backdrop of a severely underdeveloped productive basis. As time passes by, it is more and more urgent for Cuba to rationalize the presently over-extended sphere of non-market production and distribution of both goods and services. This task cannot be accomplished without a dramatic expansion of the scope and role of markets and of monetary-commercial relations, and therefore of relative price and incentive structures. In turn, any meaningful market-oriented reform could not possibly work without overcoming the double currency mess and restore the meaningfulness of two key prices in particular, namely the foreign exchange rate and the real wage.

With respect to the external equilibrium, in particular, Cuba's policy-makers must definitely come to terms to the fact that the nature of international trade relations is unequal, unstable, and exploitative, dominated as it is by the reproduction needs of globalized capitalist relations of production and exchange. Yet, it is also part and parcel of an exogenous state of the world that obeys to the laws of evolution and decay proper of worldwide modes of production. The potential for bilateral, regional, and multilateral agreements, and for other forms of South-South cooperation, is relevant, but not to the point of altering dramatically the nature of international trade itself - at least, not in a short- to medium-term time framework. Policy-makers in small, peripheral, underdeveloped countries, be them socialist- or capitalist-oriented, cannot indulge to any nostalgia for a sort of "fair" prices-based international trade utopia. They are price-takers, and can do little to affect the evolution of international relative prices. The best they can do is to apply their limited planning tools on development scenarios revolving around the respect of the external equilibrium as the

most crucial and binding constraint, attaching utmost priority to urgency to generate sufficient foreign exchange through the production of tradable goods and services.

In sum, in my view, Cuba should urgently overcome the sort of “infantile disease” constituted by its outdated state socialism model, and shift to a suitable, home-grown version of market socialism.

6. *Cuba, China, and Vietnam*

Some of the structural market-oriented changes in Cuba will necessarily have to resemble those implemented in China and Vietnam. Among them the most relevant are as follows. Market- and price-based regulation shall substitute central planning as the main guiding principle of resources allocation. The role of planning must correspondently become a less ubiquitous and ambitious one. First, quantity-based, physical planning tools and targets shall be abandoned as a residual of the past (possibly, with a few and localized exceptions). The presently-existing vertical, centralized planning mechanism should evolve into a market-compatible, price-based array of policy tools. Macroeconomic control levers are presently inadequate and should be upgraded. However, the main focus of planning should be that of steering the overall process of development as smoothly as possible, in a long-run perspective.

Consistently, the Cuban state should limit its more direct forms of intervention in the areas of production to a few strategic sectors⁵¹. These sectors are the only ones where the state should retain full or controlling ownership rights. In this endeavour, it should also borrow from the Chinese the wise and commonsensical motto “grasp the big, enliven the small”, concentrating its very limited entrepreneurial abilities on a reduced number of large and strategic enterprises. Conversely, individual and small-scale activities in the primary, secondary, and tertiary sectors – including agriculture,

⁵¹Here the term “strategic” is utilized in a ad hoc and tautological fashion to refer to those sectors where a strong and heavy-handed form of strategic state intervention makes economic sense. A more common meaning of “strategic sector” refers to economic activities that are of key importance for the overall development of the economy as a whole.

fishing, manufacturing, trading, tourism, and other traditional services activities⁵² - shall be liberalized and allowed to function autonomously, in an essentially market-regulated framework dominated by monetary-commercial relations. Parsimonious declarations on the part of Cuba's leaders in the summer of 2010 do hint to an overall liberalization of individual and petty private activities, yet the scope and speed of this potentially significant opening are not fully clear yet⁵³ (see see Ritter 2010 b, Vidal and Pérez Villanueva 2010)

Among all sectors, agriculture⁵⁴ is the one where the urgency of overhauling the presently-existing and hopelessly inefficient relations of production and exchange -including, a fortiori, food transport and commercialization services - is most pressing. Rural enterprises should be allowed to re-gain effective operational and behavioural autonomy, letting market forces and monetary and commercial relations play a central role. The structure of property rights and the very nature of agricultural production units shall be radically transformed, in order to promote household-based farming, true cooperative associations⁵⁵, and the massive entrance of FDI.

Even beyond the boundaries of the primary sector, ideological purity in the domain of property relations is neither affordable or useful for a country in such a difficult predicament as present-day Cuba. In my view, in all non-strategic sectors, any kind of entrepreneurship should be allowed and promoted by policy-makers, including small- and medium-scale capitalist enterprises. However, liberalization should not be seen as synonymous of privatization either. On the contrary, the State could and probably should retain those SOEs that are actually making profits or can reasonably be expected to do so in the near future, thanks to the results of overall structural reforms and of specific, firm-level restructuring exercises. It should also maintain its ownership rights in industrial and services joint ventures, especially in the tourism sector.

⁵² Private initiatives in advanced and especially knowledge-intensive sector should also be welcome. Yet they are to be seen as complementary to a major investment, planning and regulatory drive led by the State and involving a high degree of FDI participation.

⁵³ [Of course, letting spontaneous market regulation play a dominant role does not imply a retreat from the basic right/duty on the part of the State to provide a legal/ formal regulatory framework also in these sectors, as well as to tax the \(now\) legitimate incomes earned by private agents.](#)

⁵⁴ Agriculture is surely a strategic sector from the point of view of its crucial role in Cuba's economy, but not one where the State should maintain a high level of direct intervention.

⁵⁵ Most farms are still formally cooperatives, yet neither were they born from a genuine cooperative effort, nor do they dispose of sufficient property and decision rights to be really autonomous.

Of course, for prices to start again playing a meaningful and efficiency-enhancing role, a number of other reforms must be enacted. These reforms are of a macroeconomic nature, and shall be enacted as part of a comprehensive and (as much as possible) consistent and properly-sequenced home-grown structural adjustment package (see, Pérez Villanueva 2006,2009, Triana Cordoví , 2008, Vidal 2008a, 2010a,b Vidal 2010a,b). The implementation of such a package will be painful and not exempt of risks. Yet, the short-run distortions stemming from macroeconomic disequilibria are extreme, and the long-run damage to Cuba's development perspectives is already severe. Moreover, the risks implicit in such a drastic adjustment manoeuvre would increase, rather than diminish, if inaction prevailed and bold action were indefinitely procrastinated.

As mentioned above, two prices in particular are key for macroeconomic and external equilibria and must find a proper and realistic level: the exchange rate and the wage level. The double currency conundrum, mother of all the contradictions and distortions that plague the Cuban economy, must be finally superseded. Perennial real currency overvaluation, along with old-fashioned centralized planning, should also become a thing of the past: the unified Cuban currency must be set at a realistic exchange rate parity level.

A wage reform aimed at re-establishing a basic relationship between the formal level of wages and the cost of a subsistence basket of goods and services should also be implemented. Presently, wages for most workers are so low (even by the austere consumption standards to which Cubans are used since the 1990s) that people are increasingly forced into engaging in multiple informal activities⁵⁶. The wage reform would constitute a necessary preliminary step to set up an adequate structure of work incentives, in order to re-establish the now-shattered working ethics, and to rein in the crippling process of overall illegalization of subsistence activities in which most (especially urban) Cubans are now trapped.

⁵⁶ As part of the overall reform package, many of these activities should actually be legalized.

7. *Cuba's knowledge-based development prospects*

History, geography and path-dependency matter, and the same blueprint cannot be applied mechanically everywhere. In many important domains, the reform path for Cuba's transition to market socialism is bound to differ profoundly from that of China and Vietnam. The international scenario is different from the one which prevailed in the last quarter of the XXth century. The financial and economic malaise affecting all the major capitalist countries, the very ascent of China and of the other so-called BRICs, and the new correlation of forces in Latin America present both challenges and opportunities for Cuba's international trade and cooperation relations. Even more importantly, there are many crucial structural differences between present-day Cuba, on one hand, and China and Vietnam in the late 1970s- early 1980s, on the other hand. The most relevant ones revolve around wages and the respective roles of services and manufacturing.

Most Cubans are affected by deep poverty in terms of lack of access to virtually any consumption good or service beyond the realm of a very austere definition of subsistence. Yet, Cuba's level of human development in 2010 is still higher than that of China and Vietnam. A fortiori, it is incomparably higher than the level of human development of the two Asian countries at the time of the inception of market-oriented reforms. Notwithstanding all the inefficiencies and distortions plaguing its state socialist model, Cuba's relatively high level of human development is crucially predicated on the sustainability of its public services systems. Due to very nature of these services sectors, and to Cuba's specific comparative advantage built after decades of extraordinary needs-focused policy priorities in the allocation of scarce national resources, the cost of delivering rather good health, education, and other basic services in Cuba is relatively low.⁵⁷ Nevertheless, it's not a free lunch. The cost of labor in Cuba must embody the onus of funding basic public services, and therefore it is too high to make the island an attractive location to set up labor-

⁵⁷ Think, for instance, at the enormous difference between overall health costs in the US and in Cuba, not matched by the barely identifiable gap between the two countries in terms of basic health outcomes indicators.

intensive, low-tech manufactures⁵⁸. The latter observation applies in a similar fashion to domestic and foreign investors, public-owned (controlled) enterprises and private firms.

China and, to a lesser extent, Vietnam, are large countries in terms of population size. Even under the state socialist model, before they started experimenting with market-oriented reforms, they had already advanced enough in the path of self-centered industrialization and economic diversification to be able to produce (inefficiently) a vast array of industrial products⁵⁹. On the contrary, in Cuba, owing to the small size of the domestic market and the specific form of economic domination on the part of the US, industrialization did not go very far before the revolution. Due to the particularly distorted and dependent features of the Cuban insertion in the CMEA division of labor, industrialization and diversification in the subsequent thirty years were not impressive either. Then, almost two decades of de-industrialization followed. At present, in most manufacturing sectors, Cuba's endowment of both physical and (to a lesser extent) human capital would be too scarce to allow for potential competitiveness in international markets, even in a hypothetical scenario of successful market-oriented reforms along the lines sketched above.

In sum, Cuba lost the train of export-led massive industrialization and now it is too late to try to catch it again. Cuba will never approach the levels of industrialization of China and Vietnam (see above, Table 3).

However, In Cuba there are two relatively narrow sets of manufacturing sectors that do exhibit a significant potential.

⁵⁸ Cuba cannot compete wage-wise in garments and other very labor-intensive manufacturing sectors with some Asian and Central American countries where class and caste-based inequalities, mass malnutrition and illiteracy, and the virtual non-existence of a national public health system contribute to a very low level of wages. In most medium-tech manufacturing sectors, Cuba's potential level of productivity would be far below that of major semi-industrialized Asian and Latin American exporters.

⁵⁹ The comparison is less straightforward in terms of infrastructure endowments. With respect to China and Vietnam in the late 1970s- 1980s, Cuba has the advantage of a relatively well-developed network of paved roads, which is presently underutilized.

The larger set comprises various low- and medium-tech essential sectors that are mostly supplied by domestic producers in virtually all semi-industrialized countries, among them agro-industry and basic non-tradable manufactures. Conversely, these industrial activities are presently exceptionally under-developed, and hence import-dependent, in Cuba. It is reasonable that Cuba, in a medium term scenario, might achieve minimum acceptable efficiency and productivity improvements sufficient to make it viable a limited form of import-substituting re-industrialization process.

The other, smaller set is constituted by a few niche manufacturing sub sectors characterized by high, specialized human capital intensity, but relatively low physical capital intensity. Cuba already successfully produces biotechnology, drugs, and medical equipment.⁶⁰ It can expand and enhance its ability to manufacture and export these and other knowledge-intensive goods. To this purpose, while maintaining and selectively strengthening the traditional priority accorded to these sectors in the allocation of public investment, policy-makers should reform elite public enterprises to endow them with more autonomy and market-orientation⁶¹, and promote various forms of international cooperation (such as FDI, joint ventures, and intergovernmental international agreements).

Industrial development prospects in selected human capital-intensive niches, however, are to be seen essentially as ancillary and complementary to the development of knowledge-intensive services. Due to the uniqueness of Cuba's economic history, health⁶² and possibly other knowledge-intensive services (such as, for instance, some specialized R&D and consulting services niches) are in fact the only sectors⁶³ that might hold a true potential for becoming the engine for a sustainable and sustained development drive for the Cuban economy as a whole.⁶⁴

⁶⁰ In 2009 medicines and pharmaceutical products export grew strongly in 2009, and their share of total goods exports rose to 20% from 9% in 2008 (see ONE 2010).

⁶¹ Elite Cuban service and manufacturing SOEs operating in health-related sub-sectors already enjoy a higher level of autonomy than most other enterprises.

⁶² Here I refer holistically to the whole health cluster, which includes a goods-producing component manufacturing vaccines, drugs, biotechnology products and medical equipment, as well as diverse health-related services such as health tourism and public health planning consultancies (see Cuba Health Tourism 2010).

⁶³ Most of the growth potential in agriculture and industry is of an import-substituting nature.

⁶⁴ As in any other domain, Cuba's insertion in the global services value chain has been severely limited so far by the US embargo, which, in particular, is the main culprit for the island's virtual Internet apartheid. This constraint might become less binding in the future, thanks to the decline of the formerly hegemonic power of the US and the emergence of a multi-polar international economic

Contrary to non-strategic sectors, the role of the State in the development of knowledge-intensive services remains crucial. Cuba's comparative advantage can only be maintained and enhanced if an adequate amount of public resources continues to be earmarked to these sectors.

However, enterprise autonomy and incentives should be revamped in these advanced services sectors as well. Where possible, presently-existing monopolistic and vertical forms control on specific services value chains should be made more flexible, and competition encouraged. New forms of creative entrepreneurship, including public-private partnerships⁶⁵, should be legalized and supported. FDI and other forms of international partnerships should also be promoted.

Yet, these are necessary, but not sufficient conditions. The planning mechanism shall be modernized and fine-tuned, utilizing both price- and non price-based policy tools. The key strategic objective should be to exploit the potential synergies and economies of scale and scope that can arise from the joint pursue of two different and valuable goals. One is the direct non-market satisfaction of basic needs. The other is the generation of foreign exchange through the production of tradable services. An intrinsic tension between these two goals is inevitable, and the risk of over-penalizing basic service functions while transforming health and related sectors in a purely money-making machine is a real one. Yet, alternatives are few and the challenge is worth taking.

8. *Conclusions*

Cuba's post-revolutionary economic history has been constantly handicapped and constrained by the embargo and by a host of other exceptionally aggressive measures on the part of the US, the scope of which goes far beyond the domain of

scenario.

⁶⁵ A possible example could be offered by China's successful experience with university-funded R&D quasi-autonomous R&D-oriented enterprises (see Gabriele & Khan 2010).

trade itself⁶⁶. Yet, it has also been penalized by the twin sets of distortions stemming from its former, artificial trade relations with the CMEA and from the very nature of the state socialist model. Economic performance has been unstable and lacklustre, recurrently plagued by dramatic crises and by recurring and ultimately inconclusive de-centralizing and re-centralizing policy trends. Systemic contradictions inherent to Cuba's centralized planning system hit particularly severely the goods-producing macro-sector. Both industry and agriculture are very underdeveloped, and as result Cuba is plagued by an abysmal degree of food self-sufficiency, and more generally by an abnormally high degree of import-dependency in the area of goods.

Conversely, Cuba's centralized resource allocation system and the consistent priority accorded to the satisfaction of basic needs were instrumental in engineering a remarkable accumulation of human capital and an extraordinary development of public services. The choice of non-market, needs-based, and universal provision of health and education allowed Cuba to advance in these two crucial areas far more than what would have been thinkable under a more conventional policy approach, taking into account the poor development of the country's productive forces. These achievements led Cuba to attain a very high level of human development, and serendipitously endowed the country with a lingering comparative advantage in some advanced, knowledge-based services sectors.

As a result of the divorce between the development of the two macro-sectors, Cuba's economy is presently unique in the developing world. What is particularly striking is not the overwhelming dominance of services according to indicators such as their relative share in employment and GDP (which are inflated by the underdevelopment of the goods-producing macro-sector). Rather, it is the crucial and structural role acquired by knowledge-based services exports in ensuring - however precariously - Cuba's external trade equilibrium.

The tension between Cuba's exceptional human development achievements and the weakness of their material foundation cannot be maintained indefinitely. The Cuban government has recognized this reality, and is beginning to promote some radical changes. It should also acknowledge the intrinsic deficiencies of the central planning mechanism, the need for expanding the role of the market and of monetary-

⁶⁶In spite of Cuba's non-confrontational attitude, demonstrated among other things by the liberation of most political prisoners, such aggressive US measures are not likely to be eliminated any time soon.

commercial relations, and the cruciality of the law of value and of the socialist criterion of distribution according to work. These principles should be translated into a structural reform program, with the ultimate goal of definitely superseding the traditional state socialist model, transitioning towards a specifically Cuban form of market socialism.

Such a new economic model would necessarily resemble that of China and Vietnam in many ways (most importantly, with respect to the role of markets, prices, and incentives, and to the re-orientation of the planning mechanism towards selective and strategic goals). Yet, it would also differ profoundly from the experience of the two Asian market-socialist countries. Cuba's development prospects cannot be axed on labor-intensive industrialization, but shall necessarily focus on harnessing its potential for boosting export-oriented knowledge-based services sectors and on overcoming progressively its present state of inter- sectoral and intra-sectoral lack of integration. This development perspective would allow marked efficiency and productivity improvements with respect to the present state of things, but would not open the way to sustainable spurts of two-digit GDP growth rates.

Other important differences between the new Cuban model and the presently-existing forms of market socialism in China and Vietnam would refer to the role of state ownership, the structure of (non-tradable) basic services, and the depth of social inequalities. Even after the transition, Cuba's market socialism should be characterized by a larger relative role of public property than it is the case in China and Vietnam, especially in sectors such as tourism and light manufacturing that in the two Asian countries are dominated by private entrepreneurs. Public non-market provision and delivery of basic services shall also remain the rule in health, education and basic services in general. Cuba can and must avoid the disasters caused in China and Vietnam by the ill-fated attempts at privatization and by the wanton application of high user fees in areas where such a kind of market-based approach is totally inadequate.

Partly as a result, once the transition will be successfully completed, the degree of social inequalities in Cuba should be lower than in present-day China or Vietnam, for three main reasons.

First, private property of means of production in Cuba is bound to remain confined mostly to petty, small-and medium-scale activities, more so than in China or Vietnam. A relatively modest role of private property would be consistent with a low degree of primary income inequalities stemming from non-labor incomes.

Second, the preservation of free or quasi-free universal access to basic services is and shall continue being an utmost priority. If it will be materially possible to maintain such a universal access to basic services, the severe social inequalities still plaguing China and Vietnam in this domain so crucial for each country's human development⁶⁷ can be largely avoided.

Third, once the transition will be successfully completed, it is reasonable to expect that the dependency of people's livelihood strategy on informal transactions and activities (which is probably the most powerful source of de facto inequality in present-day Cuba) will be minimized.

In sum, under an optimistic scenario, Cuba might be able to establish a new and specific model of market socialism. This model which, albeit less dynamic in terms of GDP growth, could exhibit two distinct social advantages with respect to the early Chinese and Vietnamese experiences. First, non-market universal provision of basic social services, rather than being virtually dismantled as it happened during the first decades of market socialist experiments in the two Asian countries, would be maintained and further enhanced. Second, the role of indigenous medium- and large-scale capitalist enterprises in employment, industrial production, and exports, might remain relatively minor, thereby minimizing its negative implications in terms of income inequalities and class differentiation.

⁶⁷ See Gabriele and Schettino 2008a,b.

References

Alonso A., 2009, La economía cubana y sus problemas: un verdadero reto, La Ventana, diciembre, en <http://aquevedo.wordpress.com/2009/12/20/la-economia-cubana-y-sus-problemas-un-verdadero-reto/>

Alvarez J., 2009, ACOPIO: Cuba's State Procurement and Distribution Agency, University of Florida, IFAS ,[FE484/FE484](http://edis.ifas.ufl.edu/fe484), 2009, in <http://edis.ifas.ufl.edu/fe484>

Anaya Cruz B. and Fernandez M., 2009, Biotecnología en Cuba. Origen y resultados alcanzados, CEEC, Boletín Cuatrimestra, 1 Agosto 2009.

Arias Guevara M., 2009, Cuba: reforma y transformación agraria. La crisis de los noventa y el proceso de desestatalización de la agricultura, Revista Ideas - Interfaces em Desenvolvimento, Agricultura e Sociedade

Barberia L. Domínguez J., , Pérez Villanueva O.E., eds., 2005, The Cuban Economy at the Start of the Twenty-First Century, eds.. (Cambridge: The President and Fellows of Harvard College, 2004): 17-47

Bonet J.A., 2007, The Tertiariation of Regional Economic Structures in Colombia, Revista de Economía del Rosario, Vol. 10, No. 1, pp. 1-19, June 2007

Bryce Echenique A., 1981, La vida exagerada de Martín Romano Seix Barral Peisa, ISBN 84-204-4255-0

Burki S.J. and Edison D.P. (Eds.),2004, Transforming Socialist Economies: Lessons for Cuba and Beyond, Palgrave Macmillan, 2004. ISBN10: 1403936625

Canler E., 2008, Pesos, Poverty, and Perversions: What's Wrong With Cuba's Money and How To Fix It, Cuba in Transition: Volume 18, Papers and Proceedings of the Nineteenth Annual Meeting of the Association for the Study of the Cuban Economy (ASCE), The Miami Hilton Downtown, Miami, Florida, August 5-7, 2008

Carriazo, George. 1994. Cambios Estructurales en la Agricultura Cubana: La Cooperativización. Economía Cubana - Boletín Informativo 18 (November): 14-29 (Centro de Investigaciones de la Economía Mundial).

CEPAL (Comisión Económica para América Latina), 1950, : Estudio económico de América Latina, 1949, (E/CN.12/ 164/rev.1), Santiago do Chile.

CEPAL (Comisión Económica para América Latina, 1951 : Estudio económico de América Latina, 1950, (E/CN.12/217/Rev.1), Santiago do Chile.

CEPAL (Comisión Económica para América Latina), 2009, Estudio económico de América Latina y el Caribe 2008-2009, Santiago, October 2009

CEPAL (Comisión Económica para América Latina), 2010, Estudio económico de América Latina y el Caribe 2009-2010, Santiago, July 2010

CEPAL (Comisión Económica para América Latina), 1997 (CEPAL 1997) La economía cubana: Reformas estructurales y desempeño en los noventa (Mexico: Fondo de Cultura Económica, 1997

Cuba Health Tourism 2010, available on line in <http://cubahealthtourism.com/>

Dominguez J., 1987, Cuba in the 1980s, Foreign Affairs, No. 65, pp.118-135

Dominguez J., 2005, "Cuba's Economic Transition: Successes, Deficiencies, and Challenges," in Barberia L . Domínguez J., , Pérez Villanueva O.E., eds., The Cuban Economy at the Start of the Twenty-First Century, eds.. (Cambridge: The President and Fellows of Harvard College, 2004): 17-47

Economist Intelligence Unit (EIU), 2010, Cuba, Country Report, March

Enriquez, L. J., 2003, Economic Reform and Repeasantization in Post-1990 Cuba Latin American Research Review - Volume 38, Number 1, 2003, pp. 202-218

Enríquez, Laura J. 1994. The Question of Food Security in Cuban Socialism. Berkeley, CA: International and Area Studies, University of California.

Espina Prieto M. P., 2006, , Efectos sociales del reajuste económico: igualdad, desigualdad y procesos de complejización en la sociedad cubana, en Pérez Villanueva O. (ed.), 2006, Reflexiones sobre economía cubana, La Habana : Instituto Cubano del Libro, 2006, ISBN: 978-959-06-0652-6

Fiala N., 2008, Measuring sustainability: Why the ecological footprint is bad economics and bad environmental science Ecological Economics, Volume 67, Issue 4, 1 November 2008, Pages 519-525

Figueres Pérez M.A., 2004, “El turismo internacional y la formación de clusters productivos en la economía cubana,” in Pérez Villanueva O. (ed.), 2006,,Reflexiones sobre economía).

Galbraith, J., Spagnolo L., and Munevar D., 2006, Pay Inequality in Cuba: the Special Period and After, ECINE Working Paper Series ECINEQ WP 2006 – 52, in <http://www.ecineq.org/milano/WP/ECINEQ2006-52.pdf>

Gabriele A. and Khan H., 2010, Enhancing Technological Progress in a Market-socialist Context: China's national innovation system at the crossroads, LAP Lambert academic Publishing, Saarbrucken, ISBN 978-3-8383-5246-6

Gabriele A. & Schettino F., 2008a, Child Mortality in China and Vietnam in a Comparative Perspective, Economic Change and Restructuring, Vol. 41, Issue 1, 2008.

Gabriele A. & Schettino F., 2008b, Child Malnutrition and Mortality in Developing Countries: Evidence from a Cross-Country Analysis , in Analysis of Social Issues and Public Policy (ASAP), Vol.8, No.1, 2008.

Gabriele A., 2010, The surge of export-oriented services in Cuba, (mimeo)

García Alvarez, A., 2006, “Productividad y factores de producción en la agricultura cubana”, in Pérez Villanueva O. (ed.), 2006,,Reflexiones sobre economía cubana, La Habana : Instituto Cubano del Libro, 2006, ISBN: 978-959-06-0652-6

Gazon B., 2010, La Lettre de La Havane, no 104, Avril 2010

Guevara E., , 2006, "Algunas reflexiones sobre la transición socialista," in Apuntes críticos a la economía política, [Ocean Books](#): Melbourne, 2006

Guevara E., 2005, Socialism and man in Cuba, in The Che Reader, Ocean Press, 2005 (originally published under the title, “From Algiers, for Marcha, on March 12, 1965

Halle C., Loh J., and Goldfinger S. (eds.), 2006, Living Planet Report 2006, WWF-GFN-ZSL, London

Hershberg E., 2008, [Waiting for a Bus to Somewhere: Reflections on Cuba and its Context](#), Social sciences perspectives 2008/04/03, in <http://essays.ssrc.org/changeincuba/2008/04/02/waiting-for-a-bus-to-somewhere-reflections-on-cuba-and-its-context/>

Mao Z., Critique of Soviet Economics, 1977, Translated by Moss Roberts, Monthly Review Press, New York and London, available in <http://www.marx2mao.com/Mao/CSE58.html>

Marx K., 1894, Capital Vol. III, **First Published:** 1894; Institute of Marxism-Leninism, USSR, 1959, **On-Line Version:** Marx.org 1996, Marxists.org 1999, Part VII , Revenues and their Sources, Chapter 49. Concerning the Analysis of the Process of Production, available in <http://www.marxists.org/archive/marx/works/1894-c3/ch49.htm>

Mesa Lago C., 2008, "The Cuban Economy at the Crossroads: Fidel Castro’s Legacy, Debate over Change and Raúl Castro’s Option", WP 19/2008, Real Instituto Elcano, Madrid

Mesa Lago C., 2005a, Cuba's Aborted Reform: Socioeconomic Effects, International Comparisons and Transition Policies, Gainesville: University Press of Florida, 2005.

Mesa Lago C., 2005b, “Problemas Sociales y Económicos en Cuba Durante la Crisis y la Recuperación,” Revista de la CEPAL, No. 86 (Agosto 2005), pp. 183-205.

Mesa Lago C., 2003, *La Economía y el Bienestar Social en Cuba a Comienzos del Siglo XXI* (Madrid; Editorial Colibrí, 2003).

Mesa-Lago C., 2000, *Market, Socialist, and Mixed Economies: Comparative Policy and Performance – Chile, Cuba, and Costa Rica* (Baltimore, MD: The Johns Hopkins University Press, 2000), pp. xxiv+707,

Morales Pita A., 2008, *Cómo y Cuándo Eliminar la Doble Moneda en Cuba*, Cuba in Transition: Volume 18, Papers and Proceedings of the Nineteenth Annual Meeting of the Association for the Study of the Cuban Economy (ASCE), The Miami Hilton Downtown, Miami, Florida, August 5-7, 2008

Morrissey E., 2010, Cuba to lay off 500,000 in workers paradise, Hot Air, September 14, 2010, in http://hotair.com/archives/2010/09/14/cuba-to-lay-off-500000-in-workers-paradise/?utm_source=twitterfeed&utm_medium=twitter

NOVA, G. A., 2009a, Línea de desarrollo de la agricultura cubana en los últimos 50 años. In. Seminario sobre Economía Cubana y Gerencia Empresarial. La Habana, mayo, 2009.

Nova A., 2009b, La cadena agro- comercializadora en el sector agropecuario (II and III) (III), in Economía y gerencia en cuba. Avances de investigación,

Nova G. A., “El Mercado Interno de los Alimentos,” in Pérez Villanueva O. (ed.), 2006, *Reflexiones sobre economía cubana*, La Habana : Instituto Cubano del Libro, 2006, ISBN: 978-959-06-0652-6

Oficina Nacional de Estadísticas, 1996, (ONE 1996), Anuario Estadístico de Cuba 1996

Oficina Nacional de Estadísticas, 2000, (ONE 2002), Anuario Estadístico de Cuba 2000

Oficina Nacional de Estadísticas, 2002, (ONE 2002), Anuario Estadístico de Cuba 2002

Oficina Nacional de Estadísticas, 2004, (ONE 2004), Anuario Estadístico de Cuba 2004

Oficina Nacional de Estadísticas, 2009, (ONE 2008), Anuario Estadístico de Cuba 2008

Oficina Nacional de Estadísticas, 2010, (ONE 2010), Anuario Estadístico de Cuba 2009

Orro R., 2008, *The Cuban Dual Monetary System and Challenges Ahead*, Cuba in Transition: Volume 18, Papers and Proceedings of the Nineteenth Annual Meeting of the Association for the Study of the Cuban Economy (ASCE), The Miami Hilton Downtown, Miami, Florida, August 5-7, 2008

Pérez Villanueva, J., 2010, Cuba 2010: el crecimiento, la economía y el desarrollo, Evento CEEC “Seminario Anual sobre Economía Cubana y Gerencia Empresarial” Hotel Nacional de Cuba, 24-25 Junio 2010

Pérez Villanueva O.E., , 2009, Aspectos globales, in Villanueva O.E., (ed)., Miradas a la Economía Cubana, La Habana: Editorial Caminos, 2009.

Pérez Villanueva O.E., , 2006, Reflexiones sobre economía cubana, Editorial Ciencias sociales, Instituto Cubano del Libro, La habana 2006

Pico García N, 2003, ¿Modelo terciarizado? Economic Press Service, segunda quincena de octubre/2003.

Pico García N. , 2004, “Comercio Internacional de Servicios. Su papel en la economía cubana”, “Cuba: comercio exterior”, No. 2 del 2004, Cámara de Comercio de Cuba.

Pico García N. and Rodríguez A., 2006, · “Comercio Exterior de Servicios de Salud. La experiencia de Cuba”, Revista “Cuba: comercio exterior”, No. 4/2006, Cámara de Comercio de Cuba.

Pico García N ., 2009a, “Exportaciones de Otros Servicios: oportunidades y retos para Cuba”, en Economic Press Service, No. 2, 31 de enero 2009.

Pico García N. , 2009b, “Comercio mundial de servicios: oportunidades y retos para Cuba” Revista Cuba: Comercio exterior, Cámara de Comercio No. 3/2009.

Piñeiro Harnecker C., 2010, La empresa cubana estatal y su entorno nacional actual Evento CEEC “Seminario Anual sobre Economía Cubana y Gerencia Empresarial”, Hotel Nacional de Cuba, 24-25 Junio 2010.

Prebisch, R. (1949): El desarrollo económico de América Latina y sus principales problemas (E/CN.12/89), Santiago, CEPAL.

Ritter A. 2010a, Has Cuba’s Catastrophic Decline in Real Wage Levels Been Reversed?, In The Cuban economy, -la Economía cubana posted on June 22, 2010, in <http://thecubaneconomy.com/articles/2010/06/has-cuba%E2%80%99s-catastrophic-decline-in-real-wage-levels-been-reversed/>

Ritter A 2010 b, Raul Castro and Policy towards Self-Employment: Promising Apertura or False Start? In The Cuban economy, -la Economía cubana, posted on August 4, 2010, in <http://thecubaneconomy.com/articles/2010/08/raul-castro-and-policy-towards-self-employment-promising-apertura-or-false-start/>

Ritter A.R.M.(ed.), *The Cuban Economy* (Pittsburgh, PA: University of Pittsburgh Press, 2004), pp. xi+248, \$49.95, hb.

Sánchez Serra O., 2010, *Cuba no dejará a nadie desamparado, reorganiza su economía y sus fuerzas productivas*, Granma, September 28 2010.

Stalin J., 1972, *Economic Problems of Socialism in the USSR*, Foreign Languages Press, Peking: 1972 (First Edition), available in <http://www.marxists.org/reference/archive/stalin/works/1951/economic-problems/index.htm>

Triana Cordoví J., 2008, *De los desequilibrios a las distorsiones. Cómo crecer en el futuro inmediato*, CEEC, Boletín Cuatrimestral, Abril 2008

UNDP 2008, *Human Development Report 2007-2008*, New York

UNDP 2009, *Human Development Report 2009*, New York

Vidal P., 2008a , *La Disyuntiva Actual de la Política Económica Cubana*, CEEC, Boletín Cuatrimestral, Diciembre 2008

Vidal P., 2008b, *Monetary policy in Cuba. A structural VAR model estimation*, *Revista Principios*, 12 , Madrid, September, pp.85-102

Vidal P., 2009, , “*Política Monetaria y Doble Moneda*”, in Pérez Villanueva O.E., (ed), , *Miradas a la Economía Cubana*, La Habana: Editorial Caminos, 2009,

Vidal P., 2010a, , *La Crisis bancaria cubana Actual*, *Semana Social Católica*, 16 al. 20 de Junio 2010, Consejo Arquidiocesano de Laicos de La Habana,

Vidal P., 2010b, *La política monetaria Cubana frente a los mecanismos de transmisión de la crisis global*, ponencia para el seminario CEEC “*Seminario Anual sobre Economía Cubana y Gerencia Empresarial*”, Hotel Nacional de Cuba, 24-25 Junio 2010.

Vidal P., and Fundora A., 2008, : “*Relación Comercio-Crecimiento en Cuba: Estimación con el Filtro de Kalman*”, *Revista de la Comisión Económica para América Latina (CEPAL)*, No. 94, April 2008.

Vidal P. and Pérez Villanueva O.E., 2010, *Entre el ajuste fiscal y los cambios estructurales: Se extiende el cuentapropismo en Cuba*, *Espacio Laical (suplemento digital)*, October 2010, No.112.

Wilkinson S. 2010, *Cuba lay-offs reveal evolving communism*, BBC 14-09-2010, in <http://www.bbc.co.uk/news/world-latin-america-11302430>

World Health Organization 2010 (WHO 2010), World Health Statistics, available in http://www.who.int/whosis/whostat/EN_WHS10_Full.pdf, Geneva, 2010.