

Chapter 5

How do sectoral policies affect migration in the Dominican Republic?

Sectoral policies in key areas for development, such as the labour market, agriculture, education, financial services and investment and social protection and health can affect migration decisions, and enhance – or decrease – the positive impacts of migration on development. The IPPMD household and community surveys incorporated a wide set of policy programmes in five key sectors to identify some clear links between sectoral policies and migration. This chapter reports on analysis of the ways in which policy programmes in these sectors in the Dominican Republic influence people’s decision to emigrate, immigrate and to send remittances.

Migration is inevitably influenced by policies in the country of origin. Most countries have a set of policies which directly target migration, such as those controlling who can enter the territory and under which conditions, and those aiming to facilitate the sending and receiving of remittances. However, other policies can also have an influence on migration. The IPPMD project in the Dominican Republic focuses on policies in sectors that are key for development: the labour market, agriculture, education, investment and financial services, and social protection and health.

Chapter 4 showed that the impacts of different dimensions of migration on these five sectors vary. The policy context for each of these sectors in turn influences migration outcomes, such as the decision to emigrate and return, the sending and use of remittances, and the integration of immigrants. To date, the impact of sectoral policies on migration remains largely under-researched. This chapter attempts to disentangle the link in the Dominican Republic between migration and a wide set of policy programmes in the five sectors (Table 5.1).

Table 5.1. **Sectoral policies and programmes covered in the IPPMD project**

Sectors	Policies / programme
Labour market	<ul style="list-style-type: none"> ● Government employment agencies ● Vocational training programmes ● Public employment programmes
Agriculture	<ul style="list-style-type: none"> ● Subsidy-type programmes ● Agricultural training programmes ● Insurance-based programmes ● Land titling
Education	<ul style="list-style-type: none"> ● In-kind distribution programmes ● Cash-based programmes ● Other types of education programmes
Investment and financial services	<ul style="list-style-type: none"> ● Policies related to businesses investments ● Policies related to financial inclusion and education
Social protection and health	<ul style="list-style-type: none"> ● Policies related to health and social protection ● Policies related to labour contracts

This chapter is organised according to the five sectors under study. It first discusses how migration outcomes are affected by labour market policies, followed by policies governing agriculture, education, investment and financial services, and finally social protection and health.

Labour market policies and migration

While migration affects the labour market through various channels (Chapter 4), labour market policies implemented in the Dominican Republic can also affect households' migration decisions and the integration of immigrants. IPPMD data confirm that the search for jobs is one of the main drivers of emigration from the Dominican Republic. About 50% of current emigrants reported that they left the country to take or search for jobs abroad (Chapter 3). Policies that improve the functioning of the domestic labour market may therefore reduce the incentive to migrate. Likewise, inclusive labour market policies can further support the integration of labour immigrants.

The IPPMD study focuses on policies that aim to enhance labour market efficiency through government employment agencies, improve workers' skills sets through vocational training programmes, and expand labour demand by increasing public employment programmes. It investigates to what extent these policies are present in the Dominican Republic, and whether they have an influence on migration.

Government employment agencies are doing little to influence migration

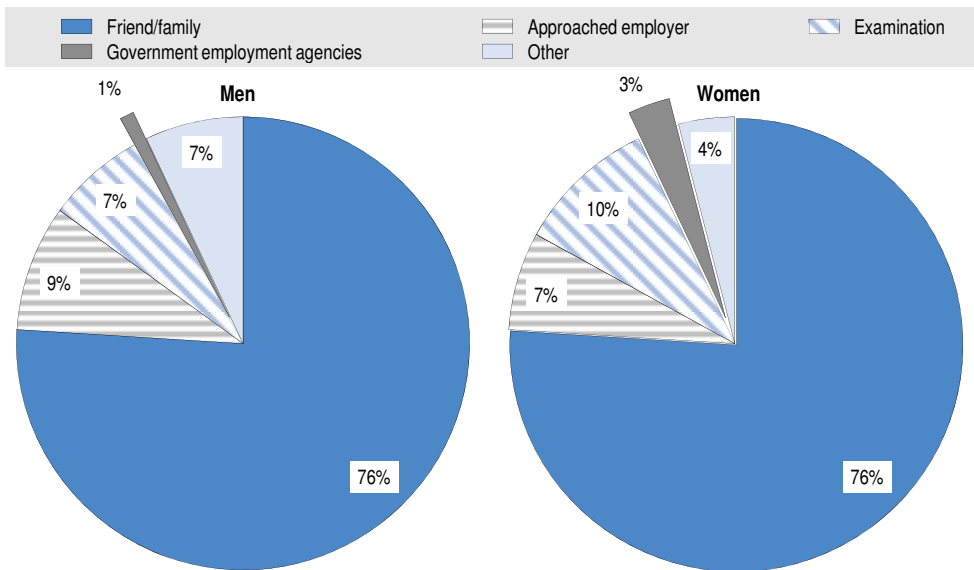
The National Development Strategy 2030 highlights the importance of the labour market and employment creation, notably under Objective 3.4, which focuses on sufficient and decent employment (MEPyD, 2009). Specific actions under this objective include strengthening the evaluation and accreditation system of vocational and technical training programmes and promoting business creation initiatives, especially among youth and women. The National Service of Employment (SENAE), under the Ministry of Labour, is responsible for linking the demand and supply of employment through various services such as job fairs and an online employment database that matches employers and jobseekers.

Government employment agencies, such as SENAE, can have an indirect impact on households' migration decisions. If people can find jobs in the local labour market through such agencies, they may choose to stay rather than emigrate to seek work abroad. However, in the IPPMD sample only about 2% of Dominicans employed in either the public or private sector had found their jobs through government employment agencies (1% for men and 3% for women). Most people had found their job through friends and family or by approaching potential employers directly (Figure 5.1). Together these two methods account for 84% of all surveyed adults with paid jobs in both the public and private sector. A higher share of women than men obtained their job through examinations.

According to the comparative study of the ten IPPMD partner countries, beneficiaries of employment agency services are less likely to have plans to emigrate than non-beneficiaries in many countries (OECD, 2017). This pattern is largely explained by the individual characteristics of government employment agency beneficiaries, who tend to be more highly educated than non-beneficiaries and more likely to hold jobs in the public sector, which are seen as secure occupations. A similar pattern appears in the Dominican Republic, although the difference is marginal and not statistically significant. Of those who found their jobs through a government employment agency, 14% have plans to emigrate, compared to 15% for those who did not use these agencies. This is likely partly explained by the low share of beneficiaries of employment agency services in the sample.

Figure 5.1. **Government agencies play a minor role in job seeking among the Dominican IPPMD respondents**

Methods for finding a current job in both public and private sectors



Source: Authors' own work based on IPPMD data.

The use of employment agency services among immigrants is low. Only 2 out of the 20 employed immigrants in the IPPMD sample had used a government employment agency service to find a job. Instead, immigrants tend to find jobs through their own networks, through direct contact with employers or through friends and family. And they do so to a larger extent than the native-born

population (90% vs. 84%). Government employment agencies could therefore expand their scope to better integrate immigrants into the formal labour market.

Vocational training programmes tend to encourage emigration from the Dominican Republic

The government has emphasised its priority of improving the employability of the labour force by upgrading skills through vocational training programmes (MEPyD, 2009). The SENAE offers training, as well as help to prepare curriculum vitae and other tools to improve people's chances of getting a job. In addition, the Ministry of Education offers vocational training for young people in the last two years of secondary education to promote employment.

The IPPMD survey found that 11% of the native-born labour force surveyed had participated in a vocational training programme in the five years prior to the survey. The share of immigrants participating in these programmes was significantly lower, at 2%.¹ Among the native-born population, a significantly higher share of women took part in vocational training than men: 16% versus 8%. Such training programmes are more common in urban areas (12%) than in rural areas (6%). The IPPMD survey findings indicate the most common training programmes to be computers/information technology (IT) (35%), followed by business/entrepreneurship (6%).

Vocational training programmes can affect migration in two different ways. While they might help people secure better jobs in the domestic labour market, thereby reducing the need to migrate, they might also make would-be migrants more employable overseas. A comparative study of the ten IPPMD partner countries shows that in most countries the share of people planning to migrate is higher among those who had participated in a vocational training programme than among those who did not (OECD, 2017). The Dominican Republic reflects this pattern: while 13% of those who did not participate in vocational training programmes have plans to emigrate, the share is much higher for participants (21%). This may suggest that people participate in vocational training programmes in order to find a job abroad.

This pattern is explored more deeply using regression analysis (Box 5.1).² It examines the links between participating in vocational training programmes and plans to emigrate while controlling for other factors, such as unemployment. The results (shown in Table 5.2) confirm a positive link between vocational training programmes and plans to emigrate, particularly for women and in urban areas. The results also suggest that being unemployed pushes people to emigrate. Having an emigrant member in the household also raises the propensity to move abroad.

Box 5.1. The links between vocational training programmes and plans to emigrate

To investigate the link between participation in vocational training programmes and having plans to emigrate, the following probit model was used:

$$\text{Prob}(plan_mig_i) = \beta_0 + \beta_1 \text{voc_training}_i + \gamma_1 \text{controls}_i + \gamma_2 \text{controls}_{hh} + \delta_r + \varepsilon_i \quad (1)$$

where $plan_mig_i$ represents whether individual i has a plan to emigrate in the future. It is a binary variable and takes a value of 1 if the person is planning to leave the country; $voc_training_i$ is the variable of interest and represents a binary variable indicating if the individual participated in a vocational training programmes in the five years prior to the survey; $controls_i$ stand for a set of control variables at the individual level and $controls_{hh}$ for household level controls;^a δ_r implies regional fixed effects and ε_i is the randomly distributed error term. The model has been tested on several different samples: men, women, urban and rural. The coefficients of the variables of interest are shown in Table 5.2.

Table 5.2. **Participation in vocational training programmes is positively associated with plans to emigrate particularly for women and in urban areas**

Dependent variable: Individual plans to emigrate					
Main variables of interest: Individual has participated in a vocational training programme					
Type of model: Probit					
Sample: Labour force in working age (15-64)					
Variables of interest	Sample				
	All	Men	Women	Rural	Urban
Individual participated in a vocational training programme	0.044** (0.021)	0.030 (0.030)	0.055* (0.030)	-0.033 (0.070)	0.053** (0.023)
Household has at least one emigrant	0.141*** (0.017)	0.131*** (0.021)	0.156*** (0.028)	0.135*** (0.040)	0.147*** (0.019)
Individual is unemployed	0.041*** (0.018)	0.036 (0.027)	0.042* (0.026)	-0.002 (0.039)	0.049** (0.021)
Number of observations	1 952	1 176	776	295	1 626

Note: Results that are statistically significant are indicated as follows: ***: 99%, **: 95%, *: 90%. Standard errors in parentheses.

a. Control variables include age, sex, education level of individuals and whether the individual is unemployed or not. At the household level, the household's size and its squared value, the dependency ratio, a wealth indicator and its squared value are controlled for. Whether the household has an emigrant or not is also controlled for.

Agricultural policies and migration

Chapter 4 concluded that migration has a positive effect on the agricultural sector in the Dominican Republic, particularly by relieving and revitalising a congested labour market. Emigrant households draw on more external agricultural labour than households without emigrants. In turn, agricultural

policies can also influence migration. The weight of agriculture in GDP in the Dominican Republic is relatively low compared to other IPPMD countries, at 6% in 2015 (World Bank, 2017). The reduced role of agriculture is visible in the country's National Development Strategy 2010-2030, which rarely mentions agriculture. Agriculture does appear in one of the country's four key strategies however, on sustainable management of the environment and adequate adaptation to climate change (MEPyD, 2009). More specifically, the strategy promotes the development and transfer of technology to help agriculture to adapt to climate change. In general, however, there does not seem to be much emphasis on agriculture.

This is also reflected in the data. The IPPMD survey collected data on whether households benefited from agricultural policies in the Dominican Republic – very few households claimed to have done so. According to the IPPMD survey, only 17 of the 420 (4%) agricultural households had benefited explicitly from an agricultural programme between 2010 and 2014, including agricultural subsidies (10 households), training programmes (11 households) and insurance mechanisms (4 households). Due to the low sample of benefiting households, a deeper analysis on how these policies affect migration decisions is not possible.

Households with official agricultural land titles are more likely to have an emigrant

An important policy component of the agricultural landscape in the Dominican Republic is land titling. Land titling has continuously been an issue for rural households in the country (FAO, 2016). A study using data from the 1998 agricultural census found that less than 50% of the rural population had access to formally titled land titles (Alwang and Siegel, 2004). In fact, formal registries suggest that only 45% of land was titled at the time. As a result, a high proportion of rural land is occupied without legal title. In 2012 the government created the State Lands Titling Commission, tasked with rolling out official titling of urban and rural properties (FAO, 2016). However, the process of land titling in the Dominican Republic has been fraught with fraud (USDS, 2015). In September 2015, recognising the urgency of the matter, the Dominican Minister of Agriculture stressed the importance of providing land titles for rural households in the country.³

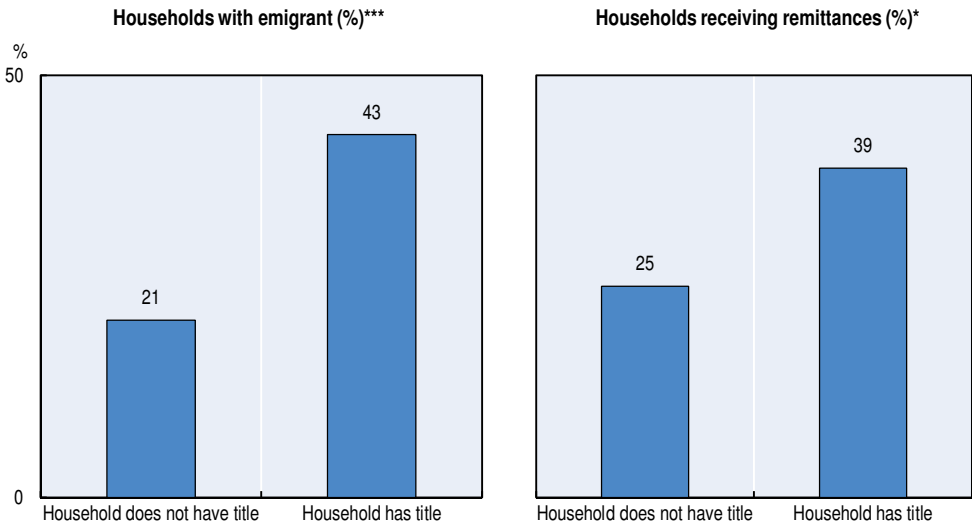
Land titles may affect emigration in various ways. Firstly, they enable households to use land as collateral when applying for a loan from banks (Poyo, 2003). The ability to borrow from banks can either help households finance migration, or, on the other hand, invest in more productive agricultural activities, lowering the likelihood of migration. Households that have the official titles to their land may also find it easier to sell it, potentially affecting migration outcomes in the same way. In many developing countries, rights to land are often contingent on its use. Research suggests that delinking land rights from land use can increase emigration, as households no longer have to use the land productively in order to retain ownership. They are free to leave it fallow or rent it out without risking losing it. In Mexico, for example, households that

had obtained certificates through the Mexican land certification programme, rolled out from 1993 to 2006, were found to be 28% more likely to have a migrant member (de Janvry et al., 2014).

The IPPMD survey also collected data on whether agricultural land-owning households had official land titles. Out of the 143 land-owning agricultural households with farming activities included in the survey (see Chapter 4), only 56 (39%) had official land certificates. Amongst these 143 households, those with land titles were slightly more likely to have a member planning to emigrate (16% vs. 15%), although this difference is not statistically significant. However, households with land titles were much more likely to have an existing emigrant (43% vs. 21%) and to be receiving remittances (39% vs. 25%), than those without the titles to their lands. Both of these differences are highly statistically significant (Figure 5.2). Given that emigrants often send money back to their households, the two are likely connected. One might also think that in the country's current tense immigration context, with immigration controls tightening, immigrants may be less likely to have the titles to their lands than households without immigrants. This is however untrue according to the IPPMD data. Immigrant households were more likely to have their land titles (9% vs. 7%), although the difference is not statistically significant.

Figure 5.2. **Land titling may increase emigration**

Share of households with an emigrant and receiving remittances, by whether the household has title for land



Note: Only households owning and working land are considered. A chi-squared test was used to measure the level of statistical significance between each set of groups. Results that are statistically significant are indicated as follows: ***: 99%, **: 95%, *: 90%.

Source: Authors' own work based on IPPMD data.

Box 5.2. The links between land titling and migration

To estimate the probability that land titling affected a migration-related outcome, the following probit regression model was estimated:

$$\Pr(mig_{hh}) = \beta_0 + \beta_1 land_title_{hh} + \gamma controls_{hh} + \varepsilon_{hh} \quad (2)$$

where the unit of observation is the household hh and the dependent binary variable (mig_{hh}) takes on a value of 1 if the household has had a migration-related outcome take place and 0 otherwise. $land_title_{hh}$ represents a dummy variable taking the value of 1 if the household is in possession of its land title. $controls_{hh}$ stands for a set of household-level regressors^a. Standard errors, ε_{hh} , are robust to heteroskedasticity.

Table 5.3. Households with official land titles are more likely to have an emigrant

Dependent variable: Migration outcomes				
Main variables of interest: Household has the certificate title for its land				
Type of model: Probit				
Sample: Agricultural households				
Variables of interest	Dependent variables			
	(1) Household has a member planning to emigrate	(2) Household has an emigrant	(3) Household received remittances in the past 12 months	(4) Household has an immigrant
Household has the official title for its land	-0.067 (0.055)	0.150* (0.085)	-0.064 (0.088)	0.020 (0.033)
<i>Number of observations</i>	143	143	143	143

Note: Statistical significance is indicated as follows: ***: 99%, **: 95%, *: 90%. Results reflect marginal effects. Coefficients reflect marginal effects. Standard errors are in parentheses and robust to heteroskedasticity.

a. Control variables for the model include the household's size, its dependency ratio (number of children aged 0-15 and elderly aged 65+, divided by the total of other members), the male-to-female adult ratio, its wealth estimated by an indicator (see Chapter 3), and whether it is in a rural or urban region. A fixed effect for its administrative region was not included due to the smaller sample size in the Dominican Republic. In addition, the specific regressions investigating whether the household has a member planning to emigrate and whether it is received remittances include a control for whether the household currently has an emigrant.

As other factors may also affect these migration outcomes, regression analysis probed these links further (Box 5.2). The results confirm that having an official land title increases the probability that a household also has an emigrant. As suggested in the discussion earlier, this may be because the household's stronger claim on the land makes losing it while living in another country less likely and therefore emigration less risky (Table 5.3, column 2). The links with remittances were found to be not statistically significant when controlling for the fact that the household has an emigrant, suggesting that the links shown

in Figure 5.2 are occurring through emigration rather than being explicitly linked to remittances, as emigrants may send remittances (Table 5.3, column 3). Remittances are the result of having an emigrant from the household. Other positive links found included between household wealth and emigration, and between urban households and receiving remittances. Having an immigrant in the household is also associated with lower wealth (the coefficients for these variables are not shown in the table).

Education policies and migration

The relationship between education policies and migration is multidimensional. As shown in Chapter 4, migration has both positive and negative effects on education outcomes: emigration and return migration tends to increase educational spending, and lead to a shift towards more private schooling, while immigrant students have lower attendance rates than native-born students. Similarly, education policies may have both positive and negative influences on migration decisions. Policies that improve access to quality education may decrease emigration motivated by the desire to finance children's education. In particular, cash-based education programmes such as conditional cash transfers and scholarships could ease the pressure to earn extra income to pay for children's schooling and thus reduce incentives to emigrate. On the other hand, education programmes might have the opposite effect by giving the household the financial means to allow a member to emigrate. Receiving financial support for children's education could also affect the amount and frequency of remittances sent home. Access to educational policy programmes can also help immigrants integrate. This section analyses these effects for a range of education policies on migration and remittance patterns in the Dominican Republic.

Immigrants are less likely to benefit from education programmes

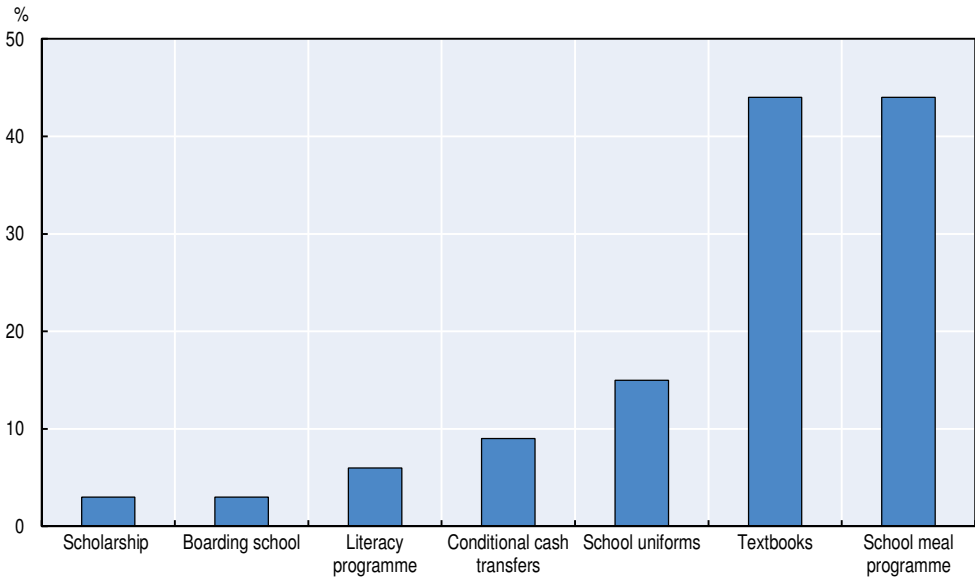
One objective of the Dominican National Development Plan 2030 is to achieve a society with equal rights and opportunities, including universal access to quality education. Concrete actions specified in the Development Plan include modernising the public education system at all levels of education, strengthening programmes to integrate youth into the labour market, and guaranteeing quality school meal programmes to students (MEPyD, 2009).

At 2.3% of GDP, Dominican national education expenditures in the period 2007-11 were relatively low compared to the regional average (4.5%). Budget allocations for education were raised in 2013, and spending increased to 3.8% of GDP. Most of the increase in education spending was allocated to primary education. These efforts have led to important improvements in the coverage

and provision of public education (World Bank, 2016). However, as reported in Chapter 4, the education sector is still facing challenges in terms of high school dropout and low completion rates.

The IPPMD survey gathered data on a range of educational distribution programmes (Figure 5.3). School meal programmes and distribution of textbooks were the most common programmes among respondent households with children of school age: around 45% of the households benefitted from these in-kind programmes. Cash-based programmes (conditional cash transfer programmes and scholarships) were much less widespread (Figure 5.3).

Figure 5.3. Distribution of textbooks and school meal programmes are the most common educational programmes benefitting IPPMD households
Share of households benefiting from education programmes (%)



Note: The sample includes households with children in school age (6-20 years old).

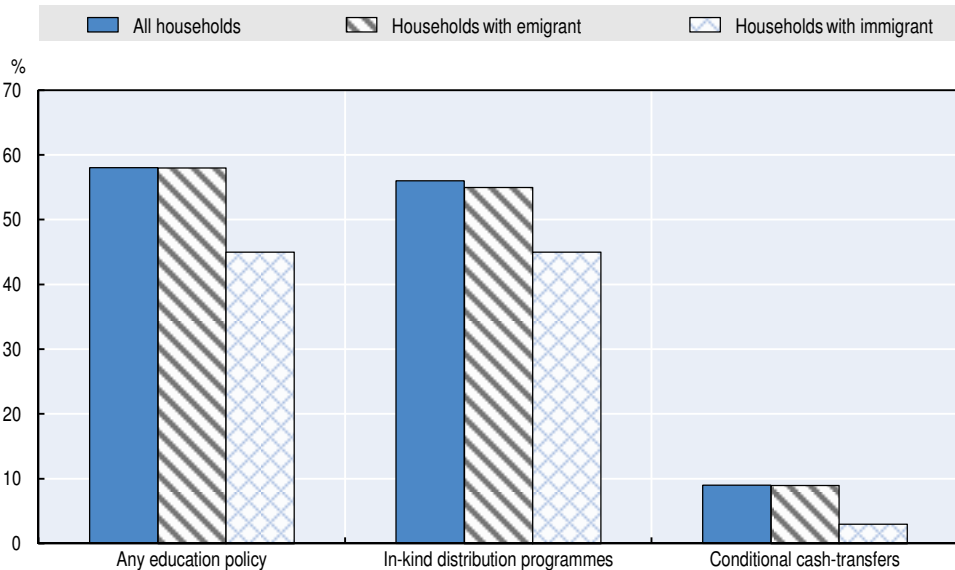
Source: Authors' own work based on IPPMD data.

Education is a fundamental tool for the social integration for immigrant children and children of immigrant parents, as it helps them learn the local language, as well as to understand the context and history of the country and to build social networks. The way that education systems respond to migration has both economic and social impacts for the immigrant children themselves – but also for the society in which they live – as it determines future productivity and earning capacity. However, as shown in Chapter 4, immigrant children and children in immigrant households in the Dominican Republic are less likely to attend school than native-born children (Chapter 4). The IPPMD data

also show that immigrant households have less access to educational support programmes, including in-kind distribution programmes and cash-based programmes in the form of conditional cash transfers (Figure 5.4). Lower access to education support programmes may constitute a further barrier to immigrant integration, and to the achievement of the objective of universal education for all as specified in the National Development Plan 2030.

Figure 5.4. **Immigrant households are the least likely to benefit from education policies**

Share of households benefiting from education programmes (%), by migration status



Note: The category "Any education policy" includes all educational programmes included in the survey. The sample includes households with children in school age (6-20 years old).

Source: Authors' own work based on IPPMD data.

Conditional cash transfer programmes seem to crowd out remittances

Conditional cash transfer (CCT) programmes have been adopted by governments in Latin America as a means to fight poverty, improve living conditions and encourage investments in education and health. Such programmes may also represent a form of social protection for households not covered by other social protection schemes. The CCT programme design differs from country to country, but they are typically target the poorest and most vulnerable part of the population and offer cash support that is conditional on specific requirements, such as children attending school and regular health checks. The CCT programme *Solidaridad* in the Dominican Republic was developed after the economic crises that hit the country in 2003, providing cash transfers to poor households to

invest in education, health and nutrition. In 2006-12, the programme increased its coverage and the number of beneficiaries three-fold. In 2012, the programme was reaching 90% of the extreme poor and 80% of the poor (World Bank, 2013). As shown in Figure 5.3, about 10% of the surveyed households with children have benefited from a CCT in the past five years.

Previous research from Latin America shows mixed results when it comes to the link between CCTs and migration and remittance decisions. Cash transfers can reduce the pressure to emigrate if they make a significant enough contribution to income, and if the conditions attached to the cash transfer require household members to be physically present, for health check-ups for instance (Stecklov et al., 2005; Behrman et al., 2008). On the other hand, receiving a cash transfer can relax credit constraints enough to enable people to afford to emigrate, especially if complemented by remittances (Angelucci, 2004; Azuara, 2009).⁴ CCTs may also increase emigration if the money received is not enough to cover the financial needs of the household, if the programme leads to human capital accumulation that increases the returns to migration, or if the conditions of the programme do not apply to all members of the household (Hagen-Zanker and Himmelstine, 2013). Finally, CCT programmes may affect the level of remittances received by the household. Households receiving CCTs may be less dependent on remittances for educational investments, which decrease emigrants' incentives to send remittances home (Attanasio and Rios-Rull, 2001, for Mexico). However, several studies found no link between private transfers and CCT programmes (Teruel and Davis, 2000, for Mexico; Fajnzylber and López, 2007, for Honduras and Nicaragua).

These links between education programmes and migration were further analysed using regression analysis (Box 5.3). The results show no statistically significant link between households benefiting from any education programme and having a household member emigrate in the five years prior to the study.⁵ There was also no link between households receiving remittances or having a member planning to emigrate (Table 5.4). Looking more specifically at CCT programmes, the results reveal no link between households benefiting from CCT programmes and migration decisions (either having an emigrant or planning to emigrate). However, receiving CCTs is negatively linked with the probability of receiving remittances. This supports the idea that government programmes can “crowd out” private transfers. However, the fact that CCT programmes are directed towards poor households suggests that the results need to be interpreted with some caution as it is hard to establish causality. While the analysis did control for household wealth (using an asset index proxy), more work is needed in order to fully understand the mechanisms linking CCT programmes, migration and remittances.

Box 5.3. The links between education policies and migration

To estimate the impact of education support programmes on the decision to emigrate, the following probit equation is applied:

$$\text{Prob}(\text{mig}_{hh}) = \beta_0 + \beta_1 \text{edu_policy}_{hh} + \gamma \text{controls}_{hh} + \delta_r + \varepsilon_i \quad (3)$$

where mig_{hh} represents household migration status, being a binary variable for the household either having at least one member planning to emigrate in the future (specification 1 in Table 5.4), having at least one emigrant who left in the five years prior to the survey (specification 2), or receiving remittances (specification 3). edu_policy_{hh} is the variable of interest and represents a binary variable indicating if the household has benefited from an education policy in the five years prior to the study (results presented in the upper part of the table). It takes on value “1” if the household has benefited from an education policy programme and “0” otherwise. controls_{hh} are set of observed household characteristics influencing the outcome.^a δ_r represents regional fixed effects and ε_{hh} is the randomly distributed error term.

In addition, cash-based programmes (CCT programmes) are analysed separately, and these results are presented in the lower part of the table.

Table 5.4. **Conditional cash transfers are linked to a lower likelihood of receiving remittances**

Dependent variable: Household with emigrant/remittances/member planning to emigrate			
Main variables of interest: Household benefited from education policy			
Type of model: Probit			
Sample: All households			
Variables of interest	Dependent variable		
	(1) Plan to emigrate	(2) Household has an emigrant (last 5 years)	(3) Household receives remittances
Household benefited from any education policy in the past 5 years	0.006 (0.022)	0.004 (0.020)	0.038 (0.024)
<i>Number of observations</i>	1 924	1 797	1 133
Conditional cash transfer programmes			
Household benefited from CCT programme	0.047 (0.038)	-0.051 (0.042)	-0.069* (0.035)
<i>Number of observations</i>	1 924	1 056	1 924

Note: Statistical significance is indicated as follows: ***: 99%, **: 95%, *: 90%. Standard errors are in parentheses and robust to heteroskedasticity. The analysis controls for households having an immigrant. Excluding immigrant households from the sample does not change the results.

a. The control variables include household size and size squared, household dependency ratio, a binary variable for urban location, the mean education level in the household, the number of children in age 6-17 and a proxy for household wealth through an asset index.

Investment and financial service policies and migration

Financial inclusion has been broadly recognised as critical for reducing poverty and achieving inclusive economic growth. The use of formal bank accounts, savings and payment mechanisms increases savings, empowers women, and boosts productive investment and consumption (Demirguc-Kunt et al., 2015). However, many households still lack access to the formal financial sector, and around 210 million individuals are still unbanked in Latin America and the Caribbean (World Bank, 2015). In 2014, 54% of adults (15 years and above) in the Dominican Republic had a bank account and 26% of adults were saving money in a formal institution (World Bank, n.d.). This makes the Dominican Republic one of the top-performing countries among the countries in the IPPMD sample when it comes to financial inclusion (OECD, 2017). Nonetheless, many individuals and households are still left outside the formal financial system.

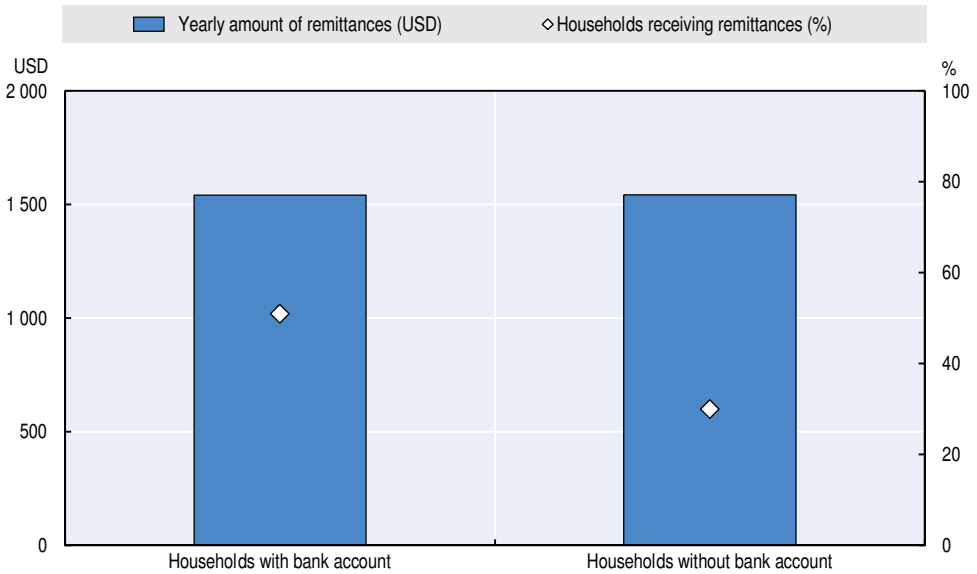
Financial inclusion does not seem to affect the level of remittances

Financial inclusion can strengthen the development impact of remittances by encouraging more savings, as well as better matching of savings with investment opportunities (UNDP, 2011). Channelling remittances through formal financial institutions is often more secure and can also contribute to the development of the financial system and make resources available to finance large-scale economic activities beyond the investments made by the recipient households.

The IPPMD household survey included a number of questions related to financial inclusion and financial literacy.⁶ The descriptive statistics show that only 36% of households in the sample have a bank account, leaving almost two-thirds of the households in the sample unbanked. The share is higher among households in urban areas (39%) than rural households (26%). There is however no difference in access to bank accounts for female- and male-headed households.

Access to the formal financial sector can facilitate the sending and receiving of higher levels of remittances, especially through formal channels. The IPPMD data show that households having a bank account are more likely to receive remittances. About half of the households having a bank account receive remittances (51%), compared to only 30% of households without a bank account (Figure 5.5). Having a bank account does however not seem to affect the amount of remittances that the household receives: the average annual amount of remittances received by households is about USD 1 500, regardless of whether the household has a bank account or not.

Figure 5.5. Households with bank accounts are more likely to receive remittances
 Share of households receiving remittances (%) and average amount of remittances received by the households in the past 12 months (USD), by possession of a bank account



Source: Authors' own work based on IPPMD data.

The relationship between having a bank account and remittance patterns was further investigated through regression analysis, controlling for other factors that could potentially affect remittance receipt and amounts (Box 5.4). In line with the descriptive statistics in Figure 5.5, the results confirm that having a bank account increases the probability that a household receive remittances, but is not linked to the amount of remittances the household receives.

Having a bank account may also stimulate the sending of more remittances through formal channels. Findings from the IPPMD comparative report show that households that are banked are more likely to receive remittances through formal channels in four out of seven countries analysed (OECD, 2017). However, fewer than 2% of the Dominican remittance-receiving households in the IPPMD sample receive remittances through informal channels, making the sample too small for further analysis. The most commonly used channel is to send money via money transfer operators (76% of households), while only about 2% use cell phones and 2% use bank transfers. A remittance market dominated by large money transfer operators may lead to higher remittance transfer costs. In the first quarter of 2017, the average fee for sending money to the Latin America and Caribbean (LAC) region was 6% of the amount sent. The average fee for sending remittances from the United States, the top destination for Dominican migrants,

was 6.3%. This is slightly higher than the LAC average of 5.8%, but below the global average of 7.45% (World Bank, n.d). It is much higher than the 3% target specified by the Addis Ababa Action Agenda (UN, 2015), however.

Box 5.4. The links between bank accounts and remittances

Regression analysis was applied to estimate the link between bank accounts and remittance patterns, using the following model

$$\text{Ln}(\text{remit})_{hh} = \beta_0 + \beta_1 \text{bank_account}_{hh} + \gamma \text{controls}_{hh} + \delta_r + \varepsilon_{hh} \quad (4)$$

where the dependent variable *remit* represents a binary variable for household receiving remittances (column 1, Table 5.5) or the amount of remittances the household receives (column 2, Table 5.5). *bank_account*_{hh} represents a binary variable indicating if the household has a bank account, where “1” denotes a household with a bank account and “0” if not. *controls* are a set of observed household and individual characteristics influencing the outcome.^a δ_r represents regional fixed effects and ε_{hh} is the randomly distributed error term.

Table 5.5. **Having a bank account is linked to receiving remittances, but not to the amounts received**

Dependent variable: Amount of remittances received/household receives remittances		
Main variables of interest: Household has a bank account		
Type of model: Probit/OLS		
Sample: All households receiving remittances		
Variables of interest	Dependent variables	
	(1) Household receive remittances	(2) Amount of remittances, urban areas
Household has a bank account	0.399*** (0.071)	-409.7
<i>Number of observations</i>	1 922	(370.5)

Note: Statistical significance is indicated as follows: ***: 99%, **: 95%, *: 90%. Standard errors are in parenthesis and robust to heteroskedasticity.

a. The control variables include household size and size squared, household dependency ratio, a binary variable for urban location (column 1), the mean education level in the household, a binary variable for having a female head, the number of children in age 6-14 and a proxy for household wealth through an asset index. The model also controlled for households having an immigrant.

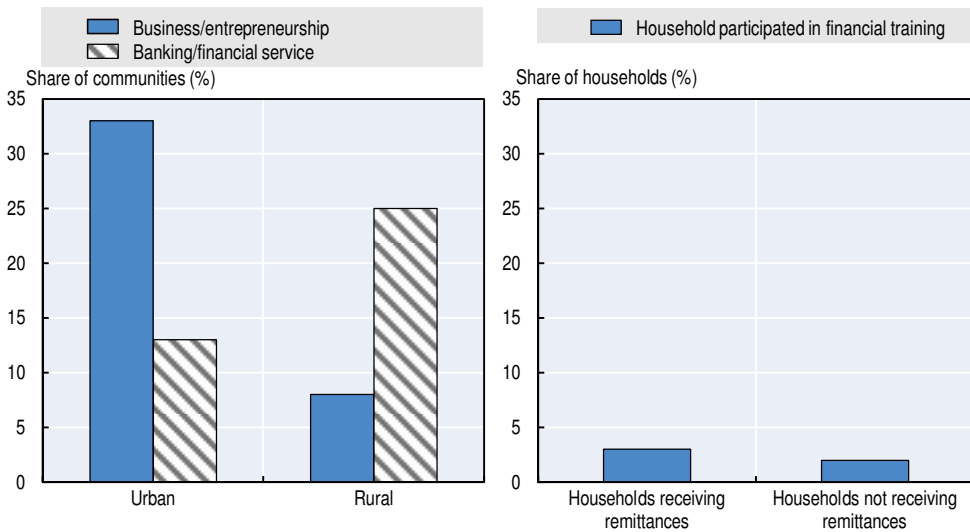
There is scope to expand financial literacy training

Financial training programmes and business management courses help to build financial literacy, which can encourage investment in productive assets. In order to enable households to maximise the returns to their remittance investments, they need to have information on the investment products available, as well as saving and investment opportunities. Knowledge about

business management is also important for households that might want to invest in setting up a business. This applies to both households receiving remittances and households in communities where remittances inflows are high and generally benefitting the local economy.

The IPPMD household survey asked households whether they had participated in a financial training programme in the previous five years. Only 3% of households receiving remittances had done so, and only 2% of households not receiving remittances (Figure 5.6). This participation rate is the fourth lowest in the IPPMD sample (OECD, 2017). The community data (Chapter 3) further show that few of the surveyed communities offer financial training courses (13% in urban areas and 25% in rural areas) or courses related to business management (33% in urban areas and 8% in rural areas). This might be a missed opportunity to channel remittances into more productive investments. Evidence from another study in the Dominican Republic shows that training in finance and financial accounting positively affects the management practices of small businesses (Drexler, Fischer and Schoar, 2014).

Figure 5.6. Household participation in financial training programmes is very low
 Share of communities which offer financial and business trainings (left graph); share of households participating in financial training programmes (right graph)



Source: Authors' own work based on IPPMD data.

In sum, sectoral policies could help create a more enabling environment by for example introducing measures to expand financial inclusion and provide financial literacy training for migration and remittance funds to be used more

efficiently. Expanding financial inclusion could also stimulate more competition among service providers, which in turn would contribute to lowering the costs of transferring money.

Social protection and health policies and migration

Chapter 4 explored the impact of immigration on the social protection and health sectors, finding little evidence that immigrants in the Dominican Republic are net beneficiaries of public payments or healthcare. Here we ask how social protection and health policies might influence migration decisions. The lack of social protection or health coverage might prompt people to emigrate to a country where coverage is better, or to seek work in order to send remittances home to help the household make up for the shortcomings in social protection or health coverage. Equal social protection and health access may also improve immigrant integration, and can determine the level of contribution an immigrant makes to the host country (OECD/European Union, 2015; Huber, 2015).

Dominican law and the Constitution of the Republic guarantee universal access to healthcare to anyone, no matter their descent, race, nationality or immigration status. For instance, public hospitals cannot deny medical services based on nationality or legal status. The lack of adequate health and social protection coverage for everyone has been an issue in the Dominican Republic, and the government has set out actions in the last years to improve it. In 2001, the country launched a large-scale reform of its health system with the goal of achieving universal access. This saw the creation of the Dominican Social Security System (SDSS). The Dominican Republic's 2010-30 National Development Strategy also sets out to guarantee health and comprehensive social security for everyone (MEPyD, 2009), while a ten-year health plan (2006–2015) addresses the principal challenges necessary to transform the country's health situation (MISPAS, 2006). In practice, implementing universality in health access has been difficult, and many individuals and regions remain without adequate coverage. While health services are supposedly free, only 44% of individuals in a 2007 survey said they did not spend any money on health services, down from 51% in 2002 (Rathe, 2010). Social protection coverage is also low. In 2013, only 1.4 million people paid into the SDSS, one of the lowest rates in the region, and equating to only 58% of workers in the country. Only 15% of adults over the age of 65 were receiving a retirement pension (IDB, 2014).

Many workers obtain their health coverage, as well as other social benefits, through formal labour contracts. Labour contracts not only provide explicit social benefits, they also facilitate and empower workers with the option of legal recourse or union coverage if desired. Yet, the share of non-agricultural

informal jobs⁷ in total employment is high, at about 50% (ILO, 2014). The IPPMD survey collected data on workers' labour contracts and the type of benefits they enjoyed through their employment. Amongst the 1 273 surveyed individuals who were working, 789 (62%) had a formal labour contract, and 577 (45%) had a formal open-ended labour contract (with no explicit end date). In addition, 594 (47%) claimed to have health benefits tied to their employment, while 512 (41%) had pension benefits. In addition, statistical convention measures informality rates based on the non-agricultural segment of the population (ILO, 2013). Amongst the group of individuals not working in agriculture⁸, 64% (729 of 1 137) had formal labour contracts.

Overall, these rates show that there is generally good coverage of work-related social protection in the Dominican Republic, compared to many developing countries, including amongst IPPMD partner countries (ILO, 2013; OECD, 2017).

Immigrants in urban areas are less likely to have access to social security and health benefits than native-born people

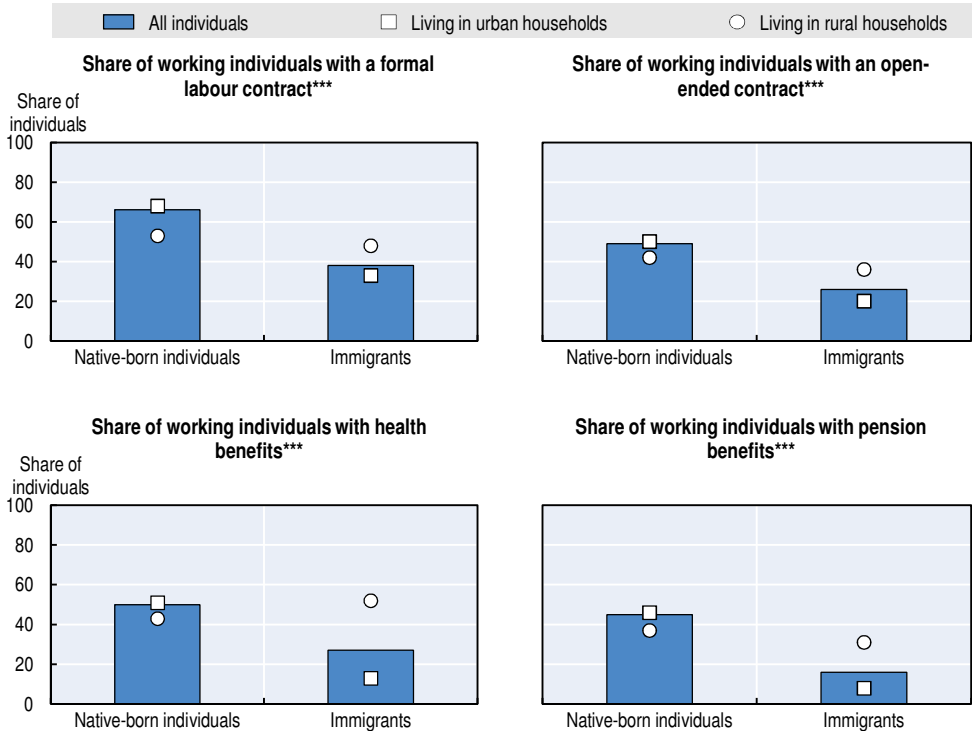
The IPPMD basic descriptive statistics found little link between social protection, emigration and remittances (not shown). However, they do show that immigrants are significantly less likely to be covered than native-born individuals (Figure 5.7). Overall, immigrants are less likely to have a formal labour contract (38% vs. 66%), an open-ended contract (26% vs. 49%), health benefits (27% vs. 50%) and pension benefits (16% vs. 45%). Looking specifically at the non-agricultural sample did not change the magnitude of these differences. It should be noted that health and pension benefits may be contingent on having a formal sector job. For instance, formal contracts may include benefits, other than salary, to the worker.

These differences are particularly acute in urban areas, while in rural areas native-born individuals and immigrants are more equal. In fact, a higher share of immigrants has access to health benefits than native-born individuals in rural areas. There may be three different reasons for this:

1. There are fewer good jobs in rural areas, thus levelling the playing field between the groups. However, this does not necessarily seem to be the case, as share in access does not seem to be particularly lower in rural areas, compared to urban ones (Figure 5.7).
2. Immigrants may be working for larger and more established enterprises (ie. sugar cane industries) in rural areas, thus making access to several social protection benefits easier.
3. Immigrants may prefer to live in cities than rural areas, despite the fact that competition for formal sector jobs in cities is fiercer.

Figure 5.7. **Immigrants in urban areas have less access to social protection**

Share of individuals with access to social protection, by whether individual is an immigrant



Note: A chi-squared test was used to measure the level of statistical significance between each set of groups (all individuals). The sample includes all individuals, whether they are working in agriculture or not. Results that are statistically significant are indicated as follows: ***: 99%, **: 95%, *: 90%.

Source: Authors' own work based on IPPMD data.

Regression analysis was used to probe these links further (Box 5.5). This firmly confirms that social protection benefits are less likely to be provided to immigrants (Table 5.6). These include formal labour contracts, open-ended contracts, health benefits and pension benefits. Regression analysis also confirmed that this finding is specifically statistically valid for urban areas. This is true for both men and women, although the difference is visibly larger for women. Limiting the sample to workers with formal labour contracts also shows that immigrants are less likely to have an open-ended contract, although the difference is not statistically significant.

As noted earlier, it may also be the case that health and pension benefits are contingent on having a formal sector job, as contracts may include benefits, other than salary. However, running the regressions within the subsample of individuals with formal sector jobs revealed that immigrants are still less likely to have such benefits through their employment.

Box 5.5. The links between social protection, health and migration

To estimate the probability that social protection or health coverage affect a migration-related outcome, the following probit regression model was estimated:

$$\Pr(\text{socpro}_i) = \beta_0 + \beta_1 \text{immig}_i + \gamma \text{controls}_{i,hh} + \varepsilon_i \quad (5)$$

where the unit of observation is the individual i and the dependent binary variable (socpro_i) takes on a value of 1 if the individual has particular social protection coverage and 0 otherwise. immig_i represents a dummy variable taking the value of 1 if the individual is an immigrant. $\text{controls}_{i,hh}$ stands for a set of individual and household-level regressors.^a Standard errors, ε_i , are robust to heteroskedasticity.

Results are presented in Table 5.6. Column (1) presents results on whether a working individual has a formal labour contract, column (2) on whether a working individual has an open-ended contract, column (3) on whether a working individual has health benefits, and column (4) on whether a working individual has pension benefits.

Table 5.6. **Urban immigrants are less likely to benefit from social protection**

Dependent variable: Social protection coverage				
Main variables of interest: Individual is an immigrant				
Type of model: Probit				
Sample: Employed individuals (15+)				
Variables of interest	Dependent variables			
	(1) Individual has a formal labour contract	(2) Individual has an open-ended labour contract	(3) Individual receives health benefits from employment	(4) Individual has a pension programme
Individual is an immigrant	-0.170*** (0.047)	-0.154*** (0.044)	-0.160*** (0.045)	-0.205*** (0.041)
<i>Number of observations</i>	1 200	1 200	1 198	1 193
Samples based on gender and household location				
Men only	-0.149*** (0.050)	-0.126*** (0.047)	-0.152*** (0.048)	-0.201*** (0.043)
Women only	-0.509*** (0.126)	-0.431*** (0.103)	n/a	n/a
Living in urban households only	-0.258*** (0.053)	-0.224*** (0.050)	-0.323*** (0.047)	-0.337*** (0.039)
Living in rural households only	0.044 (0.101)	0.004 (0.100)	0.087 (0.105)	0.047 (0.102)

Note: Statistical significance is indicated as follows: ***: 99%, **: 95%, *: 90%. Results reflect marginal effects. Coefficients reflect marginal effects. Standard errors are in parentheses and robust to heteroskedasticity. "N/a" refers to the fact that the sample sizes are too small to analyse.

a. Control variables for the model include individual age, education level (Chapter 3), gender, household wealth, household size and whether the household is in a rural region. Due to the small sample sizes, a fixed effect for the household's province was not included in the model.

This suggests, therefore, that for the Dominican Republic to better integrate and benefit from its immigrant population, it needs to address the fact that immigrants have less access to formal sector jobs in urban areas than native-born individuals.

Conclusions

This chapter has identified some links between sectoral policies and migration in the Dominican Republic. The findings show that several policies do have an unintentional influence on migration. For example, vocational training programmes are positively linked to future plans to emigrate among women and among the urban population, potentially because they equip would-be migrants with skills that are useful in the international labour market. Households with an official title to their land are more likely to have a member who has emigrated, potentially because by giving more secure access to land, it reduces the risk of people losing their land when they emigrate.

Education programmes in the Dominican Republic do not seem to have any significant influence on households' emigration decisions. This is partly explained by the nature of the policy programmes, which were mainly in-kind distribution programmes rather than cash-based programmes. The findings do however suggest that conditional cash transfer (CCT) programmes may reduce the need to send remittances home, as households benefiting from CCTs are less likely to receive remittances.

Furthermore, participation in financial training programmes is very low among both migrant and non-migrant households in the Dominican Republic and many households are still unbanked. There is hence scope to expand households' access to bank accounts and financial training programmes to encourage the sending of remittances through formal channels and to enable households to invest them productively. Encouraging more competition in the remittance market could also help decrease remittance transfer costs.

Finally, immigrants benefit to a lesser extent from many of the policy programmes included in the survey. They are less likely to benefit from education policies, and very few immigrants found their jobs through government employment agencies. Immigrants in urban areas are also less likely to have access to secure jobs, social security and health benefits. Ensuring that immigrants have access to formal labour contracts and benefit from policy programmes in key areas such as education, social protection and health is important to allow them to integrate and to contribute to the country.

Notes

1. The small sample of immigrants having participated in vocational training programmes limits further in-depth analysis of the link between immigration and vocational training.

2. See Chapter 3 for the methodological background on the regression analyses used in this project.
3. See [https://dominantoday.com/dr/local/2015/9/17/Agro-chief-urges-land-titling-to-boost-farm-income./](https://dominantoday.com/dr/local/2015/9/17/Agro-chief-urges-land-titling-to-boost-farm-income/)
4. Cash-based educational support is given to finance child and youth education and may hence not directly finance migration. But because money is interchangeable, the funds could free up resources in the household budget that enables the household to send an emigrant.
5. The IPPMD survey collected information on households benefiting from education programmes in the five years prior to the survey, but did not ask households to specify in what precise year(s) they had benefited from a policy. In order to restrict the analysis to households that benefited from a policy and had members emigrating at around the same time, households with emigrants who left more than five years ago are excluded.
6. The household survey also included questions on policies related to business operations, such as tax subsidies. These questions were however only asked to households with businesses with more than four employees, and so the sample is too small for further analysis.
7. As per statistical convention, agricultural workers are not included in rates of informal employment.
8. Agricultural occupations are defined by agricultural, forestry and fishery workers (ISCO category 6), as well as those working in elementary occupations in those fields (ISCO category 92).

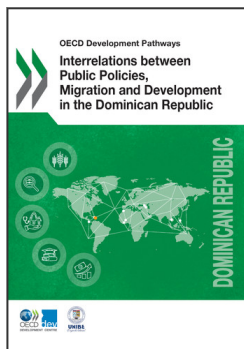
References

- Alwang, J. and P.B.Siegel (2004), "Export commodity production and broad-based rural development: coffee and cocoa in the Dominican Republic", *World Bank Policy Research Paper*, World Bank, Washington, DC, <http://dx.doi.org/10.1596/1813-9450-3306>.
- Angelucci, M. (2004), "Aid and migration: an analysis of the impact of Progresca on the timing and size of labour migration", *IZA Discussion Paper Number 1187*, Institute of Labor Economics, Bonn.
- Attanasio, O. and V. Rios Rull (2000), "Consumption smoothing in island economies: Can public insurance reduce welfare?", *European Economic Review*, 44, pp. 1225-58.
- Azuara O. (2009), "Does poverty alleviation increase migration? Evidence from Mexico", *MPRA Paper 17599*, World Bank, Washington, DC, https://mpra.ub.uni-muenchen.de/17599/1/MPRA_paper_17599.pdf Working Paper 3306.
- Behrman, J., S. Parker and P. Todd (2008) "Medium-term impacts of the Oportunidades conditional cash transfer program on rural youth in Mexico", in Klasen, S. and Nowak-Lehmann, F. (eds.), *Poverty, Inequality, and Policy in Latin America*, MIT Press, Cambridge, MA.
- de Janvry, A., K. Emerick, M. Gonzalez-Navarro and E. Sadoulet (2014), "Delinking land rights from land use: certification and migration in Mexico", mimeo, https://www.ocf.berkeley.edu/~kemerick/certification_and_migration.pdf
- Drexler, A., G. Fischer and A. Schoar (2014), "Keeping it simple: financial literacy and rules of thumb", *American Economic Journal: Applied Economics*, Vol. 6, No.2.
- Demirguc-Kunt, A, L. Klapper, D. Singer and P. Van Oudheusden (2015), "The Global Findex Database 2014: Measuring financial inclusion around the world", *Policy Research Working Paper*, No. 7255, World Bank, Washington, DC, <http://documents.worldbank.org/>

curated/en/187761468179367706/The-Global-Findex-Database-2014-measuring-financial-inclusion-around-the-world.

- Fajnzylber, P. and J.H. López (2007), *Close to Home: The Development Impact of Remittances in Latin America*, Conference Edition, International Bank for Reconstruction and Development/World Bank, Washington, DC.
- FAO (2016), “Country fact sheet on food and agriculture policy trends: Dominican Republic”, Food and Agriculture Organization of the United Nations, Rome.
- Hagen-Zanker, J. and C.L. Himmelstine (2013), “What do we know about the impact of social protection programmes on the decision to migrate?”, *Migration and Development*, Vol. 2, No. 1, pp. 117-131.
- Huber, P. (2015), “What institutions help immigrants integrate?”, *WWW for Europe Working Paper Number 77*, www.foreurope.eu/fileadmin/documents/pdf/Workingpapers/WWWforEurope_WPS_no077_MS18.pdf.
- IDB (2014), “Dominican Republic will improve social security coverage and efficiency in health care spending with support from IDB”, Inter-American Development Bank, News Release, Washington, DC, www.iadb.org/en/news/news-releases/2014-12-12/social-security-and-health-in-dominican-republic,11016.html.
- ILO (2013), *Women and Men in the Informal Economy: A Statistical Picture*, International Labor Organization, Geneva, www.ilo.org/stat/Publications/WCMS_234413/lang-en/index.htm.
- ILO (2014), “Thematic labour overview: transition to formality in Latin America and the Caribbean”, International Labor Organization, Regional Office for Latin America and the Caribbean, Lima.
- MEPyD (2009), “Documento base de la propuesta de Estrategia Nacional de Desarrollo 2010-2030: un viaje de transformación hacia un país mejor”, Ministerio de Economía, Planificación y Desarrollo/Consejo Nacional de Reforma del Estado, <http://200.88.158.22/mepyd/estrategia-nacional-de-desarrollo-2030/documentos-de-consulta-para-la-estrategia-nacional-de-desarrollo-2010-2030/>.
- MISPAS (2006), *2006-15 Decadal Health Plan*, Ministry of Public Health and Social Assistance, Republic of Dominican Republic, Santo Domingo.
- OECD (2017), *Interrelations between Public Policies*, *Migration and Development*, OECD Publishing, <http://dx.doi.org/10.1787/9789264265615-en>.
- OECD/European Union (2015), *Indicators of Immigrant Integration 2015: Settling In*, OECD Publishing, <http://dx.doi.org/10.1787/9789264234024-en>.
- Poyo, J. (2003), “Report on the banking, services to the agricultural sector and financial and institutional analysis of CONACADO”, report prepared for the Commodity Risk Management Group, World Bank, Washington, DC, March.
- Rathe, M. (2010), “Dominican Republic: Can universal coverage be achieved?”, *World Health Report Background Paper 10*, World Health Organization, Geneva.
- Teruel, G., and B. Davis (2000). “Final report: An Evaluation of the Impact of PROGRESA Cash payments on Private Inter-Household transfers”, International Food Policy Research Institute, Washington, DC.
- Stecklov, G., P. Winders, M., Stampini and B. David (2005), “Do conditional cash transfers influence migration? A study using experimental data from Mexican PROGRESA program”, *Demography* 42 (4), pp. 769-790.
- UN (2015), *Addis Ababa Action Agenda of the Third International Conference on Financing for Development*, United Nations, New York, https://sustainabledevelopment.un.org/content/documents/2051AAAA_Outcome.pdf.

- UNDP (2011), *Towards Human Resilience: Sustaining MDG Progress in an Age of Economic Uncertainty*, United Nations Development Programme, New York.
- USDS (2015), "Dominican Republic Investment Climate Statement 2015", United States Department of State, Washington, DC, June.
- World Bank (n.d.), *Remittance Prices Worldwide* (database), <http://remittanceprices.worldbank.org> (accessed 14 May 2017).
- World Bank (n.d.), *Global Financial Inclusion Database*, <http://databank.worldbank.org/data/reports.aspx?source=global-findex> (accessed 27 April 2017).
- World Bank (2017), "Agricultural, value added (% of GDP)", *World Development Indicators* (database), <http://data.worldbank.org/indicator/NV.AGR.TOTL.ZS> (accessed 1 February 2017).
- World Bank (2016), *Building a Better Future Together: Dominican Republic policy notes*, World Bank Group, <http://documents.worldbank.org/curated/en/949151486105331993/pdf/112502-WP-P156995-PUBLIC-DRPolicyNotesenglishfinal.pdf>.
- World Bank (2015), "The Global Findex Database 2014: Financial Inclusion in Latin America and the Caribbean", *Findex notes*, no. 2014-4, <http://pubdocs.worldbank.org/en/856261461702868199/N4-LAC.pdf>.
- World Bank (2013), "Conditional cash transfers and subsidies in the Dominican Republic", webpage, 17 April 2013, World Bank, www.worldbank.org/en/results/2013/04/17/improving-the-quality-of-public-spending-and-providing-social-protection-to-the-poor-in-the-dominican-republic.



From:
**Interrelations between Public Policies, Migration
and Development in the Dominican Republic**

Access the complete publication at:
<https://doi.org/10.1787/9789264276826-en>

Please cite this chapter as:

OECD/Centro de Investigaciones Económicas, Administrativas y Sociales (2017), "How do sectoral policies affect migration in the Dominican Republic?", in *Interrelations between Public Policies, Migration and Development in the Dominican Republic*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/9789264276826-9-en>

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to rights@oecd.org. Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at info@copyright.com or the Centre français d'exploitation du droit de copie (CFC) at contact@cfcopies.com.