Labor Market Effect of Granting Amnesty to Venezuelan Refugees and Migrants in the Dominican Republic*

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Abstract

This paper examines the labor market impact of an amnesty program in the Dominican Republic, that grants Venezuelan refugees and migrants an ID card that allows them to work legally. To identify the effect, we compare the outcomes of those who received and did not receive ID cards before and after they were issued, leveraging the unexpected timing of their distribution. Our findings reveal negligible effects on the extensive margin, but indicate positive effects on the quality of employment, particularly in the likelihood of having a written contract and working in the formal sector. However, no discernible impact is observed on the likelihood of being overqualified for one's job or salary. The results suggest that the amnesty has helped Venezuelans integrate into the formal labor market, yet additional reforms such as title validation may be necessary to address the remaining barriers limiting full socio-economic inclusion.

Keywords: Immigration, regularization, integration.

JEL Classification: F22, K37, O15

1 Introduction

Various barriers hinder the integration of refugees and migrants into their host communities, but perhaps the most crucial to address is the lack of legal permission to stay in the destination country and its impact on accessing economic opportunities. Amnesty processes, which offer individuals the opportunity to obtain a regular migratory status in the host country, can significantly expedite the integration process. With regular status, refugees and migrants can access essential public services and actively participate in the labor market, maximizing their contribution to the local economy.

We examine the effect of an amnesty program on the labor market outcomes of Venezuelan refugees and migrants in the Dominican Republic. The amnesty was granted through the *Plan de Normalización de Migrantes Venezolanos en la República Dominicana* (PNV). Over 115 thousand Venezuelans, roughly one percent of the country's population, were thought to be eligible for the amnesty. This process offered them a renewable one-year identification document known as the PNV ID Card. Possession of this card granted various rights, including the ability to work legally, contribute to social security, obtain medical insurance, and apply for a driver's license.

We utilize panel data collected every six months across a total of three survey rounds, beginning in December 2021, resulting in a sample of 910 Venezuelan refugees and migrants. Given the absence of a sampling frame for this population, we employed a respondent-driven sampling (RDS) methodology to construct the sample. Each of the three survey rounds incorporated comprehensive inquiries into individuals' employment conditions and migratory status. Additionally, we gathered information on each participant's employment history and wealth in Venezuela prior to arrival.

Our analysis estimates the impact of the ID Card on Venezuelans' participation in the labor market, their likelihood of being employed, and the quality of their employment conditions. We aim to estimate the causal effect of the PNV through a difference-in-difference model that compares the outcomes of Venezuelans who received and did not receive the ID Card before and after they were issued, leveraging the unexpected timing of its distribution.

We find negligible effects of the PNV ID Card on the likelihood of Venezuelans being active in the labor market or being employed. Nevertheless, we observe positive effects on the labor conditions of Venezuelans, measured by the likelihood of having a written contract and working in the formal sector. However, the ID Card does not appear to reduce the likelihood of being overqualified for one's job, contribute to an increase in salary, or decrease the likelihood of working extended hours. The positive impact of labor formality, as defined by being employed in a job that provides health insurance and retirement contributions, appears to be more pronounced among females than males.

This paper contributes to the existing literature in several dimensions. First, unlike the majority of studies focusing on the impact of amnesties or regularization programs in developed countries, particularly the United States (Chassamboulli and Peri, 2015, Cobb-Clark et al., 1995) and Europe (Devillanova et al., 2018, Monras et al., 2021), our research looks at amnesty in the context of a developing country. Developing nations often contend with significant informal labor markets and weaker healthcare and education services. For example, in the Dominican Republic, over 50 percent of employed individuals work in the informal sector (OECD, 2022).

Our findings align with Ibáñez et al. (2022), who investigated the impact of the PEP (Permiso Especial de Permanencia) regularization program in a similar context, Colombia. They found that even though regular status likely increased formal employment, informality remains a viable option for many independent of status. Moreover, our results complement the conclusions drawn by Ibáñez et al. (2022) and Bahar et al. (2021), indicating that migration reforms are unlikely to significantly impact native labor market outcomes, especially in countries with high informality levels like Colombia and the Dominican Republic, where most refugees and migrants with work permits tend to remain in the informal sector.

Second, the case of the Dominican Republic is of particular interest because, unlike the PEP visa in Colombia, the regularization process granted access to formal employment but excluded access to other government services. Since a significant portion of the positive effects of the PEP in Colombia appear to stem from increased access to public services, studying the PNV program, which provides a subset of public benefits, allows us to assess whether granting access to a smaller set of benefits still improves Venezuelans' overall well-being.

Third, the Dominican Republic is among the fastest-growing economies in Latin America and the Caribbean and its business sector faces challenges in recruiting qualified personnel, partially attributed to the mismatch between vacancy skill requirements and workers' technical training and education. Analyzing the effects of the PNV provides an opportunity to investigate if granting Venezuelans the right to work is sufficient to incentivize employers to integrate this highly educated population into the formal sector in a context of high demand for skilled labor and rapid economic growth.

2 Background

The Dominican Republic has a long history of emigration and immigration. Despite experiencing significant economic growth, the country has historically witnessed a higher number of emigrants compared to immigrants (IADB, 2023). As of 2020, over 1.5 million Dominicans lived outside the island (12 percent of the country's population), most of whom resided in the United States and Spain. However, there has been a notable increase in the number of immigrants over the past decade, rising from 390 thousand in 2010 to over 675 thousand in 2020. Of them, approximately 115 thousand originated from Venezuela and arrived in the Dominican Republic between 2015 and 2020, representing around one percent of the country's population and 17 percent of the migrant population (R4V, 2022).

The majority of Venezuelan refugees and migrants entered the country by air (OIM, 2017). This can be explained by the significant distance between Venezuela and the Dominican Republic and the fact that, prior to 2019, there were no travel restrictions for their arrival. At that time, Venezuelans could obtain a tourism-based travel authorization for 30 days upon arrival as long as they had a valid passport (OBMICA, 2020). Among the Venezuelan refugees and migrants who entered the country until the end of 2019, roughly 13,000 requested and received a temporary or permanent residence permit. Among those permits, roughly 60 percent had expired by 2020 (OBMICA, 2020). Moreover, estimates from the DMG (Dirección General de Migración, in Spanish) indicated that an additional 100,000 Venezuelans without regular migratory status lived in the country in 2020.

 $^{^{1}}$ Since December 16th, 2019, Venezuelans have been required to obtain a travel visa to enter the country (OBMICA, 2020).

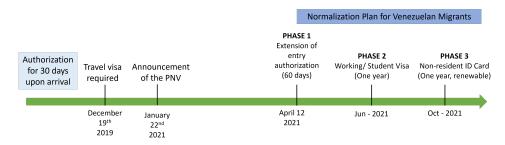
In response to the significant number of Venezuelans residing in the country without regular migratory status, the government announced an amnesty process for Venezuelan refugees and migrants in January 2021.² This initiative aimed to provide Venezuelan refugees and migrants who entered the Dominican Republic between January 2014 and March 2020 with a temporary non-resident ID card as part of the *Plan de Normalización de Migrantes Venezolanos en la República Dominicana*.

As shown in Figure 1, the PNV program was implemented in three phases. In the first phase, individuals were granted an extension of their permit to stay in the country.³ The second phase involved granting individuals a work or education visa. In the final phase, individuals received a non-resident ID card. Although the figure illustrates the government's planned timeline for beneficiaries' progression through the program, the actual outcomes differed significantly. By the end of 2021, only a small number of migrants had received the ID card. However, by the end of 2022, according to R4V (2022) and the Ministry of Foreign Affairs, approximately 38,000 Venezuelans had received the extension, 24,000 had obtained the visa, and 20,000 had acquired the ID card.

²The amnesty process was established through Resolution 01119-2021, published on January 19, 2021. The Ministry of Foreign Affairs and the Directorate General of Migration implemented the resolution.

 $^{^{3}}$ The registration deadline, initially set for one month, was later extended to two months.

Figure 1: Planned Timeline



Notes: This timeline is based on the government's planned timeline for beneficiaries progression through the program. As described in the text, the first individuals received the VISA and ID Card later (for more information, see A2).

Although obtaining the ID Card marked the completion of the regularization process, the employment visa alone was sufficient for recipients to work in the formal sector. These visas also authorized multiple entries into the country, allowing individuals to travel back and forth to Venezuela (Bandiera et al., 2023). Nevertheless, the ID Card was crucial as an identification document, particularly since most Venezuelans only possessed expired passports and thus lacked valid identification.

There were notable differences in the rights granted by the visa compared to the non-resident ID card. The primary difference was that the visa was non-renewable, whereas the ID card could be renewed after one year. Additionally, Venezuelans interviewed in focus groups highlighted the ID card's perceived advantages, such as the ability to contribute to a retirement fund, obtain medical insurance, and apply for a driver's license. Although this perception was not entirely accurate, the lack of valid identification documents—due to the widespread issue of expired passports—restricted those with only a work visa from accessing certain benefits like contributing to a retirement fund or securing employer-financed medical insurance.

Furthermore, Venezuelans reported feeling calmer and safer with an ID card than with a visa, especially when leaving and re-entering the country.

3 Data

This section outlines the data collection process and provides details about the Venezuelan sample. Recognizing the challenges associated with surveying refugees and migrants lacking regular status, we offer a thorough description of the sampling methodology. To the best of our knowledge, this study is among the first to repeatedly survey migrants without regular status, utilizing a respondent-driven sample methodology.

3.1 Sampling Approach

The data collection was conducted at the national level, although the majority of the sample was concentrated in the capital and surrounding metropolitan area (75%). The participants consisted of Venezuelan refugees and migrants aged 18 and above who had arrived in the Dominican Republic after January 2014. Importantly, individuals who were not eligible to participate in the amnesty because they arrived after March 2020 could participate in our study. However, although we actively tried to recruit them, most of our sample arrived in the Dominican Republic before January 2020.⁴

Participants were recruited via respondent-driven sampling (RDS), a methodology to obtain reliable data from hard-to-reach populations, including migrants (Tyldum and Johnston, 2014). We selected this strategy since, even though it is a non-probability-based approach, under certain conditions it can generate a representative sample by exploiting waves of peer-to-peer re-

⁴The lack of individuals who arrived after January 2020 is not surprising due to the visa restriction imposed at the end of December 2019 and the Covid-19 pandemic.

cruitment and introducing statistical adjustments to approximate random sampling. 5

To build the sample, we initially selected six seeds based on their demographic characteristics, networks with Venezuelan refugees and migrants, and recruitment potential. This group was diverse in age, gender, and immigration status. Two weeks into the study, we added two more seeds to enhance geographic diversity. A week later, we included another seed to increase the representation of irregular Venezuelans (see Figure B1 in the Appendix).

Seed participants were first contacted and informed about the study through WhatsApp. Then, each seed received a link to an online survey. After confirming eligibility and informed consent, each seed completed a short self-administered survey with questions about the migration history and immigration status of all household members. Finally, consistent with the RDS methodology, each seed could refer to up to three additional contacts. All participants received \$3 USD for completing the short survey and could receive an additional \$3 USD per referral.

We constructed the sample in two stages: initially, through a brief online survey, followed by an in-depth survey. This approach facilitated faster data collection, as we did not need to wait for respondents to schedule the half-hour in-depth interview for additional referrals. However, this strategy also reduced the likelihood that individuals who did not register for the normalization plan or did not complete the first phase of the program answered the in-depth survey. Unfortunately, the information from the initial online questionnaire is insufficient to determine if respondents also differ

⁵For more information, see Górny and Napierala (2016); Tyldum (2021).

in other characteristics. Still, we acknowledge that the two-stage RDS approach likely reduces the overall representativeness of our sample, although it should represent well Venezuelans who did register for the PNV.

With this strategy, we located a total sample of 1,813 Venezuelans. The first round of in-depth half-hour phone surveys started in December 2021. Respondents were contacted again six months and a year later to complete two additional half-hour phone surveys (in June 2022 and January 2023, respectively). In total, 1,259 individuals completed the first in-depth survey, 1,066 completed the first two surveys, and 932 completed all three surveys. Of them, we further restrict the sample to 910 individuals for whom we have information for all outcomes and control variables. ⁶

3.2 Baseline Summary Statistics

Table 1 summarizes the demographic characteristics of Venezuelan refugees and migrants from our sample in comparison to Dominicans, based on the *Encuesta Nacional Continua de Fuerza de Trabajo* (ENFCT). Venezuelans in our sample are younger, more likely to be female, and more likely to be single than their native counterparts.

⁶Table A2 in the Appendix examines attrition across survey rounds, showing younger individuals were more likely to drop out of the sample from round 1 to round 3 as were more recent arrivals.

Table 1: Descriptive statistics

	(1) Panel sample	(2) Natives
$\overline{Sociode mographics}$		
Age	35.67	43.04
	(10.21)	(18.08)
Female	0.62	0.52
	(0.49)	(0.50)
Single	0.64	0.49
	(0.48)	(0.50)
Education and migration characteristics		
Secondary or less	0.29	0.81
	(0.45)	(0.40)
Technical	0.19	0.00
	(0.39)	(0.06)
Some college or more	0.53	0.19
	(0.50)	(0.39)
Year of arrival	2,017	- '
	(1.27)	-
Worked in Venezuela	0.92	-
	(0.27)	-
Baseline Labor Characteristics	,	
Employed	0.96	0.61
	(0.20)	(0.49)
No contract	0.52	0.00
	(0.50)	(0.03)
Verbal contract	0.19	0.14
	(0.39)	(0.35)
Written contract	0.21	0.41
	(0.41)	(0.49)
Formal job	0.01	0.40
•	(0.12)	(0.49)
Overqualified	0.13	0.08
•	(0.34)	(0.27)
Long hours (+44)	0.53	0.65
- ' '	(0.50)	(0.48)
Salary (DOM pesos)	20,548.00	25,254.07
- ' '	(12,340.89)	(18,001.95)
Observations	910	23753

Notes: Column 1 presents the mean and standard deviation (in parentheses) for each variable listed in the rows, based on the balanced panel of the study. Column 2 provides the same information for Dominicans, as reported in the National Continuous Labor Force Survey, first semester of 2021.

In addition, Venezuelans in our sample are highly educated: 18.6 percent have technical education, and 52.6 percent have some college or more. These percentages indicate that the average level of education among Venezuelan refugees and migrants is much higher than the level of education of Dominicans, where only 19 percent have technical education or more.⁷

⁷It is worth mentioning that the characteristics of the Venezuelan sample in our study

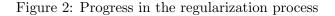
Regarding employment conditions at baseline, Table 1 shows that while Venezuelans are actively participating in the labor market, with the vast majority being employed, their employment conditions are significantly worse than those of natives. Despite having a labor force participation and employment rate more than 30 percentage points higher than that of natives, only 21% of Venezuelan workers have written contracts, and a mere 1% are employed in the formal sector. In contrast, 41% of natives have written contracts, and 40% work in formal jobs. Venezuelan workers are also more likely to be overqualified for their roles, with 13% holding technical or higher education while working in low-skilled jobs, compared to 8% of Dominican workers.⁸ Furthermore, the average wage for Venezuelans is 20,548 Dominican pesos (approximately 375 USD), substantially lower than the average wage for Dominicans, which is 25,254 Dominican pesos (around 450 USD).

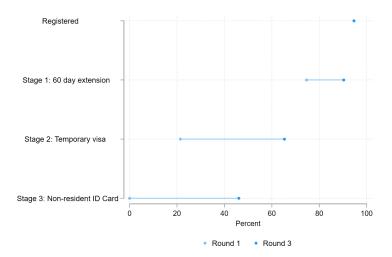
3.3 Participation in the Amnesty Process

The information about participation in the amnesty process comes from the three rounds of surveys. Each survey includes a binary indicator indicating whether the respondent completed a particular phase of the normalization process, along with the date the visa and ID card were issued for those who received each. Figure 2 displays the share of Venezuelan refugees and migrants moving through the various phases of the program.

resemble those observed in other countries across the region. Venezuelan refugees and migrants tend to be young, working age, highly educated, and more likely to be engaged in employment activities relative to their native counterparts (IDB and UNDP, 2023).

⁸ An individual is considered overqualified if he has a high level of education (tertiary or more) but worked in a job that requires a low level of education, denoted as low-skilled job, based on categories 4 thru 9 of the International Standard Classification of Occupations (ISCO).





Note: The estimates for each stage are calculated using the registered population as the denominator. This registered population consists of individuals who reported that they enrolled in the PNV program during the first round of data collection.

As expected, considering that the registration window closed prior to the first round of data collection (April 2021), the share of the sample registered for the PNV is unchanged across survey rounds and hovers around 90%. This suggests that the promotion of the program has been relatively successful. However, this proportion contrasts with administrative data, which estimates that approximately a third of Venezuelans residing in the country are registered.⁹¹⁰ One explanation for this discrepancy is that the

⁹The normalization program began in April 2021, and the program's progress can also be tracked using administrative data. First, nearly 43,000 Venezuelan refugees and migrants are registered in the system, which is estimated to be more than a third of the total Venezuelan population in the Dominican Republic. Of those eligible individuals who applied for the second stage, nearly 25,000 have received a one-year, renewable visa. The vast majority, 85%, are work visas, whereas the remaining are student visas. Finally, of those who received a visa and applied for the last stage to receive a non-resident stay permit, more than 20,000 have ID Cards, providing access to formal labor markets, opportunities in higher education, and expanded public services in the Dominican Republic.

¹⁰Although the share of the sample who registered and received the non-resident ID Card is in line with the administrative data, the share of respondents in our sample reporting having registered in the PNV is considerably higher than the official statistics

majority of unregistered cases are from respondents who believe it is unnecessary to register because they already have a valid regular status through another means — individuals who were not eligible for our study. Nevertheless, it is also possible that individuals without regular migratory status were reluctant to participate in our study.

Figure 2 also illustrates the share of Venezuelan refugees and migrants moving through various stages of the program once registered. The number of respondents in our sample who completed Stage 1 increased by ten percentage points from round 1 to round 3. More noticeably, there is a 43 and 45 percentage point increase in Stage 2 and Stage 3, respectively. While the share of the registered population with an ID Card has increased considerably between rounds, the figure also indicates how relatively few people still have regular status through a visa or ID Card.

4 Identification Strategy

The effect of receiving the ID Card from the PNV amnesty cannot be estimated by comparing the labor market outcomes of Venezuelans who received the ID against those who did not. This is because obtaining a PNV ID Card requires individuals to complete a series of administrative steps and pay several fees. Therefore, individuals who obtain the ID Card may be systematically different from those who do not obtain the ID Card. For this reason, we use a difference-in-differences strategy to estimate the impact of

reported by the authorities. This suggests that our sampling approach is biased towards the population that registered in the regularization plan, and the individuals who did not register in the PNV were less inclined to participate in the study. Alternatively, it is possible that the total population of Venezuelan refugees and migrants in the Dominican Republic is over-estimated, and the true figure is lower than the 115,000 officially cited.

the amnesty and leverage the unexpected timing of its distribution. ¹¹

The main specification uses individual-round data and exploits variation in the timing of the distribution of the ID Card. The estimating equation is:

$$Y_{it} = \alpha Post * ID_{it} + \gamma_t + \gamma_i + \epsilon it \tag{1}$$

Where i stands for individual and t stands for the round of the survey. Y represents the labor market outcome of interest, ID Card is an indicator variable that takes the value of one if the individual received the ID Card at any point in time, and Post is an indicator variable that takes the value of one if the individual had received the ID Card by then. We confined our analysis to a balanced panel data set, keeping only respondents who participated in all three rounds of the survey. We clustered the standard errors at the individual to account for serial correlation.

The coefficient of interest in α . It represents the average effect of obtaining an ID Card on Venezuelan's labor market outcomes. The key identification assumption is that individuals who received the ID Card have similar counterfactual trends relative to individuals who did not receive the ID Card. The first column of Table ?? presents evidence of the validity of this assump-

¹¹Although it would theoretically be possible to identify the effect of the program by using a regression discontinuity approach that exploits the cutoff in the date to enter the program, such a strategy is not feasible due to two important limitations. First, the addition of an entry visa in December 2019 implies that individuals who arrived before 2020 are likely to be systematically different from those who entered after, even right around the cutoff. These inherent differences among individuals would confound the results of the Regression Discontinuity Design, making it challenging to isolate the specific impact of the amnesty. Second, the COVID-19 pandemic had significant implications for global migration patterns, including those of Venezuelan refugees and migrants to the Dominican Republic. The imposition of travel restrictions in 2020 disrupted air traffic and limited the number of individuals who entered the country, and thus drastically reduced the sample size on the right side of the cutoff.

tion. It shows that baseline labor outcomes and the level of education in Venezuela are not associated with differences in the likelihood of obtaining an ID Card. That said, individuals who were single in the baseline were more likely to receive an ID Card than those who were not.

To estimate the effect, we presume the information from the first round to be baseline data because data collection took place before anyone received the ID Card. However, although no one had received the ID Card when the first round was collected, roughly 20% of the sample had received the visa. This has two implications. First, if employers in the labor market treated the visa the same way as the ID Card (i.e., if employers were more likely to hire individuals with the visa), our estimate of the effect is a lower bound of the true effect of the program. Second, if individuals changed their behavior because they anticipated changes in their migratory status and ability to work formally, the effect of the amnesty program will also be biased downward, and the estimate of the effect would be a lower bound than the true effect of the program.

5 Results

Figure 3 reports the difference-in-difference estimates for a variety of employment outcomes, indicating the impact of receiving the ID Card for Venezue-lan refugees and migrants.¹² The results show that the PNV ID Card has had no discernible impact on the external margin, meaning there is no evidence receiving the ID Card contributed to a higher likelihood of working for either men or women. This is not surprising since 98 percent of Venezuelans are already active in the labor market, and more than 95 percent of them

 $^{^{12}}$ Appendix Table $\ref{thm:prop}$ reports the coefficients and standard errors corresponding to the figure.

are employed.

On the other hand, receiving the ID Card positively and significantly affects the likelihood of having a written contract and having a formal job (defined as having employer-based health insurance and retirement contributions). The impact of the ID Card on the likelihood of having a formal job appears to be larger for women. Specifically, women who received the ID Card are seven percentage points more likely to work with a written contract than females who did not receive the ID Card. The effect for men is smaller and is not statistically significant. Similarly, women who received the ID card are 4.4 percentage points more likely to have a formal job, effectively doubling the average level of formal sector employment. As before, the effect of the ID Card on the likelihood of obtaining a formal job is slightly larger for women than for men. That said, the effect is still significant at traditional levels when looking at both genders together — when the larger sample size makes the estimates more precise.

Notably, obtaining the PNV ID Card does not seem to mitigate the likelihood of being overqualified for one's job, contribute to an increase in salary, or reduce the likelihood of working extended hours. The lack of a positive effect on these work quality outcomes may be related to the lack of recognition of foreign tertiary education in the Dominican Republic. In fact, although the percentage of individuals with apostilled titles increases across survey rounds, there is no similar increase in the percentage of individuals with a valid title illustrating their educational achievement.

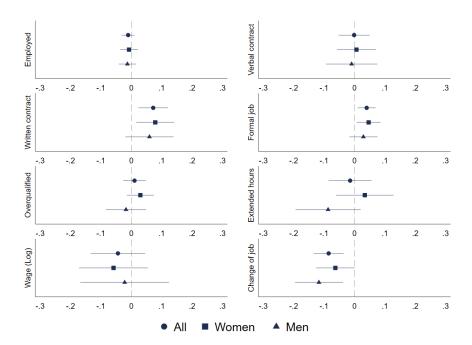


Figure 3: Impact of the ID Card on Employment Outcomes

Notes: This figure presents the difference-in-differences estimates based on equation (1). All regressions include individual fixed effects and round fixed effects. The standard errors are clustered at the individual level. We construct confidence intervals with a significance level of 95%.

The two-way fixed effect estimates in Figure 3 are based on comparisons across groups treated in round 2 and round 3 and variation between the multiple rounds of the study. To better understand the variation that produces the estimates in Figure 3, we decompose the effect into multiple two-period DiD comparisons in Figure 4. Individuals are split between those who were treated early, which corresponds to the individuals who received the ID Card before the second survey, and those who were treated late, which corresponds to the individuals who received the ID Card between the second and third rounds of the survey. Then, we compare the outcomes of each group of individuals against those individuals who were never treated or those who have not yet received the ID Card.

The numbers in the legend of the figure indicate the survey rounds included in the comparison. For instance, 1 vs 2 (Early) reports the DiD estimates of a model including only the individuals who were treated early where the DiD estimates are based on their outcomes from the *first* and *second* rounds of the survey. Similarly, 1 vs 3 (Early) reports the DiD estimates of a model including only the individuals who were treated early where the DiD estimates are based on their outcomes from the *first* and *third* rounds of the survey.

Overall, estimates 1 vs 2 (Early), 1 vs 3 (Early), and 1 vs 3 (Late) in the figure go in the same direction. Interestingly, the positive effect on the likelihood of having a written contract and having a formal job appears to be driven by those who were treated late, i.e. received the ID Card between the second and third rounds, instead of those treated early, i.e. received the ID Card between the first and second round and therefore have been treated for an additional six months by the third round of the study.

To determine if there was selection into early or late treatment, we report the correlation between baseline characteristics and the likelihood of early or late treatment in the second and third columns of Table ??. The estimates suggest that individuals treated later—among whom the ID card had the largest effect—are less likely to have some college education or higher, and are more likely to be female, indicating that those who benefited the most came from more vulnerable households.

Notably, Figure 4 includes a placebo test, marked by an unfilled square labeled 1 vs 2 (Late). This DiD coefficient estimates the effect using data from the first two rounds for individuals who were treated late (in the third round) and had not yet received the treatment. Reassuringly, this estimate

is centered at zero for formal employment. This is important because it indicates that the difference described in the previous paragraph did not exist before this group of individuals received the ID card

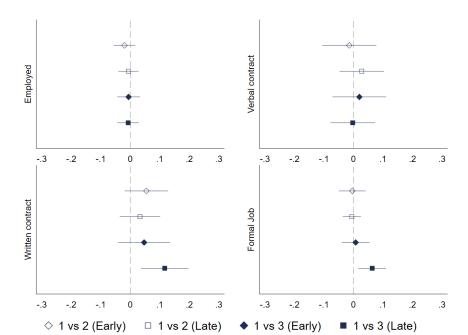


Figure 4: Difference-in-Difference Underlying Comparisons

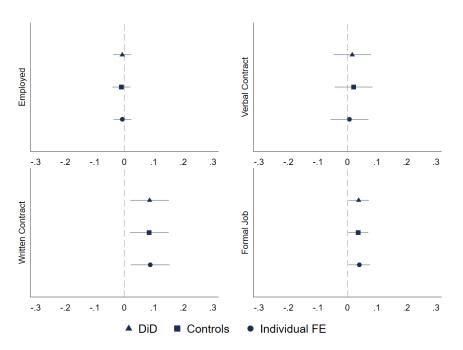
Notes: This figure presents the difference-in-differences estimates based on equation (1). It reports the estimates from multiple regressions for each outcome (as indicated in the figure caption). Each regression varies based on the survey rounds included and the treatment group—either early or late treated (see text for a detailed explanation of the estimates). All regressions include individual and round fixed effects. Standard errors are clustered at the individual level, and confidence intervals are constructed with a 95% significance level

Finally, to investigate the robustness of our results, we drop the information from the second round and explore three different specifications in Figure 5. First, we estimate the effect using a simple two-period difference-in-difference strategy as no one has received the ID in the baseline, and everyone who received the ID Card received it by the third round of the survey. The estimates of this exercise correspond to the triangle markers in the figure and are labeled DiD. Then, we include individual-level controls measured at the baseline.¹³ The estimates of this exercise correspond to the

¹³Specifically, we include age at arrival, gender, education level at arrival, and a measure of wealth in Venezuela. The wealth index is created through a principal component analysis based on the ownership of four assets (a house, a vehicle, land, or a business) in

square markers in the figure and are labeled Controls. Finally, we estimate the effect, including individual fixed effects. The estimates of this exercise correspond to the circle markers in the figure and are labeled Individual FE. As before, we find evidence of a positive effect on labor formality but no effect on other labor market dimensions. Reassuringly, the estimates and the confidence intervals are almost identical.

Figure 5: Robustness Checks



Notes: This figure presents the difference-in-differences estimates based on equation (1), including only the first and third rounds of the survey. The figure reports the estimates of a simple pre-post difference-in-difference regression, a regression that also includes baseline controls, and a regression that includes individual fixed effects. The standard errors are clustered at the individual level. We construct confidence intervals with a significance level of 95%.

Venezuela.

6 Concluding remarks

This paper investigates the labor market impact of receiving a renewable one-year ID Card, marking the culmination of an amnesty program targeting Venezuelan refugees and migrants in the Dominican Republic. Beyond granting beneficiaries the right to work legally, the ID Card allows individuals to access social security, obtain medical insurance and apply for a driver's license. It also makes it possible for Venezuelan beneficiaries to leave and re-enter the country, allowing individuals the possibility to visit their families back home.

The analysis shows that obtaining the ID Card did not significantly influence the likelihood of Venezuelans active in the labor market or their employment status. However, receiving the ID Card appears to have improved the quality of employment conditions. Specifically, having the ID Card is associated with an increased likelihood of securing employment under written contracts and being employed in the formal labor market. Nevertheless, obtaining the PNV ID Card does not appear to alleviate the likelihood of being overqualified for one's job, contribute to an increase in salary, or reduce the likelihood of working extended hours.

The findings provide a number of policy relevant insights, pertinent not only to the Dominican Republic but also other countries across the Latin America and Caribbean region hosting Venezuelan refugees and migrants. Extraordinary regularization programs have become more frequent in recent years as result of the Venezuelan situation, with notable initiatives enacted in Colombia, Ecuador, Peru and Trinidad and Tobago (Acosta and Harris, 2022). Even though the target nationality is the same across these cases, there is variation in terms of which specific groups decided to move to certain

countries. In the case of the Dominican Republic, the simple fact that one needs to fly there means those who had the resources to do so are inherently distinct from those that had no choice but to travel by land to nearby countries like Colombia, Ecuador, Peru and Brazil. This inherent selection based on socio-economic status means Venezuelan refugees and migrants in the Dominican Republic are arguably more educated and better prepared to integrate into the formal labor market relative to their compatriots in other hosting countries.¹⁴

It is also important to recognize that regularization programs across the region have fundamental differences by design, despite similarly targeting Venezuelan refugees and migrants. Each has distinct eligibility criteria, time horizon offered for legal stay and scope with respect to rights and services provided. For instance in Colombia, the landmark PEP program provides a 10-year legal stay arrangement. And aside from the legal right to work, it grants access to a wide range of fundamental public services. The Colombian program has been shown to result in significant welfare gains for Venezuelans, including greater consumption, higher labor income and improved health status (Ibanez et al, 2024). Indeed, the authors posit those improvements largely stem from access to essential services such as the social protection system, subsidized healthcare system and financial services.

Lastly regardless of the design, implementation of any regularization program will determine success. Even though the program in the Dominican Republic faced many challenges, one of the successes was the setup of free orientation hubs run by local civil society organizations, otherwise known

¹⁴Similar selection-related dynamics related to differences in Venezuelans' socioeconomic status the one travels from Venezuela is illustrated in IDB, OECD and UNHCR (2024).

as ventanillas de orientacion gratuita. The ventanillas provided critical outreach to expand coverage of those potentially eligible for normalization, and shared key information to increase the general awareness of the process. In particular, the ventanillas assisted those applying for normalized status to understand their rights and obligations as they proceeded through the various stages. The fact that the ventanillas counted with the participation and leadership of the Venezuelan community itself has given it credibility, and allowed them greater reach than otherwise would be the case.

Ultimately when it comes to regularization the devil is in the details. The proliferation of different schemes across Latin America and the Caribbean shows that policymakers recognize the consequences of hosting Venezuelan refugees and migrants in irregular situations, and contribution they are able to make when given the opportunity to integrate into local economies. Still, when designing a regularization program thoughtful consideration is needed around the characteristics of the population eligible as well as inherently excluded, the array of potential rights and services that may lead to desired outcomes, and the practical implementation. Further rigorous study on how these programs are implemented in a variety of contexts will lead to a more constructive, evidence-informed policy dialogue.

References

- Bahar, D., Ibáñez, A. M. and Rozo, S. V. (2021), 'Give me your tired and your poor: Impact of a large-scale amnesty program for undocumented refugees', *Journal of Development Economics* **151**, 102652.
- Bandiera, A., Loschmann, C., Luzes, M., Rivera, A. R. and Werf, C. v. d. (2023), 'Profiling Venezuelan Refugees and Migrants in the Dominican Republic'. Publisher: Inter-American Development Bank.
 - **URL:** https://publications.iadb.org/en/profiling-venezuelan-refugees-and-migrants-dominican-republic
- Chassamboulli, A. and Peri, G. (2015), 'The labor market effects of reducing the number of illegal immigrants', *Review of Economic Dynamics* **18**(4), 792–821.
- Cobb-Clark, D. A., Shiells, C. R. and Lowell, B. L. (1995), 'Immigration reform: The effects of employer sanctions and legalization on wages', Journal of Labor Economics 13(3), 472–498.
- Devillanova, C., Fasani, F. and Frattini, T. (2018), 'Employment of undocumented immigrants and the prospect of legal status: evidence from an amnesty program', *ILR Review* **71**(4), 853–881.
- Górny, A. and Napierala, J. (2016), 'Comparing the Effectiveness of Respondent-Driven Sampling and Quota Sampling in Migration Research', *International Journal of Social Research Methodology* **19**(6), 645– 661. Publisher: Routledge ERIC Number: EJ1190079.
- IADB (2023), 'DataMIG Portal'. https://datamig.iadb.org/, Last accessed on 2023-12-14.

- Ibáñez, A. M., Moya, A., Ortega, M. A., Rozo, S. V. and Urbina, M. J. (2022), 'Life out of the shadows'.
- IDB, O. and UNDP (2023), 'How do migrants fare in latin america and the caribbean: Mapping socioeconomic integration'.
- Monras, J., Vázquez-Grenno, J. and Elias, F. (2021), 'Understanding the effects of granting work permits to undocumented immigrants'.
- OBMICA (2020), Estado de las migraciones que atañen a República Dominicana 2019.
- OECD (2022), 'Multi-dimensional review of the dominican republic'.
- OIM (2017), 'Perfil migratorio de república dominicana'.
- R4V (2022), RMRP 2022 Regional Refugee and Migrant Response Plan, R4V Inter-Agency Coordination Platform for Refugees and Migrants From Venezuela.
- Tyldum, G. (2021), 'Surveying migrant populations with respondent-Experiences driven sampling. from surveys of east-west Journalof Social Research gration inEurope', InternationalMethodology **24**(3), 341 - 353. Publisher: Routledge _eprint: https://doi.org/10.1080/13645579.2020.1786239.
 - URL: https://doi.org/10.1080/13645579.2020.1786239
- Tyldum, G. and Johnston, L. (2014), Applying respondent driven sampling to migrant populations: Lessons from the field, Springer.

Appendices

A Complementary estimations

Table A1: Atrittion assignment by baseline charactetistics

	Atrittion
$\overline{Sociodemographics}$	
Age	-0.00298** (0.00130)
Female	$0.000930 \ (0.0279)$
Single	$0.0337 \\ (0.0265)$
Education	
Technical	-0.00727 (0.0395)
Some college or more	-0.0467 (0.0312)
Migration characteristics	
Year of arrival	$0.0237** \\ (0.00968)$
Worked in venezuela	-0.0423 (0.0508)
Baseline labor characteristics	
Employed	-0.00438 (0.0567)
Verbal contract	-0.00248 (0.0364)
Written contract	$0.00104 \\ (0.0360)$
Social Security	-0.00192 (0.120)
Overqualified	-0.0245 (0.0423)
Long hours (+44)	-0.00935 (0.0271)
Salary (IHS)	$0.000172 \\ (0.00164)$
Observations Outcome mean F	$\begin{array}{c} 1259 \\ 0.28 \\ 1.6141 \end{array}$

Note: The table presents OLS estimates for a variable identifying respondents who withdrew from the study on various baseline characteristics. The base categories are male, married, and secondary education or less. Robust standard errors are shown in parentheses. Statistical significance is denoted at the 90% (*), 95% (**), and 99% (***) confidence levels

Table A2: Tratment assignment by baseline charactetistics

	(1) Treated	(2) Early treated	(3) Late treated
$\overline{Sociodemographics}$			
Age	$0.000449 \\ (0.00172)$	$0.00167 \\ (0.00125)$	-0.00122 (0.00147)
Female	$0.00411 \\ (0.0365)$	$-0.0651** \\ (0.0287)$	$0.0692** \\ (0.0311)$
Single	$0.0616* \\ (0.0347)$	$0.0191 \\ (0.0262)$	$0.0425 \\ (0.0300)$
Education			
Technical	$0.0139 \\ (0.0511)$	0.0852** (0.0384)	-0.0713 (0.0450)
Some college or more	$0.0203 \\ (0.0405)$	0.126*** (0.0288)	-0.106*** (0.0365)
Migration characteristics			
Year of arrival	-0.00141 (0.0128)	-0.00278 (0.00937)	$0.00137 \\ (0.0105)$
Worked in venezuela	$-0.0400 \\ (0.0654)$	$0.00539 \\ (0.0461)$	-0.0454 (0.0601)
$\overline{Base line\ labor\ characteristics}$			
Employed	$0.0623 \\ (0.0729)$	$0.0543 \\ (0.0524)$	$0.00804 \\ (0.0632)$
Verbal contract	$0.0178 \\ (0.0483)$	$0.0483 \\ (0.0396)$	-0.0305 (0.0423)
Written contract	-0.00579 (0.0471)	$0.0341 \\ (0.0374)$	-0.0399 (0.0415)
Social Security	$0.0964 \\ (0.157)$	$0.174 \\ (0.160)$	-0.0773 (0.127)
Overqualified	-0.0181 (0.0562)	-0.0955** (0.0422)	$0.0774 \\ (0.0494)$
Long hours (+44)	-0.00476 (0.0356)	-0.0357 (0.0277)	$0.0309 \\ (0.0305)$
Salary (IHS)	$0.00309 \\ (0.00219)$	$0.000569 \ (0.00163)$	$0.00252 \\ (0.00195)$
Observations Outcome mean F	$\begin{array}{c} 910 \\ 0.43 \\ 0.7915 \end{array}$	$\begin{array}{c} 910 \\ 0.18 \\ 2.6368 \end{array}$	$\begin{array}{c} 910 \\ 0.26 \\ 1.5967 \end{array}$

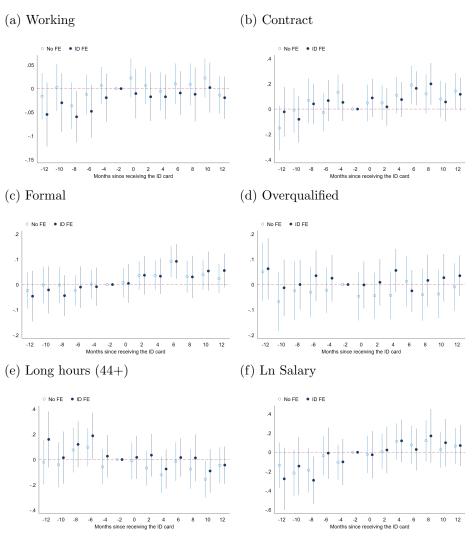
Note: Each column reports the OLS estimates on various baseline characteristics of four dependent dummy variables that equal one if the respondent belongs to one of the following groups: (1) Treated, (2) Early treated (received the ID card between collection rounds 1 and 2), and (3) Late treated (received the ID card between collection rounds 2 and 3). The base categories are male, married, and secondary education or less. Robust standard errors are provided in parentheses. Statistical significance is indicated at the 90% (*), 95% (**), and 99% (***) confidence levels.

Table A3: Effect of having ID Card on labor market outcomes

	(1)	(2)	(3)
	All	Women	Men
$\overline{Employed}$	-0.0106 (0.0110)	-0.00766 (0.0152)	-0.0131 (0.0145)
Observations Outcome mean	$\frac{2693}{0.98}$	$\frac{1662}{0.97}$	$\frac{1031}{0.98}$
Verbal contract	-0.00138 (0.0261)	$0.00622 \\ (0.0326)$	-0.00969 (0.0430)
Observations Outcome mean	$\frac{2667}{0.18}$	$\frac{1639}{0.18}$	$\frac{1028}{0.19}$
Written contract	$0.0719*** \\ (0.0250)$	0.0786** (0.0318)	$0.0595 \\ (0.0405)$
Observations Outcome mean	$\begin{array}{c} 2667 \\ 0.21 \end{array}$	$\frac{1639}{0.21}$	$\frac{1028}{0.20}$
Formal job	$0.0400^{***} (0.0152)$	0.0463** (0.0200)	$\begin{pmatrix} 0.0291 \\ (0.0235) \end{pmatrix}$
Observations Outcome mean	$\begin{array}{c} 2514 \\ 0.03 \end{array}$	$\frac{1507}{0.03}$	$\frac{1007}{0.04}$
Overqualified	$0.0103 \\ (0.0191)$	$0.0296 \\ (0.0228)$	-0.0178 (0.0337)
Observations Outcome mean	$\begin{array}{c} 2630 \\ 0.14 \end{array}$	$\frac{1618}{0.07}$	$\begin{array}{c} 1012 \\ 0.25 \end{array}$
Extended hours	-0.0145 (0.0361)	$0.0339 \\ (0.0481)$	-0.0871 (0.0545)
Observations Outcome mean	$\begin{array}{c} 2514 \\ 0.51 \end{array}$	$ \begin{array}{r} 1507 \\ 0.47 \end{array} $	$\frac{1007}{0.59}$
Wage~(Log)	-0.0443 (0.0458)	-0.0587 (0.0577)	-0.0221 (0.0742)
Observations Outcome mean	$\frac{1972}{9.88}$	$\frac{1196}{9.83}$	$\frac{776}{9.96}$
Change of job	-0.0853*** (0.0252)	-0.0633* (0.0323)	-0.117*** (0.0403)
Observations Outcome mean	$\begin{array}{c} 2730 \\ 0.17 \end{array}$	$\frac{1683}{0.18}$	$\frac{1047}{0.17}$
Change of industry	-0.00246 (0.0264)	0.0406 (0.0344)	-0.0717* (0.0405)
Observations Outcome mean	$\begin{array}{c} 2730 \\ 0.44 \end{array}$	$\frac{1683}{0.44}$	$\frac{1047}{0.44}$

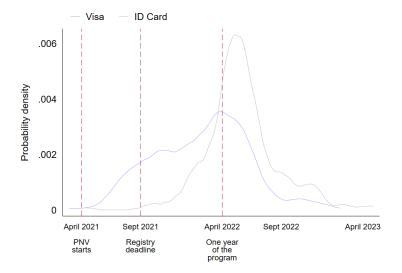
Note: Each column reports the difference-in-differences estimates of the impact of having an ID card on various labor indicators. The outcome variable is specified in the panel title. All estimations include individual fixed effects. Clustered standard errors by respondent are provided in parentheses. Statistical significance is denoted at the 90% (*), 95% (**), and 99% (***) confidence levels.

Figure A1: Event Study outcomes



Note: Each figure displays the estimated coefficients from regressing various labor outcomes (as indicated in the graph caption) on dummy variables representing the number of months the respondent has held the ID card. Individual fixed effects are included. Errors are clustered by respondent, with confidence levels set at 95%.

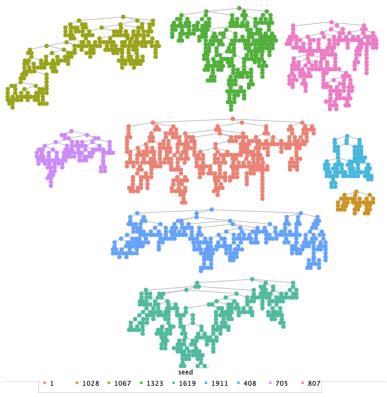
Figure A2: Issuing of Visa and ID Card



 $\bf Note:$ The figure shows the kernel density estimation of the dates when respondents received their Visa and ID card.

B Sampling

Figure B1: Recruitment by Seed



 ${f Note:}$ The figure displays the network of referrals by seed, with each color representing the respondents referred by a specific seed. Conventions at the bottom are seed identifiers.

Figure B2: Recruitment by Wave

Note: The figure shows the distribution of referrals across 28 recruitment waves, with each color representing respondents referred by a specific seed. The seed identifiers are indicated on the right side of the figure.