March 2013

**Cuba’s Dependence on Venezuelan Assistance.**

**A Quantitative Assessment**

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In October 2010 Cuba and Venezuela signed the Integral Cooperation Agreement (*Convenio Integral de Cooperación*) under which Venezuela would provide a variety of subsidies and transfers to Cuba, including a large subsidy on oil imports. Cuba also would send medical personnel, teachers, and military and security advisers to Venezuela and (on much smaller scale) to other “friendly” countries in Latin America (including Bolivia, Nicaragua[[1]](#footnote-1)). The salaries of these professionals would be paid by the Venezuelan government.

Official data on these operations have never been released[[2]](#footnote-2). The estimates presented in this paper are subject to significant errors and omissions, but they are probably a reasonably good approximation of the truth. They suggest that the inflows involved have been very large relative to the size of the Cuban economy and in comparison with those provided by the Soviet Union in the 1980’s. Soviet assistance was slashed by Russia in 1989 and eliminated by Russia in 1990, resulting in a deep contraction of the Cuban economy. A crisis of comparable magnitude could occur if the assistance now provided by Venezuela were to disappear.



1. **Basic data**

This paper provides improved and updated estimates of Venezuelan aid derived indirectly from as elected statistical series published by Cuba’s National Statistical Office (*ONE*). These data are then subject to a number of adjustments described in section 3 of this paper[[3]](#footnote-3). This methodology also makes it possible to estimate the various forms of Venezuelan assistance, which provides a check on *total* assistance. The data presented in Table 2, are taken from (i) Cuba’s state budget (lines 1 through 5); and its national income and balance of payments accounts (lines 7 to 8).

The most important series in Table 2 (line 1) is labeled **“other nontax revenue”** in the Cuban budget presentation. It is interpreted here as a proxy for *total* Venezuelan payments to Cuba: (i) because ONE explains that this item includes “price differentials on foreign trade”—a reference to the price subsidies, mostly on Cuban oil imports, granted by Venezuela; and (ii) “net foreign income”; and (ii) because it could hardly be anything else in view of its extraordinary magnitude and its very rapid growth in the mid- 2000s. Expenditure on **public health** (line 2) is used to derive an estimate of the earnings of Cuban medical personnel—which account for the bulk of Cuban workers abroad. (More o this in section 4). Lines 3 and 4 cover **subsidies** paid by the government to Cuban state enterprises (other than subsidies



for enterprise losses which are irrelevant here); they probably include oil import subsides in line 4. **Productive sphere** (*esféra productiva*) is a misnomer for government production.

Lines 6 and 7 are used to construct an alternative proxy for the earnings of Cuban professionals in Venezuela (and in other Latin American countries at Venezuela’s expense). This proxy is calculated as the difference between total exports of services (line 6) and tourist revenue (line 7), on the assumption that other services exports are small (which may not be entirely true for recent years).

It may be noted that payments received by Cuban doctors+teachers+soldiers+ spies are included here as a form of Venezuelan *assistan*ce to Cuba. This can be challenged on the grounds that these payments represent the remuneration of work actually performed by Cubans abroad and should therefore be included as a credit in the current account of the balance of payments, as well as in GDP. After all, it might be argued that Cuba had made a massive investment in health and education, and it is therefore appropriate that it now harvests the fruits of those investments.[[4]](#footnote-4)

There are, however, two good reasons to include these payments in our total for external assistance. First, as argued by Castañeda (2011), the payments received by the Cuban government as compensation for the work of Cuban professionals are much larger than those normally used in international statistics. In fact, a large fraction of these payments is not paid to the workers but is captured by the Cuban government; therefore, to that extent they should be classified as official transfers and not as services.

Second, the focus of this paper is on *sustainability*. There is no doubt that the payments in question (whether they are recorded as workers’ earnings, as official transfers, or as services) do contribute to Cuba’s national income. However, the point is that they could be terminated at any time by a *political* decision of the donor country. Just as the present government in Venezuela decided that it was *politica*lly opportune to launch this program and pay above-market wages for the services of Cuban professionals, a new government could decide that Venezuela does not need these services and terminate the program.

1. **Methodology.**

Each of the major components of Venezuelan assistance to Cuba is thought to be contained in one the variables displayed in table 2, for two reasons: (i) because of what we know *a priori* about these components; and (ii) because of their size and their unusually strong growth during the mid-2000s. However, the data in Table 2 cannot be used without further adjustments. First, because the Cooperation Agreement setting out the various assistance programs was signed in October 2000. Yet, the variables in Table 2 show positive entries for 1999, which implies that they included foreign revenues *unrelated* to the agreement with Venezuela. For this reason, each of the series in Table 2 was adjusted by subtracting its 1999 value.[[5]](#footnote-5) (By way of example, the series for “total payments” in tables 3 and 4 was calculated by subtracting from the series “other non-tax revenue” in Table 2 the 1999 value of this latter series.) This procedure assumes that the items excluded because they were unrelated to the Agreement with Venezuela remained unchanged during the rest of the sample period—an arbitrary assumption, but not unreasonable one since the items in question had shown littlechange before 1999.

Tables 3 and 4 show the breakdown of Venezuelan assistance using two alternative sets of estimates for payments to Cuban professionals. Table 3 uses adjusted budget expenditure on health as a proxy for the payments to Cuban doctors (by far the largest category of Cuban professionals in the program). This implicitly assumes that *domesti*c expenditure on health remained constant at its 1999 level during the sample period—an arbitrary assumption but probably not an outrageous one in a country were population has been stagnant for some time and has actually declined in 2011.

1. **Where has all the Money Gone?**

Table 3 suggests that total inflows from Venezuela rose moderately through 2004, increased at a breakneck pace from 2005 to 2008, but appear to have stabilized since then. Payments to doctors accounted for a little less than one half of total adjusted payments in the past couple of years; subsidies for roughly one half. The contribution of government production financed by Venezuelan transfers was significant in 2008-09, but declined considerably since then.



Errors and omissions (the difference between the estimated total payments and the sum of its explanatory components) are relatively small except in 2006-07 when total payments are overestimated, and in 2009, when they are underestimated. The root-mean square error y is 1.19. Moreover, the adjusted R2 of the regression y = a + b x (where y is total Venezuelan payments and x is the sum of explanatory variable) is 0.9449. The constant term of the regression (a) is *not* significantly different from zero, suggesting that the adjustments made to the crude data in Table 2 were appropriate. The slope coefficient b is not significantly different from one, pointing to the absence of bias in predicting total payments.

The estimates presented in Table 4 use the **s**ame inputs as Table 3, except that the income of Cuban professionals is approximated by the difference between exports of services and tourist receipts. On the whole the results are similar to those reported in Table 3, except that the errors and omissions are larger: the root-mean square error is now 1.62, and the R2 of the regression is 0.9126. This may be due to methodological differences: (the proxy for the income of Cuban professionals in Table 4 relies on national accounts and balance of payments data; those in Table 3 are based on budget data).



**Conclusion**

Inflows of funds from Venezuela increased rapidly during the first decade of the XXI century and peaked in 2008 at around $13 billion or roughly 22 percent of Cuba’s GDP. Since then the inflows appear to have declined somewhat, although in 2011 they were still about 17 percent of GDP. The dependence on Venezuelan assistance makes the Cuban economy highly vulnerable to political decisions over which it has little or no control: The Venezuelan government—which faces serious economic problems of its own—may decide at some point that it cannot continue to subsidize the Cuban economy and put an end to the program. As I pointed out in a previous paper[[6]](#footnote-6), the best way to confront the looming danger is to expand and intensify the process of structural reforms that was initiated a few years ago by President Raul Castro. This would raise productive capacity on a sustainable basis and help to confront the other major danger threatening the Cuban economy: the ageing of its population and the risk that its pension systems will collapse in the long run.

**Reference**s

Castañeda, Rolando (2011). “El insostenible apoyo económico deVenezuela a Cuba y sus implicaciones.” *Cuba in Transition*, Volume 20). Association for the Study of the Cuban Economy (ASCE). Miami:Florida.

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1. In addition, there have been recent reports of similar operations with Algeria, Angola and Namibia, but the sums involved appear to be much smaller than those committed by Venezuela. [↑](#footnote-ref-1)
2. Indeed, official presentations of the Venezuelan balance of payments do not even hint at the sizeable and growing flows of funds to Cuba since the beginning of the XXIth century. [↑](#footnote-ref-2)
3. For early estimates based on this approach see Hernández-Catá (2013) which also questions the sustainability of these flows and examines the policy measures that should be adopted if they were to be sharply reduced or eliminated. [↑](#footnote-ref-3)
4. Presumably Cuban educational planers anticipated the advent of a “friendly” government in Venezuela when these decisions were made, several decades ago. [↑](#footnote-ref-4)
5. There are two exceptions to this rule: applying the adjustment to “other subsidies” and and “productive sphere” would have resulted in small negative values in certain years, which is clearly unacceptable. [↑](#footnote-ref-5)
6. See Hernández-Catá (2013). [↑](#footnote-ref-6)