

# Selectivity Patterns in Puerto Rican Migration

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## 1. Introduction

Migration is the way of live for Puerto Ricans. Although the heaviest migration flow was recorded in the decade of the 1950s, still thousands of Puerto Ricans leave the Island yearly in search of a better life in the Mainland. In the year 2000, 42 percent of the population over the age of 18 born in Puerto Rico was living in the United States. Census data suggest that Puerto Rico loses about 5 percent of its adult population to the United States in a five year period.

It is well known that migration was once used and stimulated by the government of Puerto Rico to accommodate its new model of economic development. Then, thousands of agricultural workers mostly men, and thousands of women working in the needle industry at home, were displaced by industrialization. Then, structural unemployment coupled with government policies and labor contracting produced heavy emigration. Today, the high unemployment rate in Puerto Rico continues to be a central feature in the motivations for migration. Airport surveys of migrants conducted by the

Planning Board of Puerto Rico, consistently show that between 60 and 70 percent of emigrants leave Puerto Rico to work or to look for work in the United States. Recent studies using time series data also show the importance of unemployment in driving the migration flow (Hernández 2001).

In the U.S., Puerto Ricans rank among the poorest ethnic groups. In 2000, the poverty rates of Puerto Ricans was 26 percent, higher than the poverty rate of African-Americans and other major Latino groups (Santiago, this volume). The poor economic outcomes of Puerto Ricans in the U.S. and the continued outflow of Puerto Ricans to the Mainland, pose the question of who leaves and who stays in the Island, or the overarching issue of migration selectivity. The large number of college graduates leaving the Island, recruitment of nurses, policemen, teachers and engineers, and the transfer of manufacturing personal to the U.S due to factory closings, fuel the debate that Puerto Rico is losing important human capital to the Mainland. But the poor performance of Puerto Ricans in the Mainland suggests that those who leave may be selected from the bottom of the skills distribution.

The selectivity of international migration has been addressed fervently in the literature. Earlier literature thought of migrants as positively selected. As the story goes, the most motivated and the most willing to take risk are the ones who move. However, this view was challenged by Borjas (1987) who using a Roy-type decision model, argued that the direction of the selectivity depends on the correlation between earnings at the origin and earnings at the destination, and the difference in earnings dispersion between the origin and the destination. In most capitalist countries the first term is positive. Income distribution tends to be more unequal in developing countries than in the US,

implying negative selection. “United States insures those at the bottom of the income distribution against poor labor market outcomes, while taxing those at the top” (Borjas p. 534). Others have questioned this model theoretically arguing that it is not that migrants are negatively selected but that they are less positively selected (Chiswick 2000) and others empirically (Jasso and Rozensweig 1990) pointing to the sensitivity of the results to sample and variable specifications. To this must be added that data limitation on non-migrants, legal restrictions to migration, and limited information related to motivation, willingness to take risk, work ethic, etc., have make it difficult to assess the question of selectivity of international migration.

Puerto Rican migration represents a good case to test hypotheses concerning migration selectivity. First, there are comparable Census data on migrants and non-migrants to compare those who leave with those who stay. Second, Puerto Ricans can migrate freely to the U.S., which means that we can observe the characteristics of migrants, and not the characteristics of migrants conditioned on having obtained a visa. The result is a true population of migrants and non-migrants. Third, although born US citizens, Puerto Ricans meet most conditions of immigrants. Puerto Rico speaks a different language from that of the U.S., has a different culture, and is physically separated from the United States. As other immigrants, Puerto Ricans in the U.S. undergo a process of cultural and economic assimilation. As many other immigrants, many dream of returning home.

My interest in this paper is to examine the selectivity of Puerto Rican migration using Census data o Puerto Rico and the United States. Other studies have analyzed the characteristics of Puerto Rican migrants and non-migrants, concluding that migrants are

slightly less educated than non-migrants (Ortíz 1986, Rivera-Batíz and Santiago 1996). In this paper I study a broader set of characteristics than prior papers, and examine more closely selectivity and wages. This analysis also inquires on differences by gender.

## **9. Discussion and Conclusion**

Data on income distribution of Puerto Rico and the United States suggest, following Borjas hypothesis about income distribution differentials and migration, that those at the lower tail of the income distribution would have the greatest incentive to leave the Island and migrate to the United States. Since the higher inequality of Puerto Rico in comparison to U.S.' seems to come primarily from persons not working full-time year-round, out-migrants may be drawn from the lowest income segment of the Puerto Rican population, likely people without jobs or with sporadic employment.

Analyzing data from the 2000 Census, and comparing with results from prior studies, Puerto Rican out migration seem to have become more negatively selected in terms of education, especially among women. However, in spite of their lower educational attainment, migrants have a stronger attachment to the labor force than non-migrants proving that Puerto Rican migration is a migration of labor looking to improve their lot in the United States.

With wages in the U.S. as high as they are and with employment probabilities always higher in the U.S than in Puerto Rico, one might ask why the country has not yet emptied. Obviously, migration is not a rational choice for those who remain in Puerto Rico, since even with open borders they have decided to stay home. But it is not only psychic costs what prevent some Puerto Ricans from leaving the Island. Even within a

low-wage zone like Puerto Rico, many would lose wages if they were to migrate. College educated men in Puerto Rico stand to lose the most from migration.

The data examined are consistent in presenting a story of negative selectivity: (1) comparison of income distributions in the U.S and Puerto Rico suggest that those at the bottom gain the most from migration, mostly the unemployed; (2) the descriptive data on education and multivariate analysis of migration show that the least educated are more likely to migrate; (3) data on wages for the U.S. and Puerto Rico shows that the least educated gain the most wages from emigration; (4) earnings variance is larger for the more educated; (5) regression analysis shows that returns to education are higher for the least educated in the U.S than in Puerto Rico but lower for the better educated; (6) simulation of wages for would-be migrants show that the better educated would lose while the least educated would gain wages by migrating; and (7) the extremely poor outcomes of returnees in Puerto Rico are difficult to explain unless one argues that out-migration is negatively selected. From these patterns it can be concluded that out-migrants are negatively selected in terms of skills and that there is not “brain drain” in Puerto Rico.

The patterns just described hold consistently for men but not for women. The tendency for the least educated to migrate is stronger among women, and female would-be migrants in general face greater earnings losses than men. However, their earnings profile is not consistent in showing greater potential economic gains for the least educated. Something prevents low-educated women from transforming their migration decisions into economic gains. Maybe many of the low-educated women are accompanying their husbands, becoming tied migrants and tied stayers.

It would be instructive to compare these findings with findings for other immigrant populations. A paper by Chiquiar and Hanson (2002) conducted an analysis of selectivity of Mexican immigrants. Mexican migrants show better educational attainment than nonmigrants. Using uncorrected wage equations and Kernel densities as their counterfactual they found that wage gains are quite large for all groups but are the largest for the least educated. To reconcile wage differences that decline with education with migration rates that increase with education the authors argue that migration costs must decline with education. Chiquiar and Hanson conclude that male Mexican migration is intermediately selected and female migration is positively selected. The results for Puerto Ricans are in this sense more consistent than those for Mexico, since the least educated are more likely to leave and the least educated also have the higher gain from migration. Migration costs that decline with education are difficult to argue in Puerto Rico, because of the open borders, the constant flow of in-migrants and back-and-forth- travelers between Puerto Rico and the United States. The only aspect which could reduce migration cost for the better educated is labor contracting. US companies do search in Puerto Rican universities. A job offer taken in this way, largely reduces the migration cost of the better educated. But still this labor hiring is minuscule and cannot possibly make a big difference in migration costs in the aggregate.

In spite of the negative selection that permeates all the data examined, it cannot be lost from perspective that the analysis also shows that Puerto Rican migration continues to be a flow of labor looking to take advantage of better economic opportunities in the United States. Out-migration is the rational choice for the least educated as their employment opportunities in the Island dwindle. Low-skilled manufacturing has

virtually disappeared. Employment in the utilities sector is controlled by strong unions. Widespread use of government aid increases reservation wage and place Caribbean immigrants in a better position to take low-paying jobs. Finally, there is fierce competition from an ever growing supply of the college-educated workers.

