The level of education and health services in Cuba has been for years a reason of pride for its government. Even prestigious personalities not precisely friends of the Cuban regime have widely praised the island’s achievements in these fields. The allegedly first world level of Cuba in education and health is one of the cornerstones of the official speech, and a commonly used argument by the supporters of the Cuban system abroad, who like to point out that the lack of some freedom in the island is by far offset by its social achievements.

Many works on the future of Cuba have mentioned a highly qualified and educated population as one of the resources the country can rely on during the future transition towards a market economy. A dramatically affected capital stock, and a low level of productivity, could be compensated by high levels of human capital, as happened in the reconstructions of Germany and Japan, two countries whose physical capital suffered greater damage than Cuba’s.

However, the poor performance of the younger Cuban professionals who have emigrated to the United States has raised questions about the real quality of the island’s educational system. The truth should be faced, and we have to accept that Cubans have not shown the ability of other immigrants to successfully perform in the United States. The behavior of Cuban graduates has led to some negative opinions and raised many misgivings, especially within the first generation of immigrants, who underestimate the true capacity of the Cuban professional and are prone to see them as another failure of the current political system.

The present article is intended to present an analysis and reflection of educational and professional skills in Cuba. The paper is based mostly on the author’s own experiences as student, academic, and professional in Cuba as well as abroad. In the paper I try to portray the current situation of Cuban professionals, by briefly reviewing their education and training process, from elementary school to their labor environment. As the reader will see, Cuban professionals hold a good technical background, but they also have flaws impossible to disregard.

It is noteworthy that the system herein described corresponds to the period 1968-1990. The current dismal economic situation, unleashed by the collapse of the socialist system, has reduced the resources assigned to education, and therefore adversely affected its quality and effectiveness. Nonetheless, I believe that the foundations of the system remain unaltered. Moreover, the system this paper addresses corresponds to the one under which most of the graduates currently working in Cuba were raised. I hope that this paper makes a contribution for a better understanding of the capabilities of persons now aged 30-50 years, a generation with increasing participation in leadership positions in the Cuban government, and one that will be called to play a decisive role in the upcoming transition.

The article is structured as follows. It first analyzes the elementary and high school systems. Then it focuses on the undergraduate higher education system. This is followed by some insights on the labor environment of the Cuban professional. The paper closes with our conclusions.
ELEMENTARY AND HIGH SCHOOL EDUCATION

Since its very beginning, the new revolutionary government put education at the top of its priorities. The significance given to education and health had a political dimension: they both would be the distinctive and new features of the Revolution. Success in these fields would represent a symbol of justice and social welfare in Cuba, and the cornerstone of the official rhetoric, aimed, among other things, at encouraging a positive foreign opinion of the process.

Notwithstanding the political goals related to education, it is a fact that the Cuban government has achieved success in this field. Favorable economic relations with the former Soviet Union indeed played a key role in financing ambitious educational programs. We cannot rule out the fact, however, that the revolutionary government inherited a country with first world standards in education. The high professionalism and background of teachers raised and trained before 1959 provided the new administration with the human resources needed to launch ambitious reforms. Nonetheless, it would be unfair to deny the high quality and effectiveness of the Cuban education system.

Let us start with elementary education. In my opinion, the elementary education program can be labeled as excellent. Mathematics and Spanish courses have been designed to make the student go through a progressive level of complexity, which endows the young student with a sound basis for further levels. The Ministry of Education bolstered competitiveness and excellence through a contest system, starting in municipalities and ending with national contests, in Mathematics and Spanish.

In the fourth grade, the student was initiated in subjects such as History, Biology, and Geography. Of course, the History curriculum was totally designed according to the interests and rules set by the government, but it should be noted that the teaching of History anywhere always responds to certain official goals. In every country, History lessons at the elementary education level are used to instill into children love for national heroes. That is the reason why these lessons in Cuba, Mexico, or even the United States, entail a sort of “harmless misrepresentation” of the idolized heroes, by skipping or avoiding any negative aspect of their lives. I should stress that in spite of political biases, the Cuban curriculum did not prevent the young student from having a first interesting contact with the foremost developments of the fatherland’s history.

Perhaps the Achilles’ heel in elementary education in Cuba is the absence of foreign language instruction. The sheer control of the state over education does not make room for private institutions, where these studies would likely be offered. In addition, important complements in learning and mastering a foreign language, such as traveling abroad, access to radio, TV programs, and literature in English are out of the reach of Cuban children. Some parents have overcome this flaw by hiring private teachers, but it is a luxury that relatively few families can afford.

Political interference has not inflicted great damage to elementary education in Cuba. Although children had no other option but to become members of the organization of revolutionary pioneers, and were also required to participate in political meetings, brainwashing was not the distinctive feature of primary education. The goals for this stage, like the creation of a sound basis in basic disciplines and the physical development of children through sports and other activities, were achievable by any student.

Student competition and academic performance were encouraged by the possibility of obtaining a grant to study high school in one of the so-called vocational institutes. These were boarding schools, where the student could enroll from 7th to 12th grade. Admission to vocational schools was based on achievement during the last three years of elementary education. The academic program of vocational schools was the same as the other mid-level educational institutions and we have no evidence that their teaching staff was better qualified. However, the highly selective nature of the vocational schools, mostly based on academic performance, created an environment of excellence and competition, where every student benefited from the skills and knowledge of his classmates.
The Lenin Vocational School pioneered this kind of institutions. The Lenin school was officially inaugurated in 1974 by Fidel and the former leader of the Soviet communist party and government, Leonid Brezhnev. Thereafter, vocational schools were open in every province of Cuba.

Social lags cannot be wiped out by decrees. Most of the Lenin students came from families well-positioned in the Cuban government. Their parents were mostly members of the diplomatic and economic elite. But we should keep in mind that the selection process to be admitted to a vocational school was based almost entirely on academic achievement. The sons of government leaders who studied at the Lenin school were good students, who had benefited from the higher cultural and educational background of their families. Students with high grades coming from humbler families faced no admission barriers at the Lenin school, provided their families sided with the Revolution.

The content and quality of mid-level education in Cuba over these years were insuperable. Mathematics courses were extremely demanding, with increasing complexity as the student moved forward to a higher grade. Teaching of Differential and Integral Calculus began at the 11th grade, and Probability Theory was taught in the 12th grade. Vocational schools enriched their academic programs with courses on programming languages, such as Focal and Fortran.

The textbooks used for Mathematics, Physics, and Chemistry were written in collaboration with advisors from the former Soviet Union and the German Democratic Republic. The scientific capabilities of these countries is well known. From the educational point of view, Cuba largely benefited from its links with these countries. Soviet and German advisors also cooperated with their Cuban colleagues in training students chosen to participate in international contests and Mathematics Olympiads, where Cuban students often performed well. It should be noted that the curriculum in vocational schools were no different from other institutions, but the elite environment of the vocational schools generated positive externalities and a highly competitive spirit, by far superior to other institutions.

Regarding other subjects, their content could be labeled as excellent. For example, the Literature program comprised classic works by Cervantes, Shakespeare, Stendhal, Balzac, Tolstoi, and Puhskin, among others. The students were distributed the classics, edited in Cuban publishing houses, with the commitment to return them as soon as the academic year ended. The courses in Chemistry, Biology, and Geography were also exhilarating and demanding.

The teaching of English language started in seventh grade, the first year of junior high school, and lasted for six years. English classes put emphasis on grammar, but did not pay much attention to listening comprehension and conversation. The teaching of English undoubtedly made a contribution to enrich the background of Cuban students, but its scope was pretty narrow. The social environment did not help students to complement what they learned in classes. In such environment it was barely possible to master the foreign language and to be fluent in it.

The arrival at high school meant a turning point in indoctrination. The official dogma was not significant in years preceding high school, but starting in the 10th grade, it dramatically changed. Lessons in History provided the foundations for Marxist dogma, and shaped the mind of the students in line with the interests of the Cuban government. For instance, the high school contemporary History course was utterly designed upon the guidelines of the Soviet system. The positive aspect of being introduced to the foremost developments of world history was partially offset by a sticky approach to history. Such a dogmatic approach misled the students and did not provide a solid treatment of social and political issues.

Courses in Cuban History carried also a full load of indoctrination. The Cuban History textbooks had as their main goal portraying the socialist Revolution as the unique and true emancipating chapter of Cuban History. Before 1959, Cuba was nothing but a country enmeshed in corruption, prostitution, and poverty, a quasi-colony of the United States. With singular mastery, the courses in Cuban History embedded the life and work of Cuban heroes into the socialist Revolution. Historical personalities with no connection whatsoever with communist ideology, even anti-
Communists like Antonio Guiteras, were added to the list of the Revolution’s precursors. Any blemishes in the life of the heroes, their religious feelings, their criticism towards communist ideas, and everything that did not fit well into the official history, was simply erased or minimized as much as possible.

Besides favoring the manipulating interests of the Cuban government, indoctrination has left its print on the minds of a whole generation of Cubans, even those who no longer side with the Revolution. The rejection of anything not coming from Socialist countries, and the drastic division of countries and men into “good ones” and “bad ones,” closed the doors to an objective comprehension of the world we live in. The unflagging mockery of the United States, instilled since childhood, is one of the reasons why the younger Cuban immigrants have faced so many hardships to adapt to living in this country. After many years of listening to the same rhetoric, that Capitalism is a synonym for anarchy, it is indeed traumatic to face a society filled with disciplinary rules unknown in Cuba. The Revolution has tried to wipe out of its moral code all manners and customs considered as bourgeois and fostered those that fit in a proletarian country. The discipline of the boarding schools did not encourage a behavior of discretion, kindness, and sobriety. This is another factor affecting people born and brought up in the Revolution.

As we already mentioned, the quality of high school education in Cuba deserves to be praised. Nonetheless, the system had two significant flaws worthy of comment. The first one, and seemingly the less important one, was the little emphasis the system gave to time limits to complete a test. Generally, the student had unlimited time to respond to and review a test. Time limit was not a reason for a student to fail. If someone failed a test, it was due to not knowing the material or not taking time to read over the test, but never because of lack of time. The Cuban educational system did not have among its goals training students to work under a lot of pressure.

The other flaw mirrored the little importance that a centralized economy assigns to quality. There was a remarkable imbalance in the weights given to procedures and results when teachers gave grades. This imbalance widely favored procedure over results. The rule set by the Ministry of Education, and followed by teachers, established a penalty of one point out of a hundred (the top grade achievable), for every wrong result, provided the student had correctly completed the procedure. Such imbalance discouraged interest in quality and end results. Some students did not take the time to get the final answer to a question, since they considered it was a waste of time.

To sum up, elementary, junior high school, and high school education in Cuba provided students with a good background in basic sciences, Spanish language, literature, and general culture. The negative effects of political indoctrination, negligible until high school, turned significant once the student arrived at high school. The Cuban student came to post-secondary education with a formidable stock of knowledge, but also with some bad habits and flaws, which would worsen to some extent while in higher education.

THE REVOLUTIONARY UNIVERSITY

The university is the final and most important chapter in the life of a Cuban student. Post-graduate programs are not well consolidated yet. Although, the offer of post-graduate courses has increased over the last ten years, they are mainly geared to teachers and other professionals working in research centers, and they are usually studied abroad.

Unlike Europe and the United States, university in Cuba is not the eve of Masters and Ph.D. programs. University careers last at least five years and encompass a wide range of subjects considered essential to the future professional. The quality of these subjects is remarkably high but it could vary depending on how sensitive is the career to the influence of the official rhetoric.

The university in Socialist Cuba is a space where the virtues and flaws of the Cuban education system are enhanced. On the positive side, we can find subjects and courses with state of the art content, with tough tests, highly demanding from the logical and analytical point of view. On the other hand, we find a political environment, not willing to make concessions to criticism and deviations from the government’s
speech. Every student must unambiguously accept and repeat the official dogma, otherwise his career would be at stake.

The negative interference of politics into the university life pushes students to spend time and energy in achieving political merits. Students quickly learn the lesson that they better devote time to political and other activities organized by the inseparable duo party-government, than to upgrading professional skills and learning a foreign language. It does not mean that students are not interested in mastering another language. Many students take foreign language lessons outside the university. We simply want to stress that the weight given to learning a foreign language would be greater if the social and political context were different.

Technical and scientific careers are affected to a lesser extent by government interference in education. Notwithstanding that the Cuban government exaggerates the island’s scientific achievements, Cuba has a great cadre of professionals in fields like Biology, Medicine, Chemistry, Mathematics, and even engineering. A solid proof of the excellence of these careers is the high percentage of students who drop out during the first two years of their career.

Social Science careers portray a different picture. Economics, and other related careers (Accounting, Finance, and Commerce), whether studied at the University of Havana or at any other institution, are ideological trenches, dominated by spokesmen of the Revolution’s ideology. This peculiarity, which undoubtedly undermines the quality of Economic studies in Cuba, could lead to hasty and superficial conclusions about the capacity of Cuban economists. However, the problem has more than one dimension and deserves a thorough analysis.

The Economics academic program, and the institutions where this discipline is taught, have been subject to several revisions and reorganizations. Changes were made at every political turn taken by the Revolution. Even the official documents of the Cuban Communist Party accept that in the late 1960s, Economics and Accounting were both neglected. During the honeymoon with the Soviet Union—the 1970s and the early 1980s—Economic studies were nothing but a copy of the programs taught in Soviet universities.

The Economics program in Cuba was divided into quantitative and theoretical blocks. The latter did not include any courses on Micro and Macroeconomics, but was overfilled with subjects conforming to Marxist-Leninist theory: Marxist Philosophy, Political Economy, and Scientific Communism. In addition, during the last two years, the program encompassed Socialist Planning and Finance. These two subjects were so dogmatic, boring, and intellectually poor, that students ended up questioning the ideas that they were supposed to embrace.

However, Economics curriculum in Cuba had also its positive side. The quantitative methods module was excellent. It was comprised of 4 semesters of Mathematical Analysis, two semesters of Statistics, three semesters of Linear Programming and Models, and one semester of Computer Language. During the first two years, it provided the students with sound basis on Accounting foundations. The program also included six semesters of foreign language, though Russian prevailed over English.

Like most careers in Cuba, the Economics student was requested to write and defend a thesis in front of a panel, as an obligatory requirement to obtain the degree. The last semester was planned to fulfil this requirement. Completing the thesis entailed a useful and valuable exercise of research and writing, not existing, for instance, in bachelor programs in the United States. The requirement of the thesis provided students with the opportunity to conduct research and integrate different skills learned.

It is noteworthy that the School of Economics at the University of Havana has been under an important process of transformation since the beginning of the 1990s. This transformation is in line with the new demands of the Cuban economy, where links to western economies no longer play second fiddle. The new program has ushered courses in Micro and Macroeconomics, and dislodged some of the former obsolete subjects. At the same time, the already strong module of quantitative methods is being upgraded.
The School of Economics is still far from matching the foremost centers of Economic studies in Latin America, but no one can deny the advances undergone by this institution over the past years regarding the content of the academic program as well as the background of its staff.

LABOR ENVIRONMENT

Once the University period is completed, the young graduate begins his work experience. Up to this moment, the labor links of the student are scarce, limited to brief stays in some institution. These stays are called “professional training” and take place for about one month every year over the career. Such training does not entail any remuneration, since its only purpose is to familiarize the student with his future professional environment.

During the first two years as a worker, the young professional should comply with social service requirements, typically being sent to a hardship post. It means that the student does not choose his job, which is assigned by the government. This is not a random process and the allocation of the graduate is related to his academic performance and his political record.

The Cuban economy features a remarkable disparity between human and physical capital. Excess supply of professionals exists in almost all sectors. Therefore, it is not easy for the young Economics graduate to find a job where he can creatively utilize his background and grow as a professional. Sometimes, the graduate is given a management position in an enterprise within the production sector. It demands imagination and resolve to face the many difficulties inherent to the productive sector in Cuba. Nonetheless, the latter is rather the exception, not the rule. The graduate often ends up carrying out tasks unbecoming to people holding a university degree.

Work in Cuba has a well-defined political dimension. Work provides the environment where people, in addition to producing goods and services, involuntarily team up in a wide set of activities wherein the political control exerted by the government materializes. When starting work life, the young professional cannot avoid being sucked up by politics, a process which traps him and might eventually turn him into another member of the political machine.

A highly political working life, plus the lack of jobs suited to professionals, imply a breakup in the natural process of skill upgrading inherent to professionals. Most valuable lessons and knowledge picked up while at the university are sadly stored away, their scarce utilization leading to stagnation. Talented professionals, who under different circumstances would strive to upgrade their background and specialize, waste their time in political meetings, rallies, and non-paid jobs. In addition, the little space left for writing and discussion, if any, is bounded by official censorship. The utter subordination to the government speech and the dogmatic approach to social issues, instilled since childhood, eventually blur the people’s vision and their comprehension of the surrounding world. Many professionals eventually end up becoming disappointed by the system, but in this case they usually replace the official dogma with a naive and wrong vision of western democratic societies: what was white turned black, and vice versa.

Cuba has scientific centers of international prestige. The privileged professionals who hold positions in these centers enjoy exceptional working conditions. They are able to travel abroad—something extremely coveted in Cuba—and the government supports them with time and resources needed for their development, including high quality materials and equipment. However, even these people cannot avoid the long arm of politics. Quite the contrary, scientific research centers are a key piece in the official propaganda machine. Management positions in these centers are given to professionals who, beyond their scientific achievements, are viewed as politically trustworthy by the Communist party and the government.

Cuba’s economic restructuring, and the reorientation of its external links, have entailed new contradictions in the life of Cuban professionals. Greater and stronger bonds with western institutions and individuals have resulted in benefits for a reduced group of professionals who now are under the influence of modern technology and fresher ideas. But, at the same time, the dismal economic situation has pushed
many professionals to spend time and energy trying to get the means to survive. It implies getting involved in illegal and other activities unbecoming to persons who have received university-level education. Working life enhanced the flaws of the Cuban education system. Centralized economies are not precisely known for the quality of their goods and services. The labor environment in Cuba does not provide such incentives. The work of many professionals turns into a boring routine and there is no demand for final results within short time frames. As we already mentioned, a few professionals hold management and direction positions that bear a lot of pressure. But it is a fact that most graduates associate their working day with clocking time rather than results. They deal with a boring working routine: an eight hour stay in an office or other location where, notwithstanding the time wasted, they have the obligation to remain at work extra hours to participate in “voluntary work,” rallies, or other politically-related activities.

Finally some comments on the ways to obtain a job in Cuba. Cuba has no true job markets or the mechanisms of professional competition like the ones existing in market economies. Concepts such as labor market, curriculum vitae, interviews, head hunters—the backbone of labor intermediation in modern societies—are unknown to most Cuban professionals. Having acquaintances and being supported by influential people are assets everywhere, even in the United States, but in Cuba it is not just an advantage but a must.

CONCLUSIONS
The Cuban educational system has guaranteed that elementary education reaches every corner of the country. Not less important have been the efforts to give every elementary school student sound academic training. The quality of the teaching of Mathematics, Natural Sciences, as well as Spanish, is very strong. The quality of education in all these subjects rises as the student advances and they peak during University-level studies.

Such high technical level education is harmed by the sheer interference of politics. This interference occurs within academic programs as well as in other activities where every student must get involved. Indoctrination and political interference worsen in the latest stages of education, and mainly affect social and political careers.

As a result of the imbalance between human and physical resources, many professionals are unable to work in a creative environment that encourages upgrading and professional development. Some flaws stemming from high school education turn eventually into handicaps and vices. The lack of interest in final outcomes and of incentives to achieve goals, and the poor mastering of English, are some of the worst setbacks to overcome.

Being aware of these flaws is the first step to correct them. It can be taken for granted that Cuba will have a close relationship with the United States at some point in time. Cuban professionals have a sound background and technical bases to embed in this relationship. However, some measures aimed to foster a new culture of work and study will be needed. Fostering the teaching of the English language will be a key component in this effort.