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ABSTRACT

On the Implications of Immigration Policy Restricting Citizenship: Evidence from the Dominican Republic¹

In 2010, an amendment to the Dominican constitution weakened the concept of jus soli citizenship by denying Dominican nationality to individuals born on Dominican soil to irregular immigrants. A few years later, in 2013, the Dominican High Court denationalized large numbers of individuals by reinterpreting language in the prior constitution to, in effect, apply the newer citizenship requirements retroactively to 1929. We gauge the impacts of changes to Dominican citizenship laws on Haitian immigrants and their descendants, to whom, many believe, these policies were directed. We find that the constitutional amendment affected informal employment of some Haitians and their descendants. Furthermore, the High Court's ruling resulted in a significant reduction in the share of Haitian-descendant youth registered in school. Non-attendance was attributed primarily to lack of appropriate documents. Given the rise of nationalist sentiments and discussions to further restrict and revoking citizenship in various regions of the world today, it is important to further explore how these policies ultimately impact targeted and vulnerable populations.

JEL Classification: F22, F63, F66, F68, J61, K37

Keywords: immigration policy, birthright citizenship, Dominican Republic,

Haiti

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1. Introduction

While an ever expanding literature addresses the impact of stricter immigration laws on the well-being of migrants from developing nations who have settled in industrialized countries (south-north migrants), much less is known about the impact that alike policy changes have on the well-being of immigrants from developing nations who settle in other developing nations (south-south migrants). Given that the magnitude of south-south migration approaches that of south-north migration (International Organization for Migration, 2014), a further understanding of the implications of immigration policy changes on south-south migrants is warranted. In this study, we embark on that task by ascertaining how recent changes in the Dominican Republic's nationality laws have impacted an important segment of the Dominican resident population – namely, Haitian immigrants and their descendants.

In particular, we analyze two changes to Dominican nationality laws: (1) the 2010 constitutional change restricting the ability to claim Dominican citizenship under *jus soli* provisions for children born to irregular migrants in the Dominican Republic after 2010, and (2) the re-interpretation of the citizenship statute by the Dominican courts that resulted in the retroactive denationalization of individuals born in the Dominican Republic, prior to 2010, to parents with irregular immigration status. Families who had previously enjoyed legal or mixed status were stripped of that standing. How did immigrants and their descendants respond to these policy changes? Have they endured measurable hardships? This study traces the effects of the changes in Dominican nationality law and the High Court's interpretation of the law on residents of the Dominican Republic who are of Haitian descent.

A rather prolific literature centered on U.S. immigration policy has explored how residential choices, mobility patterns and the socio-economic well-being of various immigrant

categories, in particular those who are unauthorized, have responded to tougher immigration enforcement policies. For example, Amuedo-Dorantes and Bansak (2012, 2015), as well as Bohn, Lofstrom and Raphael (2014), find that the likely unauthorized U.S. population was pushed out of U.S. states adopting mandates requiring that employers use electronic work authorization procedures. The likely unauthorized became less likely to be at work and exhibited a higher likelihood of relocating from industries more directly impacted by the electronic verification mandate to industries less likely to be impacted (Amuedo-Dorantes and Bansak, 2012). But much less research exists concerning the consequences of restrictive immigration policies on south-south migrants. This is likely due to the dearth of data on south-south migration (Bryant and Rukumnuaykit, 2013).² Furthermore, the limited evidence that does exist suggests that the models and predictions from south-north migration might not always be applicable to south-south migration (Gagnon and Khoudour Castéras, 2012).

In the case of the Dominican Republic, understanding the consequences of a more restrictive immigration policy curtailing birthright citizenship is important owing to: (1) the proportion of the Dominican population affected by the change in nationality laws,³ as well as (2) this population's contribution to this developing economy.⁴ Additionally, this is an issue of current policy interest worldwide. According to the Migration Policy Institute, one of the top issues in immigration policy in the past years has been the proliferation of countries that have attempted to restrict who is eligible to become a citizen, along with policies that make it easier for nations to

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² While there is a literature surrounding south-south forced migrations, the more chaotic nature of those flows and the common placement of those migrants in special refugee camps differs from the case studied here--long-standing economic migration of Haitians to the Dominican Republic with integration (to some degree) in the host country.

³ According to the *Encuesta Nacional de Inmigrantes* (2012), 5.4 percent of the population residing in the Dominican Republic in 2012 was born abroad with the vast majority (87%) having been born in Haiti. However, another 2.5 percent of the Dominican-born population was born to an immigrant parent. In essence, these individuals are also potentially subject to the change in nationality law.

⁴ Using the *Encuesta Nacional de Inmigrantes* (2012), Lizardo and Gratereaux (2013) have estimated that the "foreignorigin" labor force was responsible for 7.5% of Dominican value added in 2012.

revoke citizenship (Banulescu-Bogdan 2015). The Dominican Republic is one of these countries, following its decision to change the constitution and, subsequently, strip citizenship from Dominican-born individuals not meeting new qualifications. Given the complicated economic/political/social histories of the Dominican Republic and its neighbor Haiti, the vast majority of individuals who are subject to these new requirements are of Haitian descent. Awareness of the consequences of these proliferating citizenship policies should be a priority, particularly since they potentially hinder the human capital accumulation of large shares of youth in still emerging economies.

2. Background

From 1929 until 2009, the Dominican Republic constitution, under a *jus soli* regime, granted citizenship to all persons born within Dominican territory with the exception of children of diplomats and migrants in transit. Yet, large numbers of children of Haitian descendant were routinely denied birth certificates and citizen benefits. In 2005, grievances were brought forth to the Inter-American Court of Human Rights (IACHR) by parents of Dominican-born children who were denied nationality. The IACHR ruled in favor of the parents in what became known as the *Yean & Bosico* decision, finding that the law granted those born in the Dominican territory Dominican nationality. It further stipulated that the Dominican Republic adopt a simple, accessible, and reasonable procedure for the children to acquire Dominican nationality (Hannam, 2014).

In response to the IACHR ruling, the Dominican Republic amended its constitution in 2010, in effect, including foreigners residing illegally in the Dominican territory among the so-called *migrants in transit*. Soon after, Ms. Pierre, seeking a Dominican identification card, filed suit under the Constitutional Tribunal of the Dominican Republic. In a 2013 ruling, the High Court

interpreted her parents to be "foreigners in transit" by way of being illegal workers, despite being born in 1984 before the adaption of the new constitution. This re-interpretation of the prior constitution, in effect, retroactively imposed the 2010 definition of "foreigners in transit" to all persons born in the Dominican Republic to undocumented immigrants from 1929 onward. The High Court further instructed that the electoral office begin reviewing, classifying, and processing the Dominican population in accordance to its ruling (Hannam 2014). The High Court's pronouncement effectively deprived multi-generations of Dominican-born individuals from Dominican nationality and many effectively became stateless. This was particularly true for individuals of Haitian descent, for whom it was impossible to produce Dominican birth records for their forefathers going back to 1929. In effect, the 2010 constitution revoked birthright citizenship for individuals born to illegal immigrants as of 2010, whereas the court ruling of 2013 amounted to a large scaled de-nationalization of many individuals of Haitian descent who had been born under the prior constitution.

On account of the de-nationalization of many Haitian descendants and the subsequent outcry that followed the High Court ruling, the Dominican Republic passed Law 164-14 in May 2014,⁶ which recognized individuals who had previously been granted nationality and, subsequently, deprived of it by the *Pierre* decision, as indeed being Dominican citizens. It further ruled that individuals without Dominican birth registration could apply for permission to reside and work in the Dominican Republic. Furthermore, it decreed that, after two years, such persons could apply for citizenship if they could procure the right documentation (Law 164-14). The

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⁵ Haitian law allows dual citizenship for a child born abroad to Haitian parents. At age 18, however, the individual must opt out of their other citizenship in order to keep Haitian citizenship. If renounced or lost, Haitian citizenship cannot be reclaimed. For these reasons, Haitian descendants, born in the Dominican Republic, who had not renounced their Dominican nationality when they turned 18, effectively became stateless once the Dominican Republic stripped them of Dominican nationality. Many hailed from families with Dominican citizenship for decades.

⁶ We conduct robustness checks that exclude the last period of our sample to address the enactment of this law. Results, available from the authors, remain robust to the use of the alternative sample.

sticking point, however, was that the documentation requirement proved to be an obstructive barrier to many due to historical and continuing difficulties in obtaining the necessary documents (Hannam 2014). In response to this, President Medina passed the 250-14 decree on July 23, 2014, which established several formal and less restrictive avenues for providing proper documentation (Decree 250-14). Nonetheless, refugee-style camps continued to grow along the Haitian side of the border as people fled. The International Organization for Migration has been monitoring the impact of the migration flows from the Dominican Republic to such camps using drones to capture aerial images (IOM, 2015).

The purpose of this study is to understand the impact of two of these legal maneuvers on individuals of Haitian descent, thought to be the target of these policies. What impact has the elimination of birthright citizenship had on fertility, work and schooling choices of individuals of Haitian descent? Did the 2010 constitutional amendment disadvantage this group? How about the High Court's ruling of 2013 that denationalized a significant number of the Dominican resident population? As will become apparent, answers to these questions are difficult to obtain due to lack of information on the birth circumstances and citizenship status of the resident population in most Dominican national level household surveys. We address this challenge in order to explore the ongoing impacts of these policies.

3. Brief Literature Review

A small literature exists detailing the outcomes for individuals/households whose nationality status is changed on account of broad government policy initiatives. However, the literature has primarily focused on policy changes *liberalizing* citizenship status in a *developed nation*. Specifically, the literature has exploited the new naturalization law enacted in Germany in 1999, which changed the determination of citizenship from *jus sanguinis* to *jus soli* for some

children born in Germany in 2000 and after (Felfe and Saurer, 2014). This literature has concentrate on the effects of granting birthright citizenship on fertility and the educational outcomes for children. Avitabile *et al.* (2014) find that the parents of children born under the newer *jus soli* regime display lower levels of fertility. Instead of bearing more children (along the lines of the "anchor baby" argument), families appeared to reduce their target family size. Avitabile *et al.* (2014) argue that their results point to the idea that parents responded to the change in citizenship laws by choosing quality over quantity -- investing more in their children. Using a difference-in-difference approach to analyze the effect of the change in the nationality law, they observe not only reductions in fertility, but also reductions in obesity in children born after the citizenship law took effect and other behaviors consistent with increased human capital investments in children.

Felfe and Saurer (2014), also resorting to a difference-in-difference analysis, compare children born in the pre-2000 and post-2000 periods to native Germans and to immigrants. They find a whole host of improvements for children born to immigrants and into birthright citizenship in post-2000 Germany, including increased pre-school and upper secondary school attendance, improved socio-emotional stability and better conduct.

In addition, Sajons (2016) finds that the parents of children born to immigrant parents after the change in the citizenship law were more likely to integrate and less likely to return to their home countries. Supporting this finding and using the German Socio-Economic Panel (GSOEP) longitudinal dataset, Avitabile *et al.* (2013) point to specific impacts of the increased integration of parents whose children receive birthright citizenship, including increased social interactions with Germans, greater use of the German language and a higher likelihood of reading German

over home country newspapers. Such a finding is of interest since greater parental integration is important for facilitating investments in children's acquisition of human capital.

In addition to introducing some form of *jus soli* citizenship, the German 1999 naturalization law eased significantly the requirements to acquire German citizenship for those not born in Germany and not of German lineage. Steinhardt (2012) examines the impact of these post-1999 naturalizations on labor market outcomes. He finds that the acquisition of citizenship leads to wage premiums for men, but not for women. In other words, the absence of citizenship particularly disadvantaged men.

In sum, focusing on Germany, the literature has documented a number of changes in immigrant fertility, educational investment in children, assimilation and return migration as citizenship laws were modified to adopt a *jus soli* concept of citizenship. Furthermore, the easing of citizenship acquisition in Germany also seemed to influence labor market outcomes for some immigrants. Can we expect comparable (but reversed) outcomes in a developing economy, such as the Dominican Republic, on account of its increased restrictions on citizenship? Are the effects asymmetrical or diametrically opposite? In what follows, we look into the effect of restricting birthright citizenship and of denationalizing a whole class of citizens on a number of demographic and economic outcomes in the Dominican Republic.

4. Methodology

The intent of this study is to see whether and, if so, how the Constitutional Amendment of 2010 restricting birthright citizenship and the Dominican High Court's ruling of September 23, 2013 (Hannam 2014) denationalizing large numbers of immigrants and their descendants have impacted the employment, family formation, and schooling decisions of Haitian immigrants and their descendants in the Dominican Republic. To achieve this aim, we use data from the Labor

Force Surveys conducted around a short window of time for both treatments: (1) Data from the 2009 through 2011 waves to assess the impact of the constitutional amendment, and (2) data from the 2012 to 2014 waves to assess the impact of the High Court's ruling.⁷

We start by comparing changes in the aforementioned outcomes for Haitian immigrants and their descendant *pre* vs. *post* implementation of the birthright act to changes experienced by Dominicans for whom the statute does not apply, as suggested by the following benchmark model:

$$(1) \begin{aligned} Y_{imt} &= \alpha_0 + \alpha_1 Haitian_i + \alpha_2 Post \ 2010_t + \alpha_3 Haitian_i * Post \ 2010_t + X_{imt} \gamma + \delta_m + \theta_t + \delta_m t + \varepsilon_{imt}, \\ \varepsilon_{imt} &\sim N(\mu, \sigma^2 I) \end{aligned}$$

where Y_{imt} refers to the outcome of interest –employment, fertility, or schooling– for the ith individual/household in municipality m in period t. The dummy variable Haitian equals 1 if the ith individual/household is Haitian –meaning the individual in question is Haitian or of Haitian descent, or the household has individuals of Haitian descent. It equals 0 for Dominicans and other immigrants. The variable post is a dummy equal to 1 for observations corresponding to the period after the enactment of the constitutional amendment. Since equation (1) is estimated for the sample period: 1/2009-2/2011, the post dummy equals 1 from 1/2010 onwards, where 1 and 2 refer to the first and second semesters and correspond to the period when the labor force survey was administered.

Subsequently, we estimate a second model to examine the impact of denationalization following the High Court's Ruling as follows:

$$(2) \begin{aligned} Y_{imt} &= \beta_0 + \beta_1 \text{Haitian }_i + \beta_2 Post \ 2013_t + \beta_3 Haitian_i * Post \ 2013_t + X_{imt} \gamma + \delta_m + \vartheta_t + \delta_m t + \varepsilon_{imt}, \\ \varepsilon_{imt} &\sim N(\mu, \sigma^2 I) \end{aligned}$$

⁷ The Labor Force Survey is conducted twice a year in April and in October.

⁸ According to the ENI (2012), 87 percent of the foreign born in the Dominican Republic were born in Haiti (p. 63). The foreign born constitute 5.4 percent of the entire population, and an additional 2.5 percent are descendants of immigrants by virtue of having a foreign-born parent.

where the difference with respect to equation (1) is that the model is estimated for the sample period 1/2012-1/2014 and, as such, the variable *post* is now a dummy equal to 1 for observations from after the High Court's ruling –namely 2/2013 onwards.

The vector X includes a variety of demographic and migration-related individual or household level characteristics potentially impacting the outcomes in consideration – age, gender, marital status, household head status, educational attainment, household monthly income in thousands of 2016 Dominican pesos and rural residency. Additionally, equations (1) and (2) include municipality (δ_m) and semester-by-year (θ_t) fixed-effects intended to capture fixed regional and macroeconomic factors affecting the outcomes of interest. Municipality fixed-effects can help capture time invariant geographic characteristics, such as a political environment less favorable to immigrants or the schooling infrastructure available in each municipality. In addition, equations (1) and (2) include municipality-specific time trends ($\delta_m t$) to address any time varying characteristics at the municipality level potentially influencing the residential choices, employment, fertility or schooling decisions of individuals in the sample.

We are particularly interested in α_3 and β_3 , which capture changes in the outcomes of interest for Haitians and individuals of Haitian descent relative to non-Haitians, 10 pre vs. post the constitutional amendment and the High Court's ruling, respectively. In the cases where we observe a significant impact of the Constitutional Amendment or the High Court's ruling, we ascertain the robustness of our findings by testing for pre-existing differential trends in the

⁹ These regressors vary slightly with the outcome being modeled (employment vs. fertility or education) and the unit of observation being used (individuals or households).

¹⁰ Given the realities of the Dominican situation, individuals born in Haiti or of Haitian descent are the target population of the Constitutional amendment. As noted earlier, for simplicity, we will refer to Haitians and their descendants as *Haitians* and the remainder of the population as *Dominicans*. Mixed with the so-called "Dominican" population are other immigrants and descendants of immigrants, which represent a small group relative to the Haitian population and were not the target of the citizenship laws.

outcomes of interest for Haitians and individuals of Haitian descent versus non-Haitians using data from the Labor Force Surveys from before the policy change.

We are stymied by poor quality information on the birthplace of respondents and their parents –key to identifying the population of Haitians and their descendants. Specifically, the labor force survey does not provide reliable information on the origin of immigrants. Therefore, in the spirit of Aristi-Escuder (2016), we use the Dominican Republic's 2012 survey of immigrants (Encuesta Nacional de Inmigrantes or ENI) to predict the likelihood of being Haitian or of Haitian descent.11 We derive out-of-sample predictions for being Haitian or of Haitian descent for individuals in the labor force surveys. We then order everyone according to their predicted probability of being Haitian or of Haitian descent from larger to smaller. Finally, we choose a cutoff that allows us to match the share of the population being Haitian or of Haitian descent in the 2012 ENI with the estimated share in the 2012 Labor Force Survey. Everyone with a predicted likelihood above the cutoff is considered of Haitian descent, and vice versa. Table A1 in the appendix details the average share of individuals predicted to be Haitian or of Haitian descent in each of the sample periods, along with the list of predictors used in the estimating equation. While the share of Haitians and Haitian descendants fluctuated around 8 percent for most of the period in our study, there seems to have been somewhat of a decline after 2/2013, coinciding with the post-High Court ruling.

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¹¹ The ENI was administered in 2012 with the intention of carefully delineating the population residing in the Dominican Republic who is native, immigrant and descendant of immigrants. The survey also delineated the national origin of immigrants by gathering information on their parents' national origin; thus, providing the most reliable portrait (to date) of the population of the Dominican Republic in 2012.

5. Data and Some Descriptive Statistics

Our inquiry into the impacts of the two policy initiatives: 1) the curtailment of birthright citizenship, and 2) the denationalization that took place because of the High Court's ruling, begins with a simple comparison of a number of variables pre and post these two policy changes. We explore if employment rates can be tied to the policy change, whether participation in the informal labor market changes with the policy, whether fertility rates change, and how children's and youths' schooling are impacted. We focus on the effects of each policy by splitting the dataset into 2 periods: 1) from the 1st semester of 2009 through the 2nd semester of 2011 –a short-time window around treatment that contains the adoption of the constitutional amendment weakening the right to birthright citizenship, and 2) from the 1st semester of 2012 through the 2nd semester of 2014 –a period containing the High Court's ruling that resulted in the denationalizations of large swaths of the Dominican Republic resident population. On average, we have data on approximately 163,000 individuals over the time window used to examine the impact of the constitutional amendment, and about 154,000 individuals over the period used to assess the impact of the High Court's ruling.

Figures 1 through 10 depict changes in the average values of the outcomes of interest – namely: employment, informal work, households with a newborn, school attendance and reported barriers to schooling as the main reason for not attending school– for Dominicans and Haitians before and after the two policy changes. Of interest are the relatively small changes in the values of the outcomes being displayed for the Dominican population *post* vs. *pre* the policy change, which stand in contrast to more marked changes among the Haitian population with some outcomes. While we do not observe large changes in the share employed or holding an informal job, the share of Haitian households with a newborn seems to have increased, relative to the share

of Dominican households in similar circumstances, following the constitutional amendment, whereas it declined after the High Court's ruling. Most remarkable is the reduction in school attendance among Haitian youth after each policy, relative to the unchanged share of Dominican youth. Furthermore, according to Figures 9 and 10, the share of Haitian youth claiming documentation barriers as the main motive for not being able to attend school rose, relative to the share of Dominican youth indicating the same, especially after the High Court's ruling.

To better assess whether the changes suggested in Figures 1 through 10 are statistically significant, Table 1 displays simple difference-in-difference estimates of the impact that the constitutional amendment (in Panel A) and the High Court's ruling (in Panel B) have had on employment, informal work, likelihood of having a newborn in the household, schooling attendance and documentation barriers as reasons for not attending school put forth by Haitians and their descendants (relative to everyone else). According to the estimates in Table 1, Panel A, the constitutional amendment does not appear to have had a statistically significant impact on any of the aforementioned outcomes among Haitians relative to the rest of the population. However, the estimates in Table 1, Panel B, suggest otherwise with regards to the impact of the High Court's ruling on the likelihood of attending school and reporting documentation barriers as the main motive for not doing so among children and youth of Haitian descent. Specifically, Haitian youth became 3.8 percentage points (roughly 5.2 percent) less likely to be registered in school following the broad denationalization policy. Additionally, Haitian children/youth not attending school were 10.3 percentage points (about 40 percent) more likely to report documentation barriers as the main motive for not being registered in school after the High Court's ruling. Both estimates are statistically significant and different from zero at the 5 percent level.

Yet, is it possible that the impacts found in Table 1 are driven by the different traits of the Haitian and the rest of the Dominican Republic's population prior to the changes in citizenship rules. To assess whether that was the case, Table 2 displays the basic traits we have data on for these two demographic groups. Some differences call attention to the need to control for such characteristics when modeling the impact of the two policy changes we are interested in understanding. Specifically, Haitians are younger and less likely to be female or married than their Dominicans counterparts. They are also more likely to be unschooled and to have a significantly lower educational attainment. Additionally, Haitians are also almost twice as likely to be residing in rural areas and household income is about half of Dominican's household income. In what follows, we will take into account such differences when appropriate, along with unobserved fixed and time-varying characteristics of the municipalities in which they live, in assessing the impact of the weakening of *jus soli* concept of nationality in 2010 and the 2013 denationalization of a large number of Haitians by the High Court's ruling.

6. Findings

Tables 3 through 7 display the results from estimating equation (1) and equation (2) via OLS in order to assess the effect that the constitutional amendment and the High Court's ruling had on employment, informal work, likelihood of having a newborn and school attendance/schooling barriers for individuals of Haitian descent. The estimates on the left side of the tables refer to the impact of the constitutional amendment, whereas those in the columns on the right inform about the estimated impact of the denationalization policy. For the sake of brevity, we will focus our attention on the key regressors of interest –namely: the Haitian dummy and its interaction with the post-policy indicator.

A) Employment Effects: In order to assess the impact of the two policy/legal changes on employment, we analyze the results in Tables 3 and 4, which display the estimates for the likelihood of being at work and working in the informal sector for individuals between 18 and 64 years of age. Difference-in-difference estimates are obtained using three model specifications that progressively add a number of demographic controls and municipality-specific time trends. Because of the distinct labor market participation and employment patterns of men and women, we analyze men and women separately.

Focusing on the key regressors, we find that Haitian men are clearly more likely to be employed and, not surprisingly, more likely to work in the informal sector than their Dominican counterparts. In contrast, Haitian women are less likely to be employed than Dominican women, but more likely to hold a job in the informal sector if they are working. Yet, we do not find a striking impact of either the constitutional amendment or the High Court's ruling on the employment and informal work propensity of working-age Haitian men and women. There is some weak evidence of an increase in the likelihood of holding an informal sector job by Haitian men after the amendment to the constitution. Specifically, according to the most complete model specification in Table 4, Haitian men became about 4 percentage points (5 percent) more likely to hold an informal job after the revocation of birthright citizenship. However, the High Court's ruling does not appear to have had a significant impact on the employment patterns of the Haitian population. Why did the elimination of birthright citizenship impact adults, for whom this did not apply given they were born earlier? Perhaps the policy had a chilling effect, causing some to seek cover in the informal economy in anticipation of further anti-immigrant policies or the buildup of a stronger anti-Haitian sentiment among some of the Dominican population. And why is there no detected response to the denationalization policy which affected all individuals, including older workers? Perhaps, those who were most likely to be impacted by the latter policy change had already moved into the informal economy If so, detecting large changes in labor force patterns would not be expected.

- B) Fertility: Did the policy changes affect fertility? Specifically, are Haitian households more or less likely to report having a newborn following the two policy changes? As noted earlier, in the case of Germany, the implementation of birthright citizenship lowered childbearing on the part of immigrants, suggesting a quality/quantity trade-off. However, the elimination of birthright citizenship does not appear to have significantly increased or decreased births in the Haitian immigrant/descendent population in the Dominican Republic, as can be seen in Table 5. A number of factors might be responsible for this finding. To start, unlike Germany, the Dominican Republic is a developing country where access to health services and family planning by the Haitian population might be limited, at best. In addition, social and public services available to newborn children, whether medical or educational, are likely to be quite different, making less of a dent on the fertility choices made by those for whom such services were never in place. ¹²
- C) Schooling: Perhaps of greater interest to us given the preliminary difference-in-difference estimates in Table 1, Panel B, are the effects that the revoking of birthright citizenship and the broad denationalization that followed the High Court's ruling had on the schooling and access to schooling of Haitian children and youth. To that end, we estimate equations (1) and (2) following similar model specifications to the ones in prior tables with these results presented in Tables 6 and 7. Focusing on the most complete model specifications, it is evident that the High Court's ruling, in particular, had a deleterious impact on the school attendance of Haitian children and youth.

¹² To account for the lag between conception and birth, we also re-estimated these relationships with an alternative post-treatment period beginning 9 months after the passage of the amendment. Results prove robust to that change.

According to the estimates in Table 6, they were not only significantly less likely than their Dominican counterparts to be registered in school (anywhere between 7 and 9 percentage points less likely), but the High Court's ruling, in particular, curtailed their propensity to attend school by 2.6 percentage points or 4 percent. When we further look at the role that lack of documents might have played on that outcome (Table 7), we find that, indeed, the High Court's ruling resulted in an 11-percentage point increase in the likelihood of reporting documentation barriers as the main motive for not attending school. That is an astonishingly large impact of approximately 50 percent, which could have long-term consequences in the human capital accumulation process crucial to any developing economy, as in the case of the Dominican Republic. This result is consistent with observed changes to schooling outcomes in Germany. The introduction of birthright citizenship netted improvements in schooling outcomes for the children of immigrants born in Germany, consistent with decreases in schooling for children potentially experiencing removal of nationality in the Dominican Republic.

7. Identification Check

Thus far, there seems to be evidence that the Constitutional Amendment might have raised the likelihood of being employed in the informal sector among men of Haitian descent, whereas the Court's ruling significantly curtailed the school attendance of Haitian children and youth of Haitian descent. Key to the validity of these inferences is the assumption of parallel trends in both the employment of men of Haitian and Dominican descent prior to the Constitutional Amendment and in the schooling patterns of Haitian and Dominican children and youth prior to the Court's ruling.

To assess whether that was the case, we re-estimate our models focusing on the pre-Constitutional Amendment period of 01/2009-02/2009 and on the pre-Court's ruling period of 01/2012-01/2013, respectively. In both cases, we include a time trend, which we interact with the eligibility dummy indicative of whether the men, as well as the children and youth are Haitian or of Haitian descent. If the observed impacts were, in fact, in existence prior to the Constitutional Amendment and prior to the Court's ruling, respectively, the coefficients on such interaction terms should be statistically different from zero.

The results from these identification checks are shown in Table 8. The first column of results refers to the propensity of men to be employed in the informal sector prior to the Constitutional Amendment. Although the trend only refers to two periods, one can see that there was no pre-existing differential trend in the likelihood of holding a job in the informal sector between Dominicans and their counterparts of Haitian descent. Therefore, the Constitutional Amendment impact in Table 4 does not appear to be driven by pre-existing differences between the two groups.

The next two columns of results repeat the same exercise focusing on children and youth ages 6 through 22. According to the estimates in the last two columns of results in Table 8, there appears to be no evidence of a pre-existing differential schooling trend between children and youth of Dominican and Haitian descent. Similarly, there is no evidence of a pre-existing differential trend in the likelihood of facing schooling barriers between Dominican children and youth and their counterparts of Haitian descent. As such, the schooling impacts in Tables 6 and 7 seem to have only occurred following the de-nationalization policy.

8. Summary and Conclusions

We report on the effects of changes in Dominican citizenship laws on Haitian immigrants and their descendants. In 2010, the Dominican constitution weakened the concept of jus soli citizenship by denying citizenship to individuals born to irregular immigrants. Prior to that,

birthright citizenship, though not always conferred, was not explicitly denied for the children of irregular immigrants. A few years later, in 2013, the Dominican High Court interpreted the law to apply retroactively (to 1929) thereby stripping citizenship from large numbers of Haitian descendants born to irregular immigrants. In this paper, we examine some of the outcomes of those policy/legal initiatives on the Dominican Republic's resident population of Haitian descent.

We find evidence that the constitutional amendment revoking birthright citizenship raised the propensity to hold an informal sector job among men. Furthermore, the 2013 interpretation of the constitution by the High Court, which effectively denationalized a large share of the Haitian descendant population, significantly reduced school attendance among Haitian child and youth, who suddenly reported a 50 percent increase in the likelihood of encountering documentation barriers as the main reason for not attending school.

It is important to note that we have not addressed a third legal change that took place in the Dominican Republic concerning the issue of nationality. Specifically, decrees by President Medina in 2014 provided some de-nationalized immigrants the ability to reclaim the Dominican citizenship revoked by the High Court's ruling. However, the process to do so is somewhat onerous, especially for individuals with low levels of education and few economic resources as it requires traveling to their and their parent's birth locations and applying for the needed documents. At any rate, future research on the effectiveness of Presidential decrees in reversing the impacts of the High Court's ruling using more timely data would be desirable.

While the Dominican case is of interest given the serious long-term costs of restricting human capital investments in children and youth in what is still a developing nation, the proliferation of policies restricting citizenship worldwide further emphasizes the importance of understanding the consequences of said policies (Banulescu-Bogdan 2015). Are policies

restricting citizenship simple expressions of frustration and fear with little or no costs? Or do they have impacts that seriously compromise the well-being of marginalized populations? Are the impacts of these policies potentially different in developed and developing countries? This paper is a first attempt to systematically address these questions. In an increasingly international world, gaining a better understanding of how these proliferating nationalist policies are impacting immigrant populations and their descendants, even more so in potentially more vulnerable developing economies, is well warranted.

References

Amuedo-Dorantes, Catalina and Cynthia Bansak. 2014. "Employment Verification Mandates and the Labor Market Outcomes of Likely Unauthorized and Native Workers" *Contemporary Economic Policy*, 32(3): 671-80.

Amuedo-Dorantes, Catalina and Cynthia Bansak. 2012. "The Labor Market Impact of Mandated Employment Verification Systems" *American Economic Review*, 102(3): 543-48.

Aristy-Escuder, Jaime. Not Dated. "La Fuerza de Trabajo Haitiana: Características, Penetración y Remuneración."

Avitabile, Ciro, Irma Clots-Figueras and Paolo Masella. 2013. "The Effect of Birthright Citizenship on Parental Integration Outcomes," *Journal of Law and Economics*, Vol 56: 777-810.

Avitabile, Ciro, Irma Clots-Figueras and Paolo Masella. 2014. "Citizenship, Fertility and Parental Investments," American *Economic Journal: Applied Economics*, 6(4): 35-65.

Banulescu-Bogdan, Natalia. 2015. "Top 10 of 2015: Issue #5: Governments Increasingly Restrict Citizenship", *Migration Information Sources*, Migration Policy Institute, Washington DC.

Bohn, Sarah, Magnus Lofstrom and Steven Raphael. 2014. "Did the 2007 Legal Arizona Workers Act reduce the state's unauthorized immigrant population?" *Review of Economics and Statistics*, 96(2): 258–269.

Bryant, John and Pungpond Rukumnuaykit. 2013. "The Labour Market Impacts of Immigration to Developing Countries: Evidence from a registration campaign in Thailand," *The Journal of Development Studies*, 49(6): 785-800.

Decree 250-14. Presidente Medina. Dominican Republic. July 23rd 2014

Flefe, Christina and Judith Saurer. 2014. "Granting Birthright Citizenship—A Door Opener for Immigrant Children's Educational Participation and Success?" CESifo Working Paper NO. 4959.

Gagnon, Jason and David Khoudour Castéras. 2012. "South migration in West Africa: Addressing the challenge of immigrant integration, OECD Development Centre Working Paper No. 312, Available at http://www.oecd.org/dev/

Hannam, Monique. 2014. "The Status of Haitian Descendants Born in the Dominican Republic and Measures to Protect Their Right to a Nationality." *Vanderbilt Journal of Transnational Law*, 47: 1123-1166.

International Organization for Migration. 2014. "South-South Migration: Partnering Strategically for Development," https://www.iom.int/files/live/sites/iom/files/What-We-Do/idm/workshops/South-South-Migration-2014/Background-paper-en.pdf.

International Organization for Migration. 2015. "IOM Monitors Migrant Flows on Haiti - Dominican Republic Border" *International Organization for Migration | Haiti*. 8/11/2015. Web. May 2016, http://www.iom.int/news/iom-monitors-migrant-flows-haiti-dominican-republic-border.

Law 169-14 "Ley de Régimen Especial y Naturalización". Dominican Republic. May 2014.

Lizardo, Jeffrey and Carlos Gratereaux Hernandez. 2013. "El Aporte de los Trabajadores Inmigrantes a la Actividad Económica en la República Dominicana: Una Primera Aproximación," Fondo de Población de las Naciones Unidas (UNFPA).

Sajons, Christoph. 2016. "Does Granting Citizenship to Immigrant Children Affect Family Outmigration?" *Journal of Population Economics* 29.2 (2016): 395-420.

Steinhardt, Max Friedrich. 2012. "Does Citizenship Matter? The Economic Impact of Naturalizations in Germany," *Labour Economics*, 19: 813-23.

Table 1
Difference-in-Difference Estimates

		Treated			Control		DD
	Post	Pre	DT	Post	Pre	DC	(DT-DC)
Panel A: Impact of the Constituti	on on 01/2010 (S	ample Period: 01	1/2009-02/2011)				
Employed ^(a)	0.616	0.599	0.018	0.608	0.592	0.016	0.002
	(0.486)	(0.490)	(0.013)	(0.488)	(0.491)	(0.003)	(0.013)
N	3,397	2,456	5,853	44,442	29,861	74,303	80,156
Works in the Informal Sector ^(b)	0.744	0.728	0.016	0.583	0.589	-0.006	0.022
	(0.436)	(0.445)	(0.015)	(0.493)	(0.492)	(0.005)	(0.016)
N	2,093	1,470	3,563	27,022	17,686	44,708	48,271
HH has a Newborn ^(c)	0.100	0.096	2.22e-04	0.063	0.060	0.003	-0.003
	(0.296)	(0.295)	(0.008)	(0.242)	(0.237)	(0.002)	(0.009)
N	3,392	1,731	5,123	28,709	14,442	43,151	48,274
Attends School ^(d)	0.713	0.718	-0.005	0.826	0.832	-0.007*	0.002
	(0.452)	(0.450)	(0.019)	(0.380)	(0.374)	(0.004)	(0.018)
N	3,475	1,835	5,310	38,378	20,162	58,540	63,850
Faces Barriers to School ^(e)	0.297	0.323	-0.026	0.249	0.240	0.009	-0.035
	(0.457)	(0.468)	(0.033)	(0.433)	(0.427)	(0.017)	(0.029)
N	968	501	1,469	6,817	3,459	10,276	11,745

Notes: Figures in parentheses in the 'Post' and 'Pre' columns are standard deviations of the corresponding mean shares. The remaining figures in the difference, difference-in-difference and triple differences columns are regression estimates. (a) Individuals ages 18 through 64; (b) Employed individuals ages 18 through 64; (c) Households; (d) Youth ages 6 through 22; (e) Youth ages 6 through 22 not registered at school/college. Robust standard errors are in parentheses. All regressions include a constant term. Significance levels for the dummy variables follow a one-tail test. **** p<0.01, *** p<0.05, * p<0.1.

Table 1
Difference-in-Differences – Continued

		Treated			Control		DD	
	Post	Pre	DT	Post	Pre	DC	(DT-DC)	
Panel B: Impact of the Court's R	uling on 02/2013	(Sample Period:	01/2012-02/2014)				
Employed ^(a)	0.630	0.614	0.016	0.627	0.610	0.017	-1.14e04	
	(0.483)	(0.487)	(0.011)	(0.484)	(0.488)	(0.003)	(0.011)	
N	2,808	3,928	6,736	43,305	42,710	86,015	92,751	
Works in the Informal Sector ^(b)	0.735	0.726	0.010	0.584	0.588	-0.004	0.014	
	(0.441)	(0.446)	(0.010)	(0.493)	(0.492)	(0.004)	(0.012)	
N	1,769	2,410	4,179	27,140	26,060	53,200	57,379	
HH has a Newborn ^(c)	0.082	0.088	-0.063	0.060	0.063	-0.003	-0.004	
	(0.274)	(0.283)	(0.009)	(0.237)	(0.242)	(0.003)	(0.011)	
N	2,168	2,774	4,942	21,496	21,086	42,582	47,524	
Attends School ^(d)	0.686	0.724	-0.037**	0.826	0.824	0.001	-0.038**	
	(0.464)	(0.447)	(0.019)	(0.379)	(0.381)	(0.003)	(0.019)	
N	1,842	2,778	4,620	26,156	26,458	52,614	57,234	
Faces Barriers to School ^(e)	0.353	0.258	0.091**	0.251	0.259	-0.010	0.103**	
	(0.478)	(0.438)	(0.040)	(0.434)	(0.438)	(0.009)	(0.048)	
N	530	755	1,285	4,581	4,736	9,317	10,602	

Notes: Figures in parentheses in the 'Post' and 'Pre' columns are standard deviations of the corresponding mean shares. The remaining figures in the difference, difference-in-difference and triple differences columns are regression estimates. (a) Individuals ages 18 through 64; (b) Employed individuals ages 18 through 64; (c) Households; (d) Youth ages 6 through 22; (e) Youth ages 6 through 22 not registered at school/college. Robust standard errors are in parentheses. All regressions include a constant term. Significance levels for the dummy variables follow a one-tail test. *** p<0.01, ** p<0.05, * p<0.1.

Table 2
Overall Sample Characteristics *Prior* to the Constitution and Court's Ruling

By Time Period	Pr	e-Constitu 01/2009-	ition Perio -02/2009	d:	Pre-		t's Ruling Period: 2012-01/2013		
By Descent	Domi	nican	Hai	tian	Domi	nican	Haitian		
Statistic	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	
Haitian	0.000	0.000	1.000	0.000	0.000	0.000	1.000	0.000	
Age	31.255	20.069	28.532	19.411	32.491	20.525	30.054	19.633	
Gender (Female)	0.508	0.500	0.455	0.498	0.506	0.500	0.456	0.498	
Married	0.377	0.485	0.345	0.475	0.371	0.483	0.353	0.478	
Household Head	0.284	0.451	0.339	0.473	0.296	0.456	0.347	0.476	
Child of Household Head	0.398	0.490	0.394	0.489	0.388	0.487	0.382	0.486	
No Schooling	0.115	0.319	0.197	0.398	0.102	0.302	0.164	0.370	
Primary Education	0.505	0.500	0.547	0.498	0.485	0.500	0.524	0.499	
Secondary Education	0.247	0.431	0.246	0.431	0.268	0.443	0.291	0.454	
Tertiary Education	0.132	0.339	0.010	0.098	0.144	0.352	0.020	0.142	
Real Monthly HH Income ^a	2401	2996	1116	1037	2271	2716	1189	1140	
Rural	0.281	0.449	0.464	0.499	0.257	0.437	0.460	0.498	
Observations	51,	167	4,2	35	71,	142	(5,526	

Sample: All individuals in the 01/2009 through 02/2014 Labor Force Surveys. ^(a) Monthly household income in thousands of 2016 Dominican pesos.

Table 3

The Impact of the New Constitution and Court Rulings on the Likelihood of Being at Work

Gender			M	len					Wo	omen		
Time Period	Pre	Post Constit	itution Pre-Post Court Ruling		Ruling	Pre-Post Constitution			Pre-Post Court Ruling			
Specification	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
Haitian*Post-policy	0.014 (0.014)	0.012 (0.013)	0.013 (0.013)	0.002 (0.016)	0.006 (0.015)	0.001 (0.015)	-0.008 (0.021)	-0.006 (0.020)	-0.006 (0.019)	-0.010 (0.016)	-0.006 (0.017)	-0.011 (0.017)
Haitian	0.041*** (0.015)	0.037** (0.014)	0.037** (0.016)	0.041*** (0.013)	0.036*** (0.011)	0.038*** (0.011)	-0.092*** (0.020)	-0.039** (0.018)	-0.038** (0.018)	-0.105*** (0.019)	-0.045*** (0.015)	-0.042** (0.016)
Age		0.000 (0.000)	0.000 (0.000)		0.000 (0.000)	-0.000 (0.000)		0.002*** (0.000)	0.002*** (0.000)		0.003*** (0.000)	0.003*** (0.000)
Married		0.155*** (0.008)	0.155*** (0.008)		0.122*** (0.005)	0.121*** (0.005)		0.050*** (0.007)	0.049*** (0.007)		0.024*** (0.008)	0.024*** (0.008)
Household Head		0.137*** (0.009)	0.137*** (0.009)		0.157*** (0.008)	0.158*** (0.008)		0.180*** (0.009)	0.179*** (0.008)		0.187*** (0.008)	0.187*** (0.008)
Secondary		-0.024** (0.009)	-0.024*** (0.009)		-0.021*** (0.007)	-0.021*** (0.007)		0.081*** (0.008)	0.080*** (0.008)		0.094*** (0.007)	0.093*** (0.007)
Tertiary		-0.009 (0.010)	-0.010 (0.010)		-0.000 (0.011)	-0.001 (0.011)		0.265*** (0.010)	0.267*** (0.010)		0.282*** (0.022)	0.282*** (0.021)
Rural		0.028*** (0.006)	0.028*** (0.006)		0.023*** (0.007)	0.024*** (0.007)		-0.040*** (0.007)	-0.039*** (0.008)		-0.042*** (0.006)	-0.043*** (0.006)
Semester-by-Year FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Municipality FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Municipality-time Trends	N	N	Y	N	N	Y	N	N	Y	N	N	Y
Observations	39,975	39,975	39,975	46,282	46,282	46,282	40,181	40,181	40,181	46,469	46,469	46,469
R-squared	0.019	0.126	0.134	0.018	0.117	0.121	0.024	0.084	0.092	0.026	0.096	0.103

Notes: All regressions include a constant term. Robust standard errors are displayed in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Sample: Individuals ages 18 through 65 in 01/2009 through 02/2014 Labor Force Surveys.

Table 4

The Impact of the New Constitution and Court Rulings on the Likelihood of Working in the Informal Sector

Gender			M	en			Women						
Time Period	Pre	Post Constit	Post Constitution		Post Court F	Ruling	Pre	Pre-Post Constitution			Pre-Post Court Ruling		
Specification	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	
Haitian*Post-policy	0.023 (0.024)	0.035 (0.021)	0.037* (0.020)	0.008 (0.017)	0.011 (0.018)	0.015 (0.020)	0.022 (0.029)	0.031 (0.030)	0.042 (0.035)	0.023 (0.032)	0.035 (0.030)	0.032 (0.030)	
Haitian	0.118*** (0.024)	0.050*** (0.016)	0.047*** (0.016)	0.154*** (0.028)	0.090*** (0.020)	0.088*** (0.020)	0.197*** (0.027)	0.060** (0.025)	0.053** (0.027)	0.182*** (0.033)	0.047* (0.025)	0.047* (0.026)	
Age		0.002*** (0.000)	0.002*** (0.000)		0.002*** (0.000)	0.002*** (0.000)		0.001 (0.000)	0.001 (0.000)		0.001 (0.001)	0.001 (0.001)	
Married		-0.041*** (0.007)	-0.042*** (0.007)		-0.041*** (0.009)	-0.040*** (0.008)		0.022*** (0.007)	0.024*** (0.007)		0.009 (0.010)	0.007 (0.011)	
Household Head		-0.026*** (0.010)	-0.024** (0.010)		-0.029* (0.015)	-0.029* (0.015)		0.028*** (0.009)	0.028*** (0.009)		0.031*** (0.011)	0.030*** (0.010)	
Secondary		-0.159*** (0.011)	-0.159*** (0.011)		-0.162*** (0.009)	-0.163*** (0.009)		-0.197*** (0.012)	-0.196*** (0.012)		-0.188*** (0.013)	-0.187*** (0.012)	
Tertiary		-0.434*** (0.011)	-0.432*** (0.011)		-0.447*** (0.016)	-0.448*** (0.017)		-0.535*** (0.015)	-0.533*** (0.014)		-0.521*** (0.017)	-0.521*** (0.017)	
Rural		0.075*** (0.012)	0.076*** (0.013)		0.069*** (0.011)	0.070*** (0.011)		0.035** (0.013)	0.034** (0.014)		0.037** (0.015)	0.037** (0.015)	
Semester-by-Year FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Municipality FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Municipality-time Trends	N	N	Y	N	N	Y	N	N	Y	N	N	Y	
Observations	31,770	31.770	31,770	37,365	37,365	37,365	16,501	16,501	16,501	20,014	20,014	20,014	
R-squared	0.058	0.163	0.171	0.073	0.180	0.187	0.052	0.241	0.253	0.051	0.233	0.243	

Notes: All regressions include a constant term. Robust standard errors are displayed in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Sample: Employed individuals ages 18 through 65 in 01/2009 through 02/2014 Labor Force Surveys.

Table 5
The Impact of the New Constitution and Court Rulings on the Likelihood of a Newborn in the Household

Time Period	Pro	e-Post Constitu	tion	Pre-Post Court Ruling			
Specification	(1)	(2)	(3)	(1)	(2)	(3)	
Haitian*Post-policy	-0.001 (0.009)	-0.002 (0.009)	-0.005 (0.009)	-0.003 (0.010)	-0.002 (0.010)	-0.004 (0.010)	
Haitian	0.034*** (0.007)	0.034*** (0.007)	0.032*** (0.007)	0.023*** (0.007)	0.023*** (0.008)	0.019*** (0.007)	
Share of HH Members with Secondary Education		0.048*** (0.004)	0.052*** (0.004)		0.045*** (0.004)	0.049*** (0.005)	
Share of HH Member with Tertiary Education		0.027*** (0.006)	0.031*** (0.006)		0.029*** (0.007)	0.034*** (0.007)	
Real Monthly HH Income ^a		-8.6e-07 (5.3e-07)	-1.7e-06*** (5.3e-07)		-6.0e-07 (5.5e-07)	-1.4e-06** (6.1e-07)	
HH Rural Residency		0.010*** (0.003)	0.010*** (0.003)		0.005* (0.003)	0.005* (0.003)	
Semester-by-Year FE	Y	Y	Y	Y	Y	Y	
Municipality FE	Y	Y	Y	Y	Y	Y	
Municipality-time Trends	N	N	Y	N	N	Y	
Observations R-squared	48,274 0.010	48,274 0.013	48,274 0.025	47,524 0.010	47,524 0.013	47,524 0.025	

Notes: All regressions include a constant term. Robust standard errors are displayed in parentheses. *** p<0.01, ** p<0.05, * p<0.1. (a) Monthly household income in thousands of 2016 Dominican pesos.

Sample: Households in 01/2009 through 02/2014 Labor Force Surveys.

Table 6 The Impact of the New Constitution and Court Rulings on School/College Attendance

Time Period	Pro	e-Post Constitu	ıtion	Pro	e-Post Court R	uling
Specification	(1)	(2)	(3)	(1)	(2)	(3)
Haitian*Post-policy	0.004 (0.017)	-0.004 (0.011)	-0.002 (0.013)	-0.040** (0.018)	-0.026** (0.013)	-0.026* (0.014)
Haitian	-0.108*** (0.015)	-0.079*** (0.012)	-0.081*** (0.013)	-0.093*** (0.015)	-0.063*** (0.011)	-0.063*** (0.011)
Age		-0.037*** (0.001)	-0.037*** (0.001)		-0.039*** (0.001)	-0.038*** (0.001)
Female		0.034*** (0.003)	0.034*** (0.003)		0.036*** (0.004)	0.035*** (0.004)
Child of HH Head		0.091*** (0.005)	0.091*** (0.005)		0.079*** (0.005)	0.078*** (0.005)
Real Monthly HH Income ^a		6.9e-06*** (1.0e-06)	6.9e-06*** (1.0e-06)		7.0e-06*** (1.2e-06)	6.9e-06*** (1.3e-06)
Rural		-0.018*** (0.004)	-0.019*** (0.004)		-0.013* (0.006)	-0.012+ (0.006)
Semester-by-Year FE	Y	Y	Y	Y	Y	Y
Municipality FE	Y	Y	Y	Y	Y	Y
Municipality-time Trends	N	N	Y	N	N	Y
Observations R-squared	63,850 0.015	63,850 0.241	63,850 0.245	57,233 0.018	57,233 0.253	57,233 0.257

Notes: All regressions include a constant term. Robust standard errors are displayed in parentheses. *** p<0.01, ** p<0.05, * p<0.1. (a) Monthly household income in thousands of 2016 Dominican pesos. **Sample:** Youth ages 6 through 22 in 01/2009 through 02/2014 Labor Force Surveys.

Table 7
The Impact of the New Constitution and Court Rulings on Barriers to School/College Attendance

Time Period	Pre	Post Constitu	ıtion	Pre-	Post Court R	uling
Specification	(1)	(2)	(3)	(1)	(2)	(3)
Haitian*Post-policy	-0.038 (0.031)	-0.045 (0.031)	-0.046 (0.028)	0.105** (0.051)	0.102** (0.048)	0.108** (0.053)
Haitian	0.087*** (0.017)	0.088*** (0.017)	0.092*** (0.019)	0.000 (0.023)	0.004 (0.023)	0.001 (0.024)
Age		0.002 (0.002)	0.002 (0.002)		-0.001 (0.002)	-0.001 (0.002)
Female		-0.148*** (0.015)	-0.150*** (0.015)		-0.118*** (0.013)	-0.120*** (0.013)
Child of HH Head		-0.047***	-0.047***		-0.014	-0.014
		(0.014)	(0.014)		(0.011)	(0.010)
Real Monthly HH Income ^a		1.2e-06	1.6e-06		2.4e-06	2.8e-06
		(3.1e-06)	(3.0e-06)		(3.2e-06)	(3.3e-06)
Rural		0.016 (0.010)	0.015 (0.010)		-0.011 (0.013)	-0.011 (0.013)
Semester-by-Year FE	Y	Y	Y	Y	Y	Y
Municipality FE	Y	Y	Y	Y	Y	Y
Municipality-time Trends	N	N	Y	N	N	Y
Observations R-squared	11,745 0.036	11,745 0.064	11,745 0.093	10,602 0.047	10,602 0.064	10,602 0.092

Notes: All regressions include a constant term. Robust standard errors are displayed in parentheses. **** p<0.01, ** p<0.05, * p<0.1. ^(a) Monthly household income in thousands of 2016 Dominican pesos. **Sample:** Youth ages 6 through 22 not registered in school/college in the 01/2009 through 02/2014 Labor Force Surveys.

Table 8
Checking for Pre-existing Differential Trends

Pre-Constitution Per	riod 01/09-02/2009	Pre-Cour	t's Ruling Period: 01/201	2-01/2013
Outcome	Male Informal Work	Outcome	School/College Attendance	Barriers to School/College
Haitian*Time Trend	0.027 (0.031)	Haitian*Time Trend	0.005 (0.013)	0.002 (0.044)
Haitian	-0.111 (0.180)	Haitian	-0.121 (0.161)	-0.011 (0.535)
Time Trend	0.134 (0.141)	Time Trend	3.7e-04 (0.051)	0.079 (0.134)
Age	0.002*** (0.001)	Age	-0.038*** (0.002)	-3.3e-04 (0.002)
Married	-0.069*** (0.013)	Female	0.037*** (0.006)	-0.096*** (0.020)
Household Head	-0.006 (0.021)	Child of HH Head	0.079*** (0.007)	-0.006 (0.015)
Secondary	-0.171*** (0.017)	Real Monthly HH Income ^a	6.3e-06*** (1.1e-06)	3.1e-06 (3.5e-06)
Tertiary	-0.448*** (0.017)	Rural	-0.016*** (0.006)	-0.015 (0.016)
Rural	0.070*** (0.014)			
Semester-by-Year FE	Y	Semester-by-Year FE	Y	Y
Municipality FE	Y	Municipality FE	Y	Y
Municipality-time Trends	Y	Municipality-time Trends	Y	Y
Observations	12,794	Observations	29,236	5,528
R-squared	0.194	R-squared	0.262	0.125

Notes: All regressions include a constant term. Robust standard errors are displayed in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

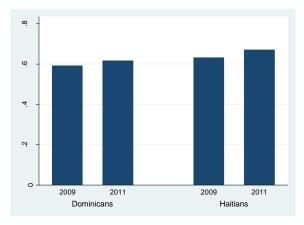
Samples: Informal Work: Employed individuals ages 18 to 64 in the pre-Constitutional Amendment period (01/2009-02/2009 Labor Force Surveys). Schooling Outcomes: Youth ages 6 through 22, as well as youth ages 6 through 22 not registered in school/college in the pre-Court's ruling period (1/2012 through 01/2013 Labor Force Surveys). (a) Monthly household income in thousands of 2016 Dominican pesos.

Figures 1 through 10: Share of Dominicans and Haitians for Each Outcome **Pre-Post Constitutional Amendment and Court Ruling**

Figure 1

Pre-Post the Constitution

Figure 2 **Pre-Post the Court's Ruling**



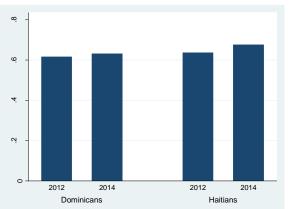
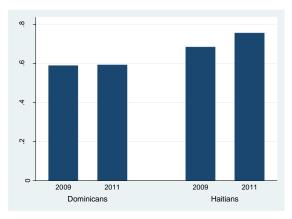


Figure 3 **Pre-Post the Constitution**

Figure 4 **Pre-Post the Court's Ruling**



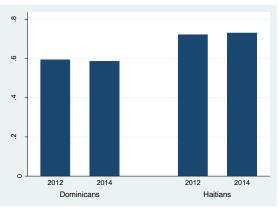
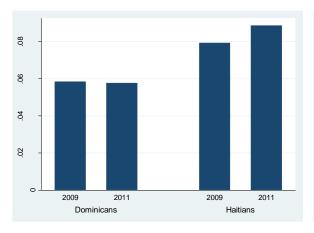


Figure 5 **Pre-Post the Constitution**

Figure 6 **Pre-Post the Court's Ruling**



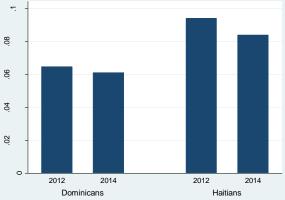
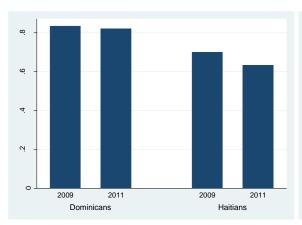


Figure 7
Pre-Post the Constitution

Figure 8
Pre-Post the Court's Ruling



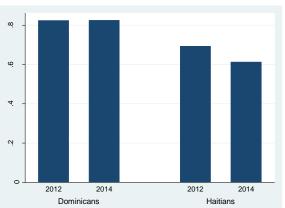
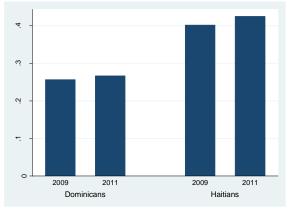


Figure 9
Pre-Post the Constitution

Figure 10 Pre-Post the Court's Ruling



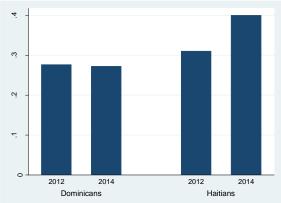


Table A1
Out of Sample Predictions for the Likelihood of Being Haitian

Time Period	Mean	S.D.
01/2009	0.083	0.276
02/2009	0.075	0.264
01/2010	0.073	0.260
02/2010	0.081	0.273
01/2011	0.087	0.282
02/2011	0.069	0.253
01/2012	0.092	0.289
02/2012	0.081	0.273
01/2013	0.086	0.280
02/2013	0.064	0.244
01/2014	0.076	0.266
02/2014	0.052	0.223

Notes: Out of sample predictions for being Haitian or of Haitian descent were obtained by estimating a probit for Haitian or Haitian descendant at the household level with the following explanatory variables: dummy for secondary education, dummy for tertiary education, dummy for no washing machine, dummy for no refrigerator, dummy for no outside kitchen/no kitchen, dummy for carton walls, dummy for wood walls, dummy for zinc walls.