Policy Issues

Cuba's "Equity Without Growth" Dilemma and the 2011 *Lineamientos*

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ABSTRACT

Cuba faces a development dilemma: it promotes equity and human capital while failing to deliver economic growth. For the government, the country's equity and human capital achievements are a source of pride, a sign that its priorities are right. This essay argues instead that this "equity without growth" dilemma is a sign of malaise. Theory and evidence suggest that high levels of equity and human capital should produce high levels of economic growth. Because growth is often weak or negative, some onerous barriers to development must be present. These barriers, it is argued, are restrictions on property and political rights. By comparing Cuba and China across two sectors, the bicycle industry and Internet access, this article shows how these restrictions have hindered growth. It also assesses how Cuba's latest economic reforms, the so-called *Lineamientos*, will address Cuba's development dilemma. The impact may be minimal, but perhaps more lasting than previous reforms.

Most scholars agree by now that the ideal goal of development is "growth with equity." This means that states must expand national incomes while simultaneously improving the economic prospects of the least advantaged, thus achieving greater social inclusion (Sen 1999, 2000). There is disagreement about what metrics of welfare to use, but there is agreement that, at a minimum, growth must entail improvements in access to at least two economic assets—education and health—especially for people in low-income strata.

Historically, Latin America has faltered on the social inclusion side of this formula; even during periods of high growth, welfare among the poorest classes remained stagnant or even deteriorated (see World Bank 2003; Buvinic and Mazza 2004). Revolutionary Cuba, on the other hand, is often praised as a counterexample: even in periods of economic hardship, the regime manages to provide education and health care services comparatively well and fairly universally.

Social inclusion has always been the Cuban government's claim to fame. Different authoritarian regimes make different claims to fame: delivering record-level economic growth (China), national rebirth

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(Russia), economic efficiency (Singapore), anticolonialism and tribal assertion (African autocrats), religious rule (Middle Eastern autocrats), military might (North Korea), luxurious development (Gulf States), protection from terrorists or secessionists (South Asia). These deliverables become the "mentality," as Linz (1975) would say, that authoritarian regimes promote at home and abroad to claim legitimacy. Cuba's claim has always been deliverables in equity through progressive social policies. No doubt, the government likes to flaunt other banners (e.g., standing up against U.S. imperialism), but for both government officials and sympathizers, it is the delivery of equity, in spite of the absence of economic growth, that best demonstrates that the Cuban state has its priorities in the correct order.

This essay raises some doubts about the praiseworthiness of Cuba's single-minded pursuit of equity. Far from an achievement, this model of equity despite low growth is a sign of grave malaise. Precisely because the country's human capital stock is so strong, insufficient economic growth in Cuba demands an explanation. Some particularly onerous obstacle to human ingenuity must exist in Cuba to counteract the growth-inducing effects of human capital. That obstacle, I argue, is the combination of restrictions on property and political rights. To illustrate how grave this malaise is, this essay will make two structured comparisons. First, it will compare Cuba's and China's development models since the 1980s, and second, Cuba's policies for two sectors on opposite ends of the skill spectrum: the bicycle industry (menial skills) and the Internet (high skills). The Cuba-China comparison seeks to show how restriction on property rights (higher in Cuba, lower in China) produces divergent growth experiences. The bike and Internet comparison seeks to show how commonality of policy (acute property and political rights restrictions) hurts growth across different skill categories.

The main thesis of this essay is that Cuba's dilemma of high investment in human capital without growth is actually more a sign of repression than a sign of commendable prioritization. Discussing this developmental calamity is all the more pertinent now that Cuba has proposed the most sweeping economic reform goals since mid-1993, the so-called *Lineamientos de la Política Económica y Social.* The key question is whether these reforms will address Cuba's equity without growth dilemma. I suggest that the reforms, as currently announced, will only scratch the surface. Because they do not address profoundly the issue of property rights, and actually ignore the issue of political rights, the reforms are unlikely to drive an improvement in Cuba's economic performance. Nevertheless, there is a promising side: these reforms could become building blocks for more lasting change in the future because they create a new domestic constituency that may become important demanders of deeper reforms; namely, the unemployed.

I recognize that this essay is unlikely to settle many debates. Readers may well disagree with my argument that state suppression of property rights is the variable to blame for insufficient economic growth in Cuba. (Some will still blame the U.S. embargo, the contraction of world sugar markets, the country's education and value system, the burdens of an aging population, or even hurricanes—16 in total between 1998 and 2008).[1] I do not directly refute those arguments; I simply offer an alternative or supplementary one, in the hope of encouraging debate on Cuba's political economy and on its current reforms.

Growth and Social Inclusion in Cuba Compared

The Cuban regime often ranks high by world standards on two indicators of basic necessities: access to health and education. A review of how Cuba fares in these areas (Ranis and Kosack 2004) provides the basic data (see also Brundenius 1984). Before the revolution (circa 1958), Cuba had a GINI coefficient of 0.57, indicating high income inequity. There were few secondary schools in rural areas; 40 percent of rural workers had no schooling; and adult illiteracy was at 13 percent—indicating education inequity, at least in terms of rural versus urban Cuba. The infant mortality rate was 80.6 per 1,000 live births, while life expectancy was 60.8 years for males and 64.2 percent for females.

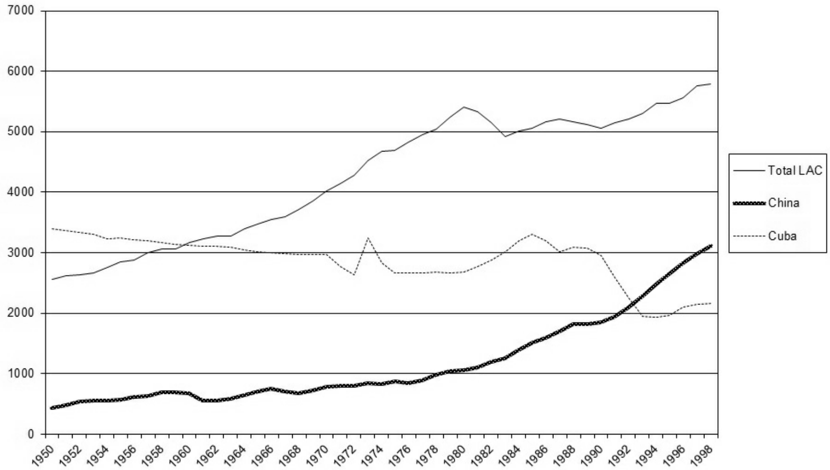
By the mid-1970s, equity indicators had improved. The GINI coefficient declined to 0.28 by the mid-1960s. Education inequity declined: Cuba implemented universal primary education in rural areas; the proportion of the population enrolled in secondary education expanded to 12 percent in 1980 (from 1.75 percent in 1960). Life expectancy continued to increase, and infant mortality continued to decline. By the early 1970s, levels of health and education were comparable to those of the United States, despite Cuba's significantly lower income (see Espina Prieto 2005).

Scholars dispute some of these achievements.[2] For the sake of the argument, however, I will skip these disputes and accept that by the late 1970s, Cuba did register improvements in equity and human capital, at least far more than comparable to developing countries (Rodríguez and García 2011).

Cuba's human capital investment level is remarkable primarily for two reasons. First, it occurred in the context of paltry or even negative economic growth. Angus Maddison provides supporting data: since the 1950s, the only moments of income improvement in Cuba occurred ephemerally in the early 1970s and the early 1980s (see figure 1). The rest of the time, Cuba has suffered declining or stagnating income.

Second, Cuba's human capital levels are internationally exceptional: few countries in the world can boast Cuba's combination of human capital investment and paltry economic growth. Figure 2 provides a clear

Figure 1. Cuba, China, and 44 Latin American and Caribbean Countries: Per Capita GDP, 1950–1999



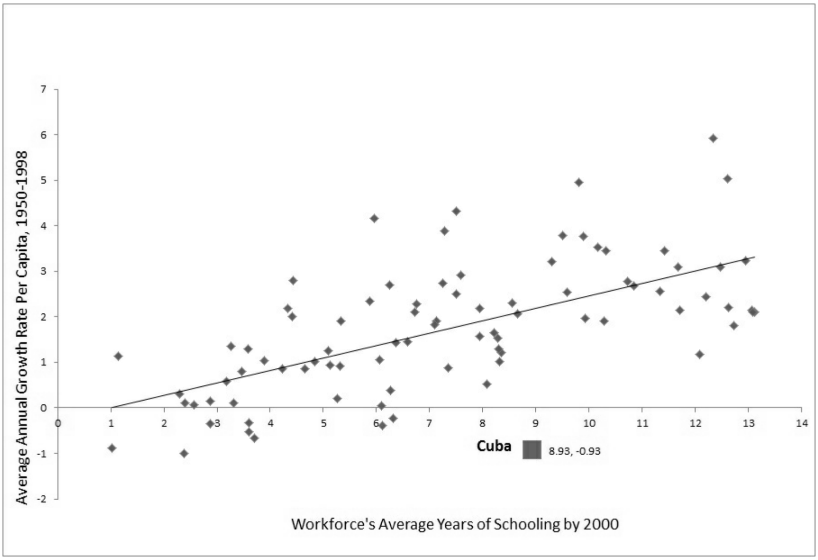
Source: Maddison 2001.

illustration of this global anomaly. The figure is a scatterplot between one human capital indicator (the average number of years of schooling of a country's workforce in 2000) and one growth indicator (average annual growth rate per capita) for 85 countries.[3] Although the figure does not include a complete sample of countries (data for former Soviet republics, some Eastern European countries, and several other developing countries are missing, for example), it provides a fairly comprehensive picture of trends in both developing and developed countries. The figure shows that greater levels of schooling tend to be associated with greater overall growth. Notably, the most salient outlier is Cuba. Despite having one of the world's most-schooled workforces, Cuba has one of the world's least impressive growth records.

Average years of schooling can certainly be questioned as an indicator of human capital; quality of education surely matters as well. Cuban schoolchildren also score well in education quality assessments, too. In 1997–98, UNESCO sponsored the Laboratorio International Exam in 13 Latin American countries. Cuban fourth graders achieved math and language scores more than 50 percent higher than most Latin American countries. There seems to be a correlation between economic growth and test scores, but Cuba, with an average score of 686 (compared to an average for all countries combined of 525), bucks the trend.

Accompanying the Laboratorio exam was a survey in which Cuba ranked first or second in rural-urban performance gaps, textbooks per

Figure 2. Workforce Average Years of Schooling, 2000; Country's Average Economic Growth Rates, 1950–1998



Source: Economic growth rates from Maddison 2001; schooling levels from Cohen and Soto 2001.

student, parent expectations, and preschooling. These numbers indicate high levels of human capital, but also low levels of inequity, as rural Cubans are nearly as educated as their urban counterparts.

At least on the education front, it does appear that Cuba is exceptional relative to the rest of Latin America. Martin Carnoy (2007) conducted in-depth studies, tests, and interviews in Brazil, Chile, and Cuba and concluded unambiguously that the Cuban educational system did a better job of teaching language and math skills than did the other two nations. He also found, through both qualitative and quantitative measurements, that Cuban classrooms are more efficient than Brazilian or Chilean ones, have smaller classes, incorporate more conceptual problem solving, engage their students more often, hold students more accountable for their homework, and assign more homework.

In terms of quality of health care, Cuba also ranks high. Life expectancy in Cuba is 78.7 years (World Bank 2008). Cuba in the period 2000–2010 had the highest rate of physicians per capita in the world, with 64.0 per 10,000 inhabitants, compared with 14.0 for the world as a whole and 28.6 for high-income countries (WHO 2011). Cuba has so many doctors that it exports them as aid to countries with doctor shortages.

Table 1. Variations in Growth and Equity

Distribution of Income and Access to Economic Assets	GDP Per Capita	
	Low Growth/Contraction	Growth
Increasing equity	I. Cuba 1960–1990	II. East Asia 1965–1990s Latin America 2000s
Decreasing equity	III. Latin America 1980s Cuba 1990s	IV. Latin America, 1960–1980 Cuba 2002–2007

In sum, Cuba by the mid-1970s could easily be placed on the upper left quadrant of table 1, scoring high on various health, education, and equity variables, while its growth performance since the 1950s has been low, perhaps even pitifully so, depending on which standard of comparison one uses. The Cuban case is thus unique: no other case with such high levels of equity and human capital features such paltry levels of growth.

EQUITY WITHOUT GROWTH, AND CUBA'S RESTRICTIONS ON PROPERTY RIGHTS

Many scholars find it admirable that Cuba has been able to promote and sustain levels of equity and access to economic assets despite its economic underperformance. They may see this as a sign of the premium the regime places on social justice. The implication tends to be that any other government facing economic contraction would certainly have targeted a lower level of human capital investment.

However, the weakness in economic growth in Cuba suggests that something quite onerous is preventing the economy from taking advantage of its equity levels. Research has provided strong evidence for a positive relationship between equity and growth (e.g., see Aghion et al. 1999; Alesina and Rodrik 1994; Persson and Tabellini 1994; Perotti 1996). In particular, Engerman and Sokoloff (1997) argue that the divergent performances of North and South American economies can be attributed to the historical levels of relative inequality in the respective regions. If these theories are correct and the relationship between equity and growth is so strong, then what can explain the Cuban anomaly?

There is one answer that can be ruled out: the idea that the pursuit of equity itself hurts Cuba's growth prospects. This argument would be based on the so-called Kuznets hypothesis, which depicts an inverted *U* relationship between income inequality and income per capita (Kuznets

1955). As industrialization and urbanization begin, physical capital accumulation is the priority; the resulting high concentration of wealth among capital owners leads to rising inequality. Once this initial period is complete, however, human capital development becomes the driver of growth, ultimately reducing inequality. Yet Cuba had already reached this later stage of development by the time Fidel Castro came to power.

Part of the answer must lie elsewhere, perhaps in the nature of Cuba's system of redistribution: many of the benefits of equity may be lost when equality is enforced through total control of economic activity rather than coming about as a byproduct of market mechanisms. Cuba lends credence to Acemoglu et al.'s findings (2007) that it is political, rather than economic, equality that is most important for growth. Usually, the two phenomena go hand in hand: when political power is concentrated, the elite use their control to hoard wealth. On the other end of the spectrum, democracies tend to create institutions that favor social mobility and a middle class, increasing equity. Cuba, conversely, uses its absolute state control to limit economic inequality. Thus, whatever benefits it derives from economic equity may be outweighed by the consequences of an authoritarian government.

Carnoy's study (2007) on Cuba's education achievements seems to confirm this trade-off theory. Though he attributes much of Cuba's educational success to teacher training, high academic expectations, and an effective national curriculum, he also emphasizes the "benefits" to education that come from a lack of teacher autonomy or parental discretion and strict state control of nearly every facet of education. He also credits the inflexibility of the Cuban job market for discouraging relocation, which results in stronger relationships between teachers and students who stay at the same school because of a lack of opportunities elsewhere. The limitations placed on individuals are another factor contributing to the high quality of Cuba's teachers relative to those of other nations in the region. The lack of either a private sector or wage differentials between jobs means that schools do not have to compete with higher-paying employers to recruit the best and brightest teachers. When wage incentives are eliminated, job seekers look for positions that offer the highest nonmonetary benefits; this naturally leads many of the most qualified Cubans to seek positions such as teachers, which offer high personal and psychological rewards.

The same reasoning applies to Cuba's surplus of doctors. This surplus also results partly from the lack of professional opportunities in other sectors. Constraints on private enterprise and business ownership push a large percentage of students toward the one sector that offers the chance to create, innovate, and travel overseas. Arguably, then, improvements in education and health were achieved partly through restrictions on liberty and economic opportunities.

Still, despite the costs, the Cuban government's investment in human capital—an educated and healthy workforce—is in place. This stock in human capital alone should produce more economic growth. For example, Baldacci et al. (2004) find that an increase in education spending of 1 percentage point of GDP is associated with a total increase in growth of 1.4 percentage points in 15 years. Similarly, an increase in health care spending of 1 percentage point of GDP is associated with an increase of 0.5 percentage points in annual per capita GDP growth.

These arguments linking human capital and growth assume, of course, that production inputs are held constant, which in Cuba may be questionable. In a standard economic two-factor input model, with physical capital and labor as inputs, a reduction in physical capital (perhaps due to insufficient maintenance expenditures) could offset any gains from positive human capital investments. Such a reduction could be exacerbated because Cuba's high levels of human capital investment may mean that its marginal returns from such investment are in the "flat of the curve," assuming that there are diminishing marginal returns to investment (i.e., the marginal productivity of capital may exceed the marginal productivity of labor).[4]

Nevertheless, human capital formation is still considered an important determinant of economic growth. With its high levels of human capital, Cuba should display healthier growth. So what besides the highly draconian costs of education and health might be responsible for this drag? The culprit, I argue, is state suppression of property and political rights.

Property Rights in Cuba and China, 1970–Present

In the past two decades, the concept of property rights has achieved a prominent status in theories of democracy and development.[5] The old Lockean idea that property rights are a prerequisite for accountable state power has now become a mantra of development studies as well (see Olson 2000). North et al. (2000) argue that secure property rights lowered the stakes of officeholding in the United States in the nineteenth century and thus led to stability, which, in turn, led to economic growth, in contrast to Latin America, where the reverse was true on all these variables. Acemoglu et al. (2004) show that security of property rights leads to higher incomes and possibly the rise of democracy, based on the correlation between secured property rights and growth rates between 1985 and 1995, the performance of the two Koreas since 1950, and the performance of postcolonial societies since the 1700s. Yet Cuban scholars seldom discuss the price that Cuba has paid for suppressing property rights.

One way to show how steep this price has been is to compare Cuba with China. In the 1970s, Cuba and China shared roughly the same economic model: state control of the economy with significant restrictions on property and political rights. The results were similar: impressive improvements in human capital without any return in terms of economic growth (see figure 1). In a now-familiar story, China in 1979 changed development models. It introduced liberalization in three crucial domains: foreign investment, including tax breaks and incentives (Shirk 1994); local authorities, who were given policy tools to attract foreign investment and to promote local firms (Zhu 2003; Oi 1992); and individual citizens, who received property rights. Subsequently, growth skyrocketed, with many signs suggesting that equity variables actually improved (Wolf 2004, 159).[6]

Cuba, on the other hand, hardly expanded property rights. A brief experiment with limited property rights (the free farm markets of the early 1980s) was aborted in the mid-1980s, and the economic reforms of 1993–96 amounted in the end to nothing more than property rights for a tiny elite—mostly foreigners and the military. Essentially, Cuba in the 1990s copied China's model of economic opening to the outside world, but not its economic opening among citizens. As of 2009, Cuba ranked 177th out of 179 countries in the Heritage Foundation's Economic Freedom Rankings. The Cuban economy scored above only Zimbabwe and North Korea in terms of economic freedom. Within the rankings, Cuba's property rights earned only 10 out of 100 possible points, reflecting the fact that Cubans' private property is rarely protected, that most of it belongs to the state, and that the judiciary is an ineffective guarantor of property rights.

The regime's restrictions on property rights are both formal and informal. The formal ones are found in Cuba's constitution, which enshrines a series of institutions and judicial principles that foreclose the possibility of private transactions among individuals (see Domínguez 2003). The informal restrictions are far more extensive, although harder to document. In the 1990s, the Cuban government allowed some minor market activities (self-employment) while simultaneously disallowing entrepreneurship. Most sociologists agree that to survive the economic hardship of this decade, Cubans developed unforeseen levels of inventiveness. But each time these episodes of inventiveness turned into economic partnerships or profitmaking endeavors, the state moved swiftly to repress them (except for those originating among the politically favored class). Between 2001 and 2006, the last years of Fidel Castro's control, the state often slammed these economic actors with arbitrary revocations of licenses, restrictions on services, excessive fines and taxes, arrests, confiscation of assets, surprise inspections, and general harassment. These continuing assaults on property rights typically target groups such as associations of small merchants, cooperatives, private taxis, street vendors, or small trade associations. Consequently, economic actors in Cuba operate under heightened uncertainty about the longevity of the economic niches in which they operate. Cubans know that at any moment the Cuban state is ready to punish them for their economic resourcefulness.

Cuba in the 1990s thus globalized but did not liberalize. The results were predictably dismal: growth in the 1990s was mediocre. Growth in the 2000s recovered, but industrial output remained depressed, standing in 2011 at 43 percent of 1989 levels, mostly the result of faltering productivity and investments (Feinberg 2011).

Cuba's command economy, with its ancillary restrictions on property rights, impairs productivity and investment in at least two ways. First, many business opportunities are overlooked (forgone) because the economy is so dependent on the state and is thus highly vulnerable to state failures. In the last three decades, political economists from both the left and the right have conceptualized the notion of state failures. Although state practices vary across the globe, state failures can be as frequent and as pernicious as market failures. In Cuba, state failure comes in the form of insufficient and narrowly targeted investment. The point is not that the Cuban state is incapable of making investments in important developing sectors—it has promoted unexpected competitive advantages in biotechnology, for instance (see Erickson 2004)—but that the state cannot possibly identify, let alone promote, all attractive business opportunities. It has rival objectives, inferior information, and imperfect capacities.

The second way that restrictions on property rights impair productivity and investment is by penalizing, and thus discouraging, the ingenuity of citizens. As North and Thomas (1973) argue in their theory of the rise and fall of nations, when institutions do not allow people to maximize and retain private returns from their efforts, social outputs (or investments) will falter. In Cuba, though citizens have the right ingredients for entrepreneurship (economic necessity and high levels of human capital), the frequent and systematic suppression of property rights means that citizens, facing enormous penalties for pursuing that route, are insufficiently incentivized to do so and therefore simply refrain entirely.

Two Bike Stories

It is not easy to illustrate how Cuba's restrictions on property rights severely hamper growth through missed investments and disincentives to entrepreneurship. In the social sciences, explaining nonobservable events—e.g., forgone growth—is always difficult: how can one prove the cause of an outcome that did not occur? One solution is to select a case that shows the connection between the posited causal factor and the outcome (in this case, property rights and economic growth) and then apply counterfactual analysis to the negative case to show what would have happened if the posited variable had had a different value (see McKeown 2004). The rise and decline of Cuba's bicycle industry shows the effect of state policy toward property rights.

By 1991, Havana was closing in on Beijing's title of bicycle capital of the world. With the collapse of the Soviet Union, Cuba lost its access to subsidized petroleum and motor vehicles. As the Cuban economy went into a tailspin, the Castro government enacted a series of policies in an attempt to avoid the impending crash. One such measure involved the replacement of the bulk of Cuba's fleet of motor vehicles with bicycles (and some tricycles) purchased unassembled from China. In 1990–91, Cuba imported nearly one million bicycles and about sixty thousand cargo tricycles. The number of bicycles in Havana rose from an estimated seventy thousand in 1989 to approximately seven hundred thousand in just three years. The World Bank marveled at the speed of implementation of the new system, which it classified as "unprecedented in the history of transportation" (in Baker 1995; see also Whitehead and Williams 1992).

Cycling soon became the most cost-effective and most demanded mode of travel in Cuba. This was reflected in the price differential of the official and black market prices of bicycles. Students could purchase a new Phoenix or Flying Pigeon bike for 60 pesos, and workers paid about 120 pesos; these same bikes could then be resold illicitly for as much as 500 pesos. The conditions were ripe for a bike market to thrive in Cuba.

But the sector was subjected to the regime's hallmark restrictions on property rights. Within a few years, the flow of replacement parts from China dwindled to a trickle. Cuba's export sector was too small to afford the large number of imports needed to sustain modern life on the island. With hundreds of thousands of bicycles falling into disrepair, the predictable consequence should have been a burgeoning bicycle parts industry to substitute for the decline in imports. Considering the country's skills, as well as the clear demand conditions, the only viable explanation for the failure of a bicycle-manufacturing industry to emerge is property rights repression. Where credit is banned, hiring labor is illegal, and "profiteering" is classified as a crime that can be punished by long prison terms, it was simply impossible for a bike industry to take root. These restrictions led to two negative outcomes: state neglect of business opportunities and the discouragement of entrepreneurship.

The State Overlooks Investment and Represses Inventiveness

Cuba had all the right conditions for a booming bike industry: large domestic demand, the possibility of producing *en masse* and thereby taking advantage of scale economies, and foreign interest in an economic partnership.[7] And yet the Cuban state failed to capitalize on the opportunity to build a truly competitive bike industry. Some capacity for local bike production was created, but nothing further.

If Cuba had seriously invested, it might have been able to compete (or form partnerships) with China to capture export markets. It might have even been able to sustain the local market. However, because the Cuban state did not make the necessary investments, the sector began to suffer shortages, riders were gradually forced to stop using bikes, and bike repair shops were forced to downsize or close (Grogg 2001).

In the wake of Cuba's recession-turned-depression (1986–94), Cubans needed more than just transportation; they also needed to survive financially. Bicycle owners in the early 1990s took advantage of their newly acquired assets to satisfy both needs: they began to convert their Chinese bikes into taxi rickshaws suitable for two passengers. Cubans were taking advantage of one of the few property rights acquired in the early 1990s, the 1993 legalization of bicitaxis.

Unsurprisingly, bicitaxis proliferated in urban neighborhoods and tourist areas. But beginning in February 2001, the government started to harass bicitaxis, first by imposing prohibitive taxes and banning them from carrying tourists (Newman 2001), and later by imposing fines and confiscating them. Cuba's government virtually discontinued the issuance of new licenses and arrested leaders of small bicitaxi federations. In 2003, the four hundred or so bicitaxi operators in Nueva Gerona organized a march to protest state harassment, only to be subsequently repressed (Cubanet 2003). Further harassment and repression followed.[8] The most important explanation the government provided for these repressive actions is that private bicitaxis competed with the state monopoly over taxi services. Because of these economic attacks, bicitaxis in Cuba essentially died by 2008.

Without property rights and with state control of investments, not even the combination of globalization, strong local demand, Cuban know-how, or cheap labor conditions proved powerful enough to generate any economic boom. The bike industry in Cuba, which had the same growth potential as in China, never took off.

Can the U.S. embargo be blamed for the moribund state of the bicycle sector? Lacking access to this export market and source of capital no doubt hurts Cuba. However, Cuba has had historically healthy trade relations with three of the world's largest steel exporters (Russia, China,

Table 2. Internet Use, Cuba Compared to Its Development Peers

	HDI 2011	Internet Users (per 100) in 2010
Panama	0.768	42.80
Saudi Arabia	0.770	41.00
Mexico	0.770	31.00
Montenegro	0.771	52.00
Bulgaria	0.771	45.90
Bahamas	0.773	43.00
Cuba	0.776	15.10
Romania	0.781	40.00
Barbados	0.793	43.50
Croatia	0.796	60.00
Argentina	0.797	36.00
Latvia	0.805	68.70
Chile	0.805	45.00

Source: UNDP 2011; World Bank 2011.

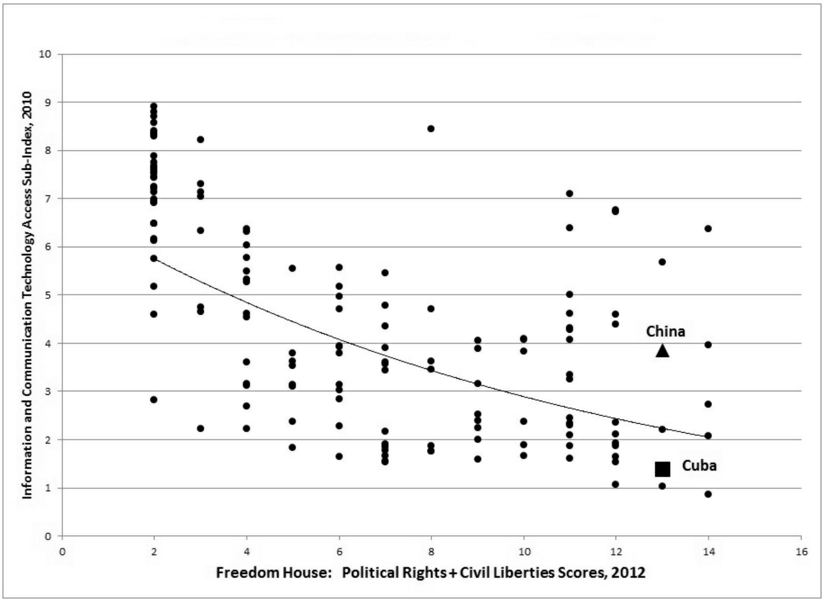
and Germany), and has even closer ties to Brazil and Venezuela, both of which possess sizable steel export sectors. Cuba also has a growing tourism industry, which could have boosted the demand for bike rentals in cities. The U.S. embargo therefore does not seem to have been as powerful as Cuba's own restrictions.

Suppression of Political Rights: Internet Use

Cuba's restrictions go beyond property rights; they encompass suppression of political rights as well. While authoritarian regimes can achieve high levels of growth, these tend to be a minority of cases, mostly concentrated among those dictatorships that expand property rights widely (Haber 2006). When authoritarianism combines with high property rights violations, as in Cuba, development is hurt.

One way to illustrate the detrimental impact of political rights and property rights suppression is to look at the evolution of Internet use in Cuba. Information technologies (IT) are not a development panacea, but it is hard to imagine an economy today achieving international competitiveness with its back turned on this revolution. One indicator of how much a country is taking advantage of the IT sector is the number of Internet users per capita. Relative to its peers in terms of development, Cuba is a salient underachiever. Table 2 compares Cuba with its closest neighbors in terms of the United Nations Human Development Index, a composite measure of income, education levels, and

Figure 3. IDI Access Sub-Index vs. Political Freedoms and Civil Liberties Index

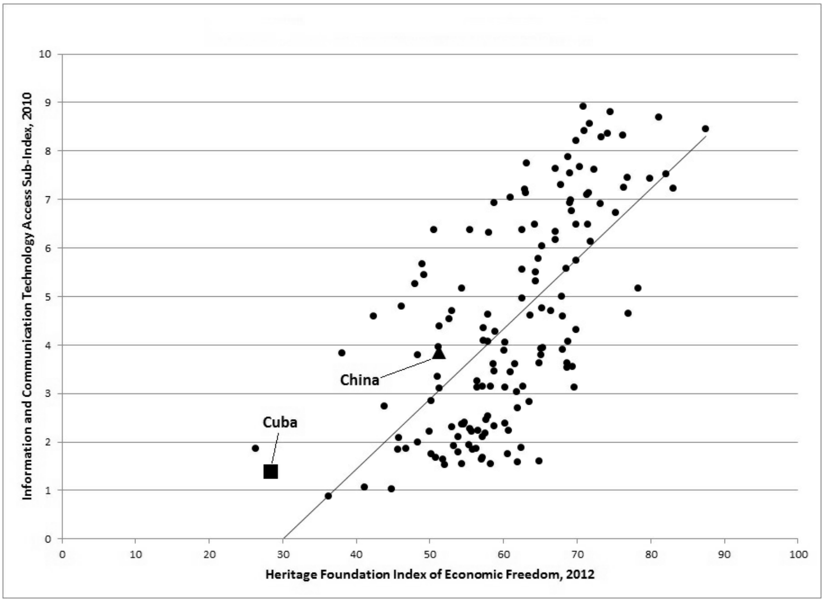


Notes: IDI stands for Information and Communication Technology Index. The IDI Access Sub-Index is one component of IDI that includes five indicators of basic level of access and infrastructure development in a country: fixed-telephone subscriptions per 100 inhabitants, mobile cellular telephone subscriptions per 100 inhabitants, international Internet bandwith per Internet user, proportion of households with a computer, and proportion of households with Internet access at home.
Source: ITU 2011; Freedom House 2012.

health achievements. The average rate of Internet use among Cuba's HDI neighbors (those with an HDI from 0.768 to 0.805) is 43.4. Cuba's Internet use is 15.1, way below the average. Cuba's Internet use score, incidentally, is arguably inflated, since it includes mostly use of Cuba's domestic Intranet, rather than international access to the Internet, which is miniscule.[9] Cuba's stagnant rate of Internet adoption is all the more surprising because Cuba is rich in the other factor that typically fosters Internet adoption: high levels of human capital.

The reason for Cuba's absurdly low Internet use is the combination of political and economic repression. Statistical analysis of the determinants of Internet use has shown that political rights and civil liberties scores, as well as economic freedoms, determine Internet access: the less free the country (politically and economically), the lower the access to Internet (Corrales and Westhoff 2006). Figure 3 shows the correlation

Figure 4. IDI Access Sub-Index vs. Economic Freedoms Index



Source: ITU 2011; Heritage Foundation 2012.

between an index of communication (Internet and telephone use) and political freedoms, and Figure 4, the correlation between the same index and economic freedoms. Cuba fits this pattern.

Like many other authoritarian states, Cuba is terrified of the potential political effects of the Internet. But unlike China, the Cuban state is not interested in liberalizing its economy, and so it feels it can afford to forgo the economic gains of the Internet; without interest in private sector development, the state pays no cost for the country's low levels of Internet use. Consequently, Cuba has deployed one of the most draconian Internet control mechanisms in the world. The regime imposes restrictions not only on content (as China does) but on access (unlike China), and this explains Cuba's rock-bottom scores.

Decree-Law 209 (1996) stipulates that Internet use cannot "jeopardize national security" or be used "in violation of Cuban society's moral principles or the country's laws." As a result, there is no free market for Internet accounts. Internet cafes are essentially unavailable to non-tourists or are prohibitively expensive.[10] In May 2009, the government quietly passed a resolution forbidding ordinary Cubans from accessing hotel Internet services, though de facto monetary obstacles already restricted Cubans' access to such services—the $20 monthly salary of state workers pales in comparison to the $10 to $12 an hour that hotels demand for Internet access (Azel 2011; Sánchez 2009).

The Castro regime continually attributes lack of Internet access to the U.S. embargo.[11] As in the bike story, however, it is unclear that the embargo is more problematic than Cuba's own domestic restrictions. In 2007, a Venezuelan and a Cuban company merged to build and operate a submarine fiber optic cable, the ALBA-1, connecting the two countries and granting Cuba 640 gigabytes, which would boost Cuba's bandwidth by a factor of 3,000. Installation was "completed" in February 2011. As of April 2012, Cubans were still waiting to use it. In the meantime, a more beneficial alternative was offered by the United States (Baker 2010). In October 2009, the Barack Obama administration gave permission to TeleCuba Communications, a small, Miami-based company, to lay the first fiber optic cable between the United States and Cuba, but Cuba imposed fees that went beyond what U.S. law deemed reasonable, and so no business deal was made. Furthermore, there is evidence that China has emerged as a willing financier of Internet investments in Cuba (Press 2011), suggesting that financing and technological constraints imposed by the U.S. embargo are no longer very weighty.

Cuba's position regarding the Internet thus is paradoxical and cruel. According to Ignacio González Plana, Minister of Information Technology and Communication at the time, Cuba in 2004 provided free training to some thirty thousand students in new technology centers (again, reflecting the regime's human capital promotion) (quoted in Rosabal 2004). Yet Cuba deploys some of the world's most severe controls on Internet use. By restricting political rights, Cuba is effectively turning its back on the Internet revolution, and by also suppressing economic rights, the state is preventing Cubans from participating in a development leap that, precisely because of their privileged human capital, they should be well prepared to take.

THE *LINEAMIENTOS*

The most significant political event in Cuba since the transfer of power from Fidel to Raúl Castro in 2006 is the announcement of a series of economic reform goals in 2011 called Guidelines for the Party's and the Revolution's Political Economy and Social Policy (*Lineamientos*). Approved at the Sixth Congress of the Cuban Communist Party in April 2011 and by the National Assembly the following August, the *Lineamientos* represent the first time the government has recognized not only that there is an endogenous problem of no growth, but also that property rights ought to be part of the solution. The problem is that the reforms, as announced, do not go far enough, economically or politically.

First, a word on the origins: the reforms were prompted by the ever more dismal performance of the Cuban economy in the last two decades. In the 1990s, the "Special Period" of austerity exacerbated Cuba's no-growth problem, with an added malaise: reduction of equity. That is, Cuba moved from cell I to cell III in table 1. From 2001 to 2008, growth resumed, but Cuba was unable to restore the equity levels that existed before 1991 (Mesa-Lago and Vidal-Alejandro 2010). Thus, Cuba moved from cell III to cell IV. And during the 2008–10 global crisis, Cuba was hit especially hard, since the global recession affected Cuba's main trading partners, the European Union (especially Spain) and Cuba's main subsidizer, Venezuela. Lacking few viable exports and suffering from completely "decapitalized" internal markets, to use Raúl Castro's own words (Castro 2011), Cuba's economy faltered in the period 2008–10 like that of no other Latin American country, with the exception of Venezuela and Haiti.

In fact, Cuba ranked among the world's sickest economies in 2011, with a tiny export base, mediocre productivity, and a public debt of 125 percent of GDP (lower than Greece's 144 percent but higher than Iceland's 124 percent, Portugal's 109 percent, Ireland's 94 percent, and Spain's 63 percent) (de Salas-del Valle 2011). The *Lineamientos* were a response to these two decades of worsening performance in both growth and equity.

The *Lineamientos* constitute steps in the right direction. First, they rightly focus on streamlining the state with an eye to enhancing efficiency and productivity, including laying off possibly up to 1.5 million workers and "pulling back the state" from economic activities, to quote Marino Murillo, one of Cuba's economic czars (*LatinNews* 2011). The Cuban state is well known for its hypertrophy, centralization, excessive bureaucratization, and uniformity (Hernández 2003), so any reform package seeking to streamline the public sector is good news.

The *Lineamientos* also break away from the state's traditional penchant for verticalism, judging from a series of political reforms that were drafted at the same time. For instance, Raúl Castro ensured the gradual and smooth phasing out of Fidel Castro's stranglehold over Cuba's political institutions, a process that was completed in April 2011. In addition, the government adopted term limits (no more than two five-year terms) for party and government officials, including the president (Sweig 2011). Also, the reforms were submitted to a process of consultation with society. According to Raúl Castro, more than 8,913,838 people in more than 163,000 meetings were consulted, and 68 percent of the original suggestions were "revised" (*reformulados*) (Castro 2011).[12]

Third—and this is the most innovative part—the reforms include a significant opening of property rights (see Feinberg 2011), Self-employment will be allowed in 178 professions (far more than ever before, and including the repressed bicitaxis). Some of the self-employed will be allowed for the first time to hire nonrelatives. Cubans will be able to buy and sell homes for the first time since the early 1960s. Cubans might be able to use remittances from Cuban Americans to make purchases, and maybe to receive financing from the state. The term *nonstatist forms of property* is officially recognized (Guideline 219). The government commits to use "salaries," bonuses, and even a new tax system to incentivize productivity.

This opening of property rights is unprecedented in Revolutionary Cuba. In the reforms of the 1990s, very few property rights were granted to Cubans (Corrales 2004). The state authorized only a handful of self-employment activities, all with onerous restrictions (high taxes, limits on hiring, bans on partnerships). This time around, however, the focus is on ensuring that those laid off from the public sector succeed in the private sector, even if that means accepting help from Cuban Americans (see Mujal-León 2011).

This latter point is also extraordinary. For the first time since the 1960s, the Cuban government is permitting Cuban Americans to act as creditors to Cuba. It is still not clear whether their rights as creditors will be protected and whether they will be free to move their money as they see fit, but there is no question that this is the most extraordinary opening to Cuban Americans since the country permitted travel (in late 1979) and remittances (in the 1990s).

Missing Institutions

Despite these positive innovations, there is a risk that the reforms will not succeed in addressing the key impediments to growth and the setbacks to equity in Cuba. There remains both a micropolitical and a macropolitical problem.

The micropolitical problem has to do with institutions. We now know that without supporting institutions, market reforms flounder (see Edwards 2010). And yet the *Lineamientos* stop short of calling for the founding of market-supporting institutions. For instance, while 178 new professions are being liberalized, the vast majority of professions will remain unliberalized, failing to address the limited opportunities available to Cuba's highly trained workforce. Engineers, for example, one of Cuba's best assets, will not be able to form companies to design new products. Notably, the newly liberalized professions are not those that require high skills (e.g., hairdressers, cleaning services). Of the liberalized professions, the only ones that require some skills are electrician, typist, secretary, language instructor, computer programmer, and document translator. So the bulk of the high-skill professions will remain unliberalized, and the newly chosen liberalized sectors will not necessarily take advantage of the population's existing skills. Moreover, *Lineamiento* 3 bans "the concentration of property [*la concentración de la propiedad*] by natural and juridical people," a clause that is vague enough to be invoked to launch crackdowns on these newly liberalized sectors.

On the housing front, while a housing market has been created, there is no private mortgage market. In terms of production, no effort is being made to create an office to promote private sector exports, as Chile has done. Finally, there is no mention of the court system. Without an independent judiciary through which economic agents can sue each other and even the state in case of contract disputes, it is almost impossible to speak of rule of law or even a system of property rights.

The one new institution that is being built, a new tax system for the "nonstate" sector, will probably be distortionary. The announced tax reform for the self-employed is particularly harsh (up to a 50 percent tax rate on personal income, and in some cases, an additional 25 percent for social security) (Associated Press 2011). The new tax system is clearly designed more to maximize revenue collection than to encourage investment.

The macropolitical problem has to do with the notion of guarantees. Scholars who study markets argue that for property rights to function well, agents must have sufficient guarantees that gains will not be confiscated (by arbitrary and high taxation, rule reversal, or state encroachments). If investors lack institutional assurances of property rights, investments will falter. In Cuba, there are two reasons to expect reversals. The first is history: the Cuban state has a history of reversing economic openings. In the past, once an economic crisis abates, or once new forms of independent wealth emerge, the state panics and repeals the liberalization. The second reason is the lack of political checks and balances, or more broadly, a system for regularizing rotation of power. As Domínguez has argued, "the relationship between rotation of the head of state or government and the ability to guarantee property rights is crucial" (2008), and the question of succession remains one of Cuba's mysteries. The leadership is still not accountable to any independent organ, and as a result, no institution can prevent the current leadership from reversing course.

In short, the current leadership is uninterested in political experimentation. Marino Murillo, economic czar and a vice president of the Council of Ministers, said it clearly during the March 2012 visit of Pope Benedict: "in Cuba there will not be political reform." Murillo could not have been more emphatic.

The Unemployed as Hope for Reform Sustainability

There is nevertheless a glimmer of hope. The *Lineamientos* might turn out to be more sustainable than previous reforms. The reason has to do with the rise of a new actor in Cuban politics: the unemployed sector. This actor could become the most important pressure group on behalf of reform sustainability. To see why, it helps to compare the *Lineamientos* with the reforms of the 1990s.

Market-oriented economic reforms are more likely to survive if pressure groups emerge domestically and internationally to push for change. How do the reforms compare in terms of pressure groups? In the 1990s, the domestic pressure groups remained very weak. At the level of the top leadership, important hardliners (i.e., Fidel himself, hardcore party leaders, and military officials) were interested mostly in containing market opportunities (see Corrales 2004). This time, the domestic environment might be different. The hardliners still linger and might continue to fear that the reforms might end up empowering a societal group to become too autonomous from the state (Mujal-León 2011). But the hardliners might soon face a large unemployment situation, ranging from 11.4 to 26.9 percent of the labor force, depending on whether the state fires 500,000 or 1.3 million state employees. This is a huge and unprecedented number. In the 1990s, open unemployment was kept significantly lower, peaking at 7.9 in 1995 and declining thereafter to 1.9 in 2004 (Mesa-Lago 2010). There was huge "hidden unemployment" in the 1990s, to be sure, reaching almost 34 percent in 1994. But that is the difference: the government devoted substantial resources (deficit spending of up to 30 percent of GDP) to prevent the underemployed from becoming unemployed. With the *Lineamientos*, the state seems to be suggesting that it has no desire (or resources) to repeat this unemployment prevention feat.

A large unemployed population will become a major domestic pressure group like no other in the history of reforms in Revolutionary Cuba. The state will not be able to ignore this group easily. From a political economy perspective, this will be the key domestic sector needing market-friendly institutions to survive, and therefore likely to place demands on the state for such institutions. If the state does not meet those demands, the unemployed will experience immiseration and possibly turn restless. The government may not want to see either outcome; the sector will be too huge. In the 1990s, when the unemployed sector was never large, the government could get away with miniscule concessions leading to a miniscule self-employed sector (peaking at 4.1 percent in 2000), which could be decapitated or reabsorbed into the state economy once reform pressures eased. This time around, the unemployed sector will be too big to kill.

Internationally, however, the reverse is true: pressures are weaker today than in the 1990s. The 1990s were the heyday of the Washington Consensus. All the financial powers of the world advocated more rather than fewer market-oriented reforms. There was little financing except through institutions and countries committed to the Washington Consensus; namely, the multilaterals, the United States, and the European Union. Cuba's key ally, Spain, was pushing for reforms.

In the 2010s, by contrast, it is not clear that external pressures for reforms abound. Cuba has been bailed out by two major creditors, Venezuela and China (Pérez-López 2011), which, after Russia, are Cuba's most important debtors (Cuba owes US$28.5 billion, $15.6 billion, and $9.1 billion to each, respectively) (de Salas-del Valle 2011). If debtors are the ultimate condition setters, this does not amount to a neoliberal club at all. Venezuela under Hugo Chávez is interested in erasing capitalism, and Russia and China prefer state capitalism over neoliberalism.

In sum, the incentive structure shaping reform sustainability in Cuba today is the mirror opposite of that which was in place in the 1990s. Back then, the international environment pressed for reform while the domestic environment hardly pressed. With the *Lineamientos*, the opposite is the case. The future of reform in Cuba has only one hope: how large the unemployed sector is allowed to grow.

Conclusions

In its best years, Revolutionary Cuba's economic problem was equity without growth. In its worst years, the problem has been plummeting equity and still no growth. This essay has argued that the reason for this lack of growth is the state's obstruction of both property and political rights. This obstruction must be intensely onerous in Cuba—far more than may be typical elsewhere—precisely because human capital and social indicators are so strong. When the Cuban state boasts about human capital achievements despite no growth, it is inadvertently indicting itself, because it is providing evidence of the lengths to which it goes to repress property rights. The comparison of the bicycle and Internet sectors shows precisely how draconian the state restrictions on property rights and political freedoms have been, even in the presumably more liberalized era of the revolution. By promoting equal access to crucial economic assets, the Cuban state may have provided some of the conditions for humans to pursue prosperity, but by simultaneously restricting property and political rights, it has caged the very same citizens it claims to have liberated.

The *Lineamientos* represent the first time the Cuban government has recognized the endogenous components of this ailment. As President Raúl Castro said in 2011, sounding almost like an *antifidelista*, "Our worst enemy is not imperialism . . . but our own errors." More significantly, the *Lineamientos* represent the first time the Cuban government has acknowledged the need to introduce property rights as part of the solution. In the 1990s, property rights were given mostly to foreigners and to a handful of Cubans. This time, there is the promise of going further. And yet the reforms risk going nowhere. The newly established property rights still come with huge restrictions and insufficient institutions to function well.

The policy's fundamental problem—the reason for its half-baked approach—lies with the leadership's continued ambivalence toward reform. On the one hand, the post-Fidel leadership is, for the first time ever, serious about tackling the problem of equity without growth with a dose of property rights. On the other hand, the leadership remains fearful of property rights and adamant about political rights. As Raúl Castro proudly declared, "I was not elected president to restore capitalism in Cuba or to surrender the Revolution. I was elected to defend, maintain, and continue perfecting socialism, not to destroy it" (Castro 2010). Here he does not sound like an *antifidelista* at all.

Half-baked reforms will, no doubt, alleviate the poverty of some Cubans, but they will not end Cuba's dilemma of equity without growth. Seen from the angle of domestic politics, however, these reforms have more potential to survive and expand than previous ones, depending on how large the unemployed sector is allowed to become. It remains to be seen whether the revolutionary leadership, this time around, will take this much risk.

Notes

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1. For an argument on how political interference hurts education quality, especially at the university level in nontechnical or scientific disciplines, see Orro Fernández 2004.

2. For instance, some scholars feel that the official figures exaggerate Cuba's achievement (Mesa-Lago 2000, 2002); that the starting point was favorable and the rate of improvement in Revolutionary Cuba was lower (McGuire and Frankel 2005); that income inequality was achieved by generalizing poverty (depressing consumption) rather than distributing wealth; that the economy was heavily dependent on other people's money; i.e., Soviet subsidies (see Pastor and Zimbalist 1995); that a new, more exploitative class was created—the unrestrained state and its officials (Espina Prieto 2005); that equality indicators have

deteriorated significantly in the 1990s (Fabienke 2001; Espina Prieto 2005); or that the Cuban government's definition of infant mortality leads to underreporting (Eberstadt 1986).

3. Data are derived from Cohen and Soto 2001. They define workforce schooling levels as the years of educational achievement for people aged 15 to 64 who are not studying. Data were derived using OECD, UNESCO, or the national census.

4. This is supported by Madrid-Aris (2000), who shows that capital accumulation was responsible for 70 percent of Cuba's economic growth from 1963 to 1988, implying that Cuba's human capital investment is relatively inefficient.

5. For an early review of the literature on property rights, development, and democracy, see Riker and Weimer 1993.

6. While foreign investors have driven most of China's growth so far, there are signs that domestic investors are starting to take over. See World Bank 2005, 12.

7. Chinese bike producers approached the Cuban state to develop this sector. Mao Xianglin, former envoy of the Central Committee of the Chinese Communist Party, visited Cuba in 1997 with two purposes: to study the domestic economy and to set up a bicycle factory that would bring Chinese capital and technical expertise to Cuba (Hearn 2009).

8. More than six hundred bicitaxis were confiscated in Havana in November 2004 (Cubanet 2004). In March 2005, the National Tax Office, after imposing a series of fines, finally revoked Roger Benítez Palmero's self-employment license, thus precluding him from offering bicitaxi services. Benítez leads one of Havana's bicitaxi federations (Cosano Alén 2005).

9. Until 2011, international Internet remained off-limits to ordinary citizens. Only government offices and research institutions receive full Internet connections. Private citizens must solicit permission from the state to get a connection, and emails are routinely monitored (see Azel 2011; Reporters Without Borders 2004; Hoffmann 2004).

10. In January 2004, a three-hour prepaid card to email accounts abroad was sold in Cuba for US$4.50, one-third of the average Cuban monthly wage (Reuters 2004).

11. It is true that the embargo plays a role. In 2005, it was estimated that Cuba paid more than $4 million to be able to connect to the Internet via satellite, given that connectivity by undersea fiber optic cable is prohibited under the 40-plus-year U.S. blockade, according to officials at the Ministry of Information Science and Communications (MIC). Connectivity with the Internet via fiber optic cable is faster, better quality, and between 15 percent and 25 percent cheaper than by satellite, explained engineer Roberto Santiesteban Hernández, director of the DATOS Business Unit of ETECSA (Empresa de Telecomunicaciones de Cuba S.A.),which is part of the MIC (quoted in Riera 2006).

12. In a country with 11.2 million inhabitants, this reported number of participants is probably exaggerated (unless the very elderly, the very young, and the very rural were consulted).

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