OECD Development Pathways

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

DOMINICAN REPUBLIC

OECD **dev**
DEVELOPMENT CENTRE

UNIBE
¡Forjando líderes!

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

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 the member countries of the OECD or its Development Centre, or CIES-UNIBE.

This document, as well as any data and 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.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Photo credits: Cover design by the OECD Development Centre.

Corrigenda to OECD publications may be found on line at: *www.oecd.org/publishing/corrigenda*.

Foreword

T he Dominican Republic has historically been a country of destination for migrants, but over time has shifted to become a net emigration country. In recent years, the country's economic growth has been one of the strongest in the region, driving improvements in a number of key development indicators. Despite this, people continue to leave the Dominican Republic; today an estimated 1.3 million Dominicans live overseas – 12% of the population. The earnings they send home contributed 8% to the national income in 2015 – a sum of over USD 5.2 billion. The country also continues to attract immigrants, who now constitute 4% of the population.

These significant migration and remittance flows embody significant development potential, but this opportunity is not fully reflected in the country's policy framework. There is scope to further include migration in the development policy agenda. More empirically based evidence is crucial to ensure that policy responses in the field of migration and development are coherent and well-informed.

In 2013, the OECD Development Centre and the European Commission launched a project to provide empirical evidence on the interrelations between public policies, migration and development (IPPMD) in ten countries around the world, including the Dominican Republic. The findings from the Dominican Republic, outlined in this report, are the culmination of four years of fieldwork, empirical analysis and policy dialogue conducted in collaboration with the Development Centre and the Centro de Investigaciones y Estudios Sociales (CIES), and with strong support from the Ministerio de Economía, Planificación y Desarrollo.

The report explores the links between the various dimensions of migration and key policy sectors – the labour market, agriculture, education, and investment and financial services – in the Dominican Republic. It analyses both the impact of migration on these sectors, as well as the impact of these policy sectors on migration outcomes, such as the decision to migrate, the sending and use of remittances, the success of return migration and the integration of immigrants. The empirical analysis draws on quantitative data collected from surveys of 2 037 households and 54 communities, enriched by 21 qualitative stakeholder interviews, and discussions with key stakeholders and policy makers.

This report is published in parallel with nine other country reports – presenting the findings from the other IPPMD partner countries – and a comparative report. The comparative report provides a cross-country overview drawing on the data and analysis in the ten partner countries. The Dominican report is intended as a baseline for improving

understanding of the role of public policies in the migration and development nexus in the Dominican Republic. It also aims at fostering policy dialogue and providing guidance on how best to integrate migration into national development strategies. Building on discussions with key stakeholders and policy makers in the Dominican Republic, the OECD Development Centre and CIES look forward to continuing their co-operation to enhance the positive contribution of migration to the nation's sustainable development.

Mario Pezzini
Director of the Development
Centre and Special Advisor
to the Secretary-General on
Development, OECD

Wilfredo Lozano
Executive Director
Centro de Investigaciones y Estudios Sociales,
La Universidad Iberoamericana

Acknowledgements

Table of contents

Tables

Acronyms and abbreviations

CCT	Conditional cash transfer
CIES	*Centro de Investigaciones y Estudios Sociales* (Centre for Research and Social Studies)
DGM	*Dirección Nacional de Migración* (General Directorate of Migration)
DOP	Dominican peso
ENI-2012	*Primera Encuesta Nacional de Inmigrantes* (First National Survey of Immigrants)
EU	European Union
GDP	Gross domestic product
IPPMD	Interrelations between Public Policies, Migration and Development
JCE	*Junta Central Electoral* (Central Electoral Board)
LAC	Latin America and the Caribbean
MEPyD	Ministry of Economy, Planning and Development (*Ministerio de Economía, Planificación y Desarrollo*)
OECD	Organisation for Economic Co-operation and Development
OLS	ordinary least squares
ONE	*Oficina Nacional de Estadística* (National Statistics Office)
PSU	Primary sampling unit
SENAE	National Service of Employment
UN DESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
USD	United States dollars

Facts and figures of the Dominican Republic

(Numbers in parentheses refer to the OECD average)

The land, people and electoral cycle

Population (million)[c]	10.5	Official language	Spanish
Under 15 (%)[c]	30 (18)	Form of government	Constitutional republic
Population density (per km^2)[c]	218 (37)	Last election	May 15th 2016
Land area (thousand km^2)	48.3		

The economy

GDP, current prices (billion USD)[c]	68.1	Exports of goods and services (% of GDP)[c]	24.7 (28.5)
GDP growth[c]	7.0 (2.2)	Imports of goods and services (% of GDP)[c]	29.3 (28.2)
GDP per capita, PPP (thousands, constant 2011 international USD)[c]	13.4 (38.0)	GDP shares (%)[c]	
Inflation rate[c]	0.8 (0.2)	Agriculture, forestry and fishing	5.8 (1.6)
General government total expenditure (% of GDP)[d]	17.6	Industry, including construction	27.3 (24.2)
General government revenue (% of GDP)[d]	14.4	Services	66.9 (74.2)

Well-being

Life satisfaction (average on 1-10 scale)[c]	5.1 (6.5)	Proportion of population under national minimum income standard (%)[c]	32.4
Life expectancy[b]	74 (80)	Unemployment rate (%)[b]	15.0 (7.3)
Income inequality (Gini coefficient)[a]	47 (32)	Youth unemployment rate (ages 15 to 24, %)[b]	31.4 (16.4)
Gender inequality (SIGI index)[b]	0.04 (0.02)	Satisfaction with the availability of affordable housing (% satisfied)[c]	47 (46)
Labour force participation (% of 15 to 64 year old)[b]	69.2 (70.7)	Enrolment rates[b]	
Employment-to-population ratio (15 and over, %)[b]	55.1 (55.2)	Primary (Net)	84 (96)
Population with access to improved sanitation facilities (%)[c]	84.0	Secondary (Gross)	78 (104)
Mean years of schooling[c]	7.8	Tertiary (Gross)	48 (70)

Notes: a) Data from 2013; b) Data for 2014; c) Data for 2015; d) Data for 2016.

Sources: World Bank, *World Development Indicators* (database), *http://data.worldbank.org/*, Washington, DC; OECD, SIGI Social Institutions and Gender index, *http://www.genderindex.org/*; IMF, *World Economic Outlook Database*, International Monetary Fund, April 2017 edition, Washington, DC; UNESCO Institute for Statistics, Data Centre, *http://data.uis.unesco. org/*; Gallup (2015), *Gallup World Poll* (database), Gallup Organisation.

Executive summary

International migration – both emigration and immigration – are a significant feature in the Dominican Republic, offering substantial potential for development. Although its role is increasingly being acknowledged in national development planning, migration's development potential is not fully reflected in the policy framework. The Interrelations between Public Policies, Migration and Development (IPPMD) project – managed by the OECD Development Centre and co-financed by the European Union – was conceived to enable the Dominican Republic to maximise this potential. It explores:

1. how migration's multiple dimensions (emigration, remittances, return migration and immigration) affect some key sectors for development, including the labour market, agriculture, education, investment and financial services, and social protection and health

2. how public policies in these sectors enhance, or undermine, the development impact of migration.

This report summarises the findings and main policy recommendations stemming from empirical research conducted between 2013 and 2017 in collaboration with the Centre for Research and Social Studies (*Centro de Investigaciones y Estudios Sociales*) at the University Iberoamericana and the Ministry of Economy, Planning and Development (*Ministerio de Economía, Planificación y Desarrollo*). Data were gathered from a survey of 2 037 households, interviews with 56 local authorities and community leaders, and 21 in-depth stakeholder interviews. Robust statistical analysis, accounting for the Dominican Republic's political, economic and social contexts, sheds new light on the complex relationship between migration and sectoral policies.

Policy coherence is critical to make migration work for development

The research finds that the various dimensions of migration – emigration, remittances, return migration and immigration – have both positive and negative effects on key sectors of the Dominican economy. Similarly, sectoral

policies have indirect and sometimes unexpected impacts on migration and its role in development. Understanding these impacts is critical for developing coherent policies.

Labour market policies can encourage emigration

Migration and remittances affect household labour supply in different ways. Most Dominican Republic emigrants surveyed are of working age (95%) and around 60% were employed before leaving; their departure thus reduces households' labour supply. This reduction is further reinforced by the receipt of remittances – women especially tend to withdraw from the labour market when their household receives remittances. The analysis shows that in rural areas emigrants are being replaced by hired-in labour, thus potentially helping to revitalise the labour market. Immigrants also help partly to fill the labour gaps, especially in low-skilled sectors such as construction and agriculture.

In what way do Dominican labour policies affect migration? Surprisingly it seems that vocational training programmes may encourage people to emigrate – especially women and urban residents – by making them employable abroad. The use of government employment agencies is very low in the sample, especially among immigrants. Clearly greater policy coherence is necessary in these areas.

Agricultural land titles may facilitate emigration

Emigration may cause agriculture households to draw on the external labour market, which can relieve congestions in the agriculture labour market. The findings show that emigration stimulates the hiring of external workers in the agriculture sector in the Dominican Republic, which may help revitalise the agriculture labour market. One agricultural policy found to have a bearing on migration was land titling, which the analysis suggests may encourage emigration. Formal titles to land can help develop land markets and allow households to use land as collateral. In addition, by securing ownership, rural residents do not fear losing the land when they emigrate. The analysis found that having an official land title is positively linked to a household also having an emigrant. Furthermore, the results show no discrimination in land titles: immigrants are as likely as native-born land owners to have titles to their land.

Migration helps improve access to education, except for immigrants

Remittances are often invested in education, according to the analysis. Households with an emigrant and/or return migrant spend more on education than households without migrants. Private education seems to be especially linked to return migration: 43% of children living in return migrant households attend private school, compared to 17% in other households. Return migration also builds human capital through the new skills acquired abroad. Of the

countries in the IPPMD project, return migrants to the Dominican Republic are the most likely to have obtained education while abroad. However, immigrant households are failing to access education: young people (aged 15-22) in immigrant households are less likely to attend school than their native-born peers, and are also less likely to benefit from government education programmes. The country's most popular education support programmes – mainly free text books and school meals – have little impact on household migration decisions, probably because they have limited income impact.

Low rates of financial inclusion and literacy are undermining investment

Overall, 22% of the households in the Dominican sample own a business, one of the lowest shares among the IPPMD countries. While remittances are positively associated with business ownership, this is true only in urban areas. Return migration and immigration do not seem to be linked with business ownership. One explanation for the weak link between migration and productive investments may be that household access to the financial sector is limited, and participation in financial training programmes is very low. Almost two-thirds of the sampled households are unbanked and only a few have participated in a financial training programme in the past five years (3% of remittance-receiving households and 2% of households without remittances). Those households with a bank account were more likely to receive remittances, although this does not affect the amount of remittances received.

Immigrants are less covered by social protection and health care

One of the major controversies linked to migration is the degree to which individuals contribute to or draw on the social protection and health system. Immigrants, for instance, are often criticised for being net users of health and social protection services, even though they can help finance such systems by paying taxes. The findings of the Dominican Republic IPPMD survey show that immigrant households are the least likely to receive public social transfers (6% versus 24% for households without immigrants). Furthermore, immigrants are less likely to benefit from social protection, health and pension benefits, including those linked to formal labour contracts, open-ended contracts. When it comes to the use of health facilities, the analysis shows that immigrants and native-born individuals use them at the same rate.

The way forward: Integrate migration into sectoral and national development strategies

Migration can benefit economic and social development in the Dominican Republic, but its potential is not yet fully realised. Many sectoral policy makers do not yet sufficiently take migration into account in their areas of influence,

and some policies seem to be inadvertently contributing to emigration. Migration needs to be considered in the design, implementation, monitoring and evaluation of relevant sectoral development policies and a more coherent policy framework across ministries and at different levels of government would make the most of migration. Specific actions include:

- Refine and target vocational training programmes to better match skills demand with supply. Mapping labour shortages and strengthening co-ordination mechanisms with the private sector are important steps.

- Tie land-titling programmes to migration and development schemes, such as increasing the coverage of money transfer operators in rural areas, creating programmes to channel remittances towards agricultural investment and to facilitate investment and integration by return migrants in rural areas.

- Enforce and ensure quality and access to public and private educational institutions to meet the higher demand for good education driven by remittances and return migration.

- Increase financial literacy and entrepreneurial skills among households in communities with high emigration rates to boost remittance investment.

- Increase *de jure*, but also *de facto*, universal access to social protection, such as pension plans, medical benefits, labour union membership and formal labour contract provisions, especially in rural areas.

Chapter 1

Integrating migration and development in the Dominican Republic: Overview and policy recommendations

The Dominican Republic is missing opportunities to harness the development potential embodied in its high rates of both emigration and immigration. The Interrelations between Public Policies, Migration and Development (IPPMD) project was conducted in the Dominican Republic between 2013 and 2017 to explore, through both quantitative and qualitative analysis, the two-way relationship between migration and public policies in five key sectors: the labour market, agriculture, education, investment and financial services, and social protection and health. This chapter provides an overview of the project's findings for the Dominican Republic, highlighting the potential for migration in many of its dimensions (emigration, immigration, remittances and return migration) to boost development, and analysing the sectoral policies that will allow this to happen.

The Dominican Republic has historically been a country of destination for migrants, attracting immigrant workers from neighbouring countries to its sugar plantations. International emigration took off in the 1960s, and in more recent decades has shifted to become a net emigration country. Between 1990 and 2000, the number of Dominicans in the United States nearly doubled. Remittances from emigrants abroad reached over USD 5.2 billion in 2015 (World Bank, 2016). The migration flows bring both opportunities and challenges to the country. The key question now is how to create a favourable policy environment, across all relevant sectors to enhance the positive, and minimise the negative, impacts of migration.

This report details the Dominican findings of a ten-country study on the interrelations between public policies, migration and development (IPPMD; Box 1.1). It aims to provide policy makers with empirical evidence of the role played by migration in policy areas that matter for development. It also explores the influence on migration of public policies not specifically targeted at migration. This chapter provides an overview of the findings and policy recommendations.

Box 1.1. **What is the IPPMD project?**

In January 2013, the OECD Development Centre launched a project, co-funded by the EU Thematic Programme on Migration and Asylum, on the **Interrelations between public policies, migration and development: case studies and policy recommendations** (IPPMD). This project – carried out in ten low and middle-income countries between 2013 and 2017 – sought to provide policy makers with evidence of the importance of integrating migration into development strategies and fostering coherence across sectoral policies. A balanced mix of developing countries was chosen to participate in the project: Armenia, Burkina Faso, Cambodia, Costa Rica, Côte d'Ivoire, the Dominican Republic, Georgia, Haiti, Morocco and the Philippines.

While evidence abounds of the impacts – both positive and negative – of migration on development, the reasons why policy makers should integrate migration into development planning still lack empirical foundations. The IPPMD project aimed to fill this knowledge gap by providing reliable evidence not only for the contribution of migration to development, but also for how this contribution can be reinforced through policies in a range of sectors. To do so, the OECD designed a conceptual framework that explores the links between four dimensions of migration (emigration, remittances, return migration and immigration) and five key policy sectors: the labour market, agriculture, education, investment and financial services and social protection and

---

Box 1.1. **What is the IPPMD project?** *(cont.)*

health (Figure 1.1). The conceptual framework also linked these five sectoral policies to a variety of migration outcomes (Table 1.1).

Figure 1.1. **Migration and sectoral development policies: A two-way relationship**
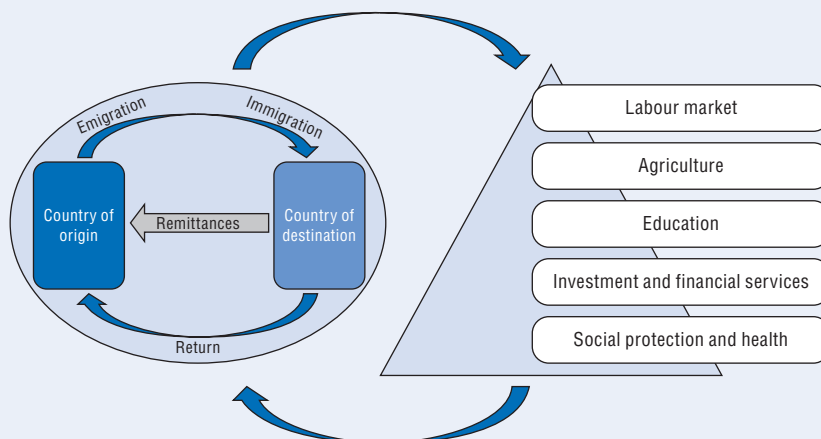
The methodological framework developed by the OECD Development Centre and the data collected by its local research partners together offer an opportunity to fill significant knowledge gaps in the migration and development nexus. Several aspects in particular make the IPPMD approach unique and important for shedding light on how the two-way relationship between migration and public policies affects development:

● The same survey tools were used in all countries over the same time period (2014-15), allowing for comparisons across countries.

● The surveys covered a variety of migration dimensions and outcomes (Table 1.1), thus providing a comprehensive overview of the migration cycle.

● The project examined a wide set of policy programmes across countries covering the five key sectors.

● Quantitative and qualitative tools were combined to collect a large new body of primary data on the ten partner countries:

  1. A **household survey** covered on average around 2 000 households in each country, both migrant and non-migrant households. Overall, more than 20 500 households, representing about 100 000 individuals, were interviewed for the project.

  2. A **community survey** reached a total of 590 local authorities and community leaders in the communities where the household questionnaire was administered.

  3. **Qualitative in-depth stakeholder interviews** were held with key stakeholders representing national and local authorities, academia, international organisations, civil society and the private sector. In total, 375 interviews were carried out across the ten countries.

Box 1.1. **What is the IPPMD project?** *(cont.)*

● The data were analysed using both descriptive and regression techniques. The former identifies broad patterns and correlations between key variables concerning migration and public policies, while the latter deepens the empirical understanding of these interrelations by also controlling for other factors.

Table 1.1. **Migration dimensions and migration outcomes in the IPPMD study**

	Migration dimensions	Migration outcomes
Emigration	**Emigration** happens when people live outside of their countries of origin for at least three consecutive months.[1]	The **decision to emigrate** is an important outcome for the countries of origin, not only because it may lead to actual outflows of people in the short term, but also because it may increase the number of emigrants living abroad in the long term.
Remittances	**Remittances** are international transfers, mostly financial, that emigrants send to those left behind.[2]	The **sending and receiving of remittances** includes the amount of remittances received and channels used to transfer money, which in turn affect the ability to make long-term investments.
		The **use of remittances** is often considered as a priority for policy makers, who would like to orientate remittances towards productive investment.
Return migration	**Return migration** occurs when international migrants decide to go back to and settle in, temporarily or permanently, their countries of origin.	The **decision to return** is influenced by various factors including personal preferences towards home countries or circumstances in host countries. Return migration, either temporary or permanent, can be beneficial for countries of origin, especially when it involves highly skilled people.
		The **sustainability of return** measures the success of return migration, whether voluntary or forced, for the migrants and their families, but also for the home country.
Immigration	**Immigration** occurs when individuals born in another country – regardless of their citizenship – stay in a country for at least three months.	The **integration of immigrants** implies that they have better living conditions and contribute more to the development of their host and, by extension, home countries.

1. Due to the lack of data, the role of diasporas – which often make an active contribution to hometown associations or professional or interest networks – is not analysed in this report.
2. Besides financial transfers, remittances also include *social remittances* – i.e. the ideas, values and social capital transferred by migrants. Even though social remittances represent an important aspect of the migration-development nexus, they go beyond the scope of this project and are therefore not discussed in this report.

In October 2016, the OECD Development Centre and European Commission hosted a dialogue in Paris on tapping the benefits of migration for development through more coherent policies. The event served as a platform for policy dialogue between policy makers from partner countries, academic experts, civil society and multilateral organisations. It discussed the findings and concrete policies that can help enhance the contribution of migration to the development of both countries of origin and destination. A cross-country comparative report (OECD, 2017) and the ten country reports will be published in 2017.

Why was the Dominican Republic included in the IPPMD project?

The Dominican Republic is a country of both significant emigration and immigration flows. While overall it is a net emigration country, with the third highest share of emigrants in the IPPMD sample, immigrants represent almost 4% of the population (Figure 1.2). The United States is the most common destination for both female and male emigrants (63% and 69% respectively), followed by Spain, hosting 16% of the female emigrants and 10% of the male emigrants. The large majority of immigrants originate from Haiti: 95% of the female and 97% of male immigrants was born in Haiti. A majority, 59%, of the emigrants are women, while immigration is dominated by males, constituting 61% (Chapter 3).

Figure 1.2. **The Dominican Republic has the third highest rate of emigration among IPPMD countries**

Emigrant and immigrant stocks as a percentage of the population, all IPPMD countries (2015)
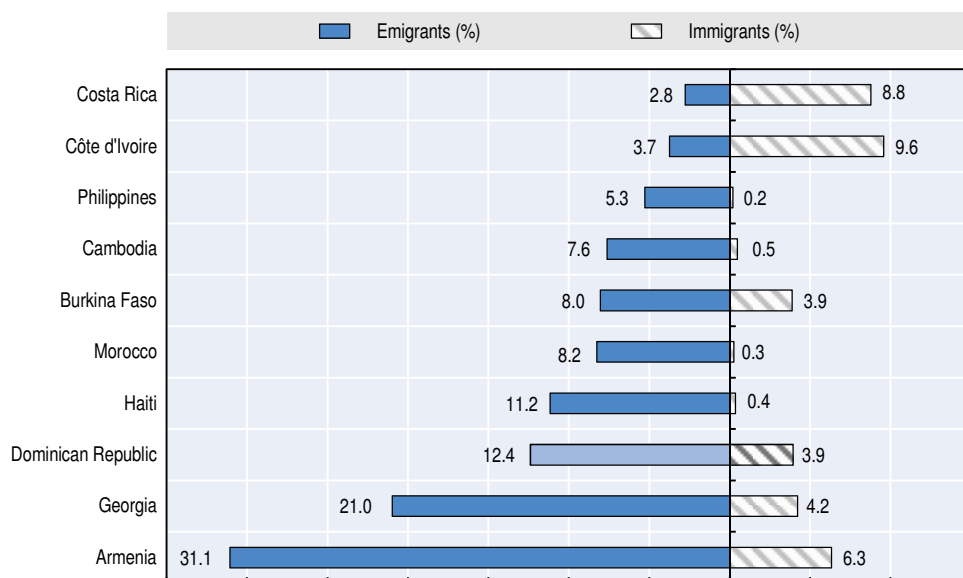
Note: Data come from national censuses, labour force surveys, and population registers.

Source: UN DESA (2015), *International Migration Stock: The 2015 Revision* (database), *www.un.org/en/development/desa/population/migration/data/estimates2/estimates15.shtml*.

Remittances sent home by emigrants constitute an important source of income for many households in the Dominican Republic. These funds have the potential to improve the well-being of migrant households and spur economic and social development. The inflow of remittances has been growing continuously in the past 15 years, with the exception of the 2009 economic crisis when the economies of the main destination countries slowed (Chapter 2). In 2015, the inflow of remittances corresponded to almost 8% of the Dominican national

income, close to the average share in the IPPMD sample, at 8.1% (Figure 1.3). The volumes and modes of sending remittances depend on multiple factors, including the characteristics of the migrants and the sending and receiving costs.

Figure 1.3. **Remittances make an important contribution to the Dominican economy**

Remittances as a share of GDP (%), 2015
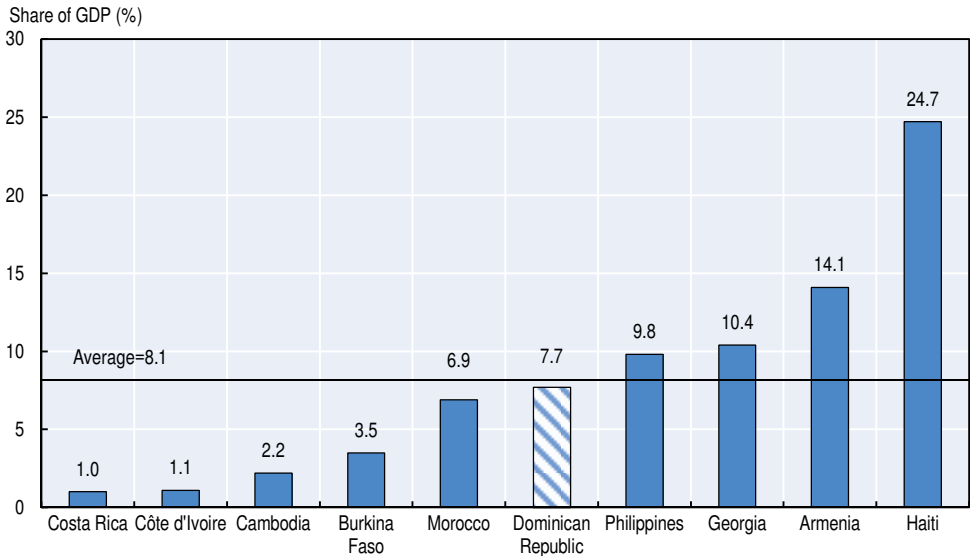
Source: World Bank (database), "Annual remittances data (inflows)", World Bank Migration and Remittance data, *http://www.worldbank.org/en/topic/migrationremittancesdiasporaissues/brief/migration-remittances-data.*

How did the IPPMD project operate in the Dominican Republic?

The IPPMD project team worked in the Dominican Republic with the Ministry of Economy, Planning and Development (MEPyD).[1] MEPyD provided information on country priorities, data and policies and assisted in organising country workshops and bilateral meetings. The IPPMD team also worked with the *Centro de Investigaciones y Estudios Sociales* (CIES) at the *Universidad Iberoamericana*, to ensure the smooth running of the project. CIES helped organise country-level events, contributed to the design of the research strategy, conducted the fieldwork and co-drafted the country report.

The IPPMD project team organised workshops and meetings in the Dominican Republic throughout the course of the project. The various stakeholders who participated, and who were interviewed during the missions to the Dominican Republic, also played a role in strengthening the network of project partners and setting the research priorities.

A kick-off workshop in Santo Domingo launched the Dominican project in February 2014, with support from the Delegation of the European Union to the

Dominican Republic. The workshop served as a platform to discuss the focus of the project with national policy makers and representatives of international organisations, employer and employee organisations, civil society organisations and academics. Following these discussions and in keeping with the overall IPPMD project design, the IPPMD project team decided to focus the analysis on five sectors: 1) the labour market; 2) agriculture; 3) education; 4) investment and financial services; and 5) social protection and health.

Following a training workshop and pilot tests conducted by the IPPMD project team, CIES collected quantitative data from 2 037 households and 54 communities and conducted 21 qualitative stakeholder interviews (Chapter 3). The project will conclude with a policy dialogue to share the policy recommendations from the findings and discuss with relevant stakeholders concrete actions to make the most of migration in the Dominican Republic (Figure 1.4).

Figure 1.4. **IPPMD project timeline in the Dominican Republic**
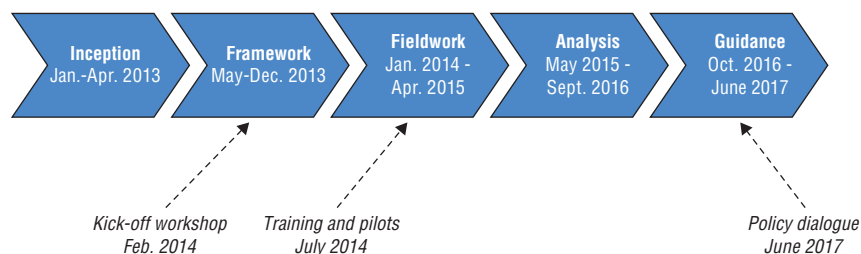
What does the report tell us about the links between migration and development?

The findings of this report suggest that the development potential embodied in migration is not being fully exploited in the Dominican Republic. Taking migration into account in a range of policy areas – not just those directly related to migration – can allow this potential to be better tapped. The report demonstrates the two-way relationship between migration and public policies by analysing how migration affects key sectors – the labour market, agriculture, education, investment and financial services and social protection and health (Chapter 4) – and how migration is influenced by policies in these sectors (Chapter 5). Some of the key findings are highlighted below.

Labour market policies can encourage emigration

Employment is an important determinant of migration – emigration as well as immigration – in the Dominican Republic. Most survey respondents emigrated for work reasons, while better job opportunities and higher wages were the main pull factors for immigrants. In this context, labour market policy is hence likely to play an important role in migration decisions.

How are the Dominican Republic's labour market policies affecting migration? It is often assumed that policies such as vocational training programmes will reduce people's incentives to emigrate by making them more employable. The IPPMD analysis, however, shows that vocational training programmes can also make would-be migrants more employable overseas. Individuals who participated in vocational training programmes are more likely to plan to emigrate in the future (21%) than those who did not (13%). More in-depth analysis shows that the link between vocational training programmes and plans to emigrate are particularly important for women and the urban population.

The results also find that immigrants benefit less from labour market policies such as vocational training programmes and government employment agencies than the native-born population. Rectifying this would help them to integrate into the formal labour market.

Finally, migration also has an impact on the labour market by affecting labour supply. Receiving remittances seems to reduce the need for people to work, as households receiving remittances tend to have a lower share of working members than households not receiving remittances (Figure 1.5). However, when households have lost people to emigration and are not receiving remittances, the need for remaining household members to work is highest. These households were found to have the highest share of working adults, and women especially were much more likely to be working in such households.

Figure 1.5. **Households receiving remittances have fewer working members**

Share of household members aged 15-64 who are working (%)
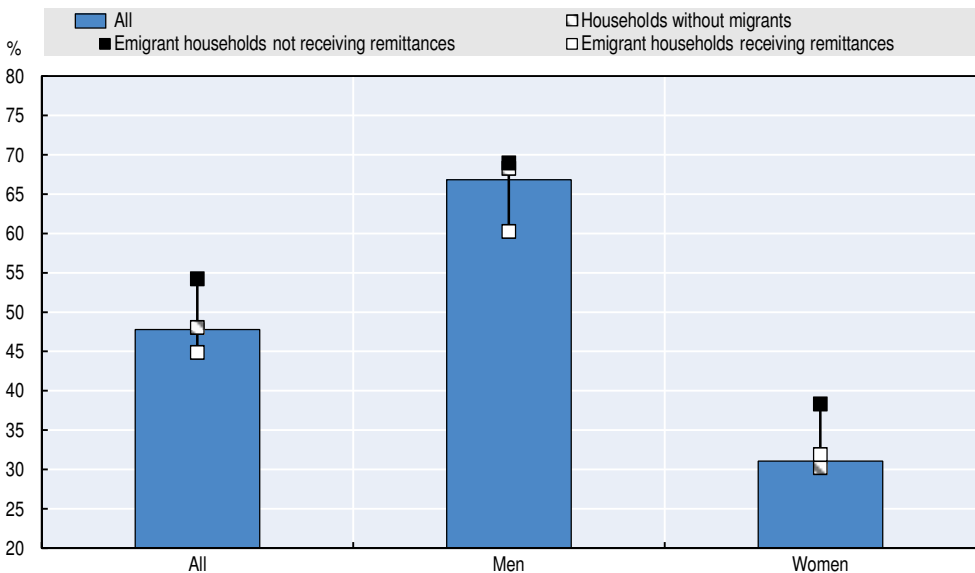
Note: The sample excludes households with return migrants only and immigrants only.

Source: Authors' own work based on IPPMD data.

Agricultural land titles facilitate emigration

The contribution of agriculture to the Dominican Republic's gross domestic product (GDP) is relatively limited compared to other IPPMD countries. In 2013, 14% of the employed population worked in the agricultural sector (FAO, 2016). This pattern is also reflected in the IPPMD sample, which shows that only one in five households is involved in agricultural activities. The analysis suggests that emigration may contribute to revitalising the agriculture sector by making it necessary for farming households to hire in labour.

The IPPMD survey also asked whether households benefited from agricultural policies (including agricultural subsidies, training programmes, and insurance mechanism). Very few households claimed to have done so, with the exception of one policy: land titling.

Land titling is an important policy component of the agricultural landscape in the Dominican Republic, where a high proportion of rural land is still occupied without legal title. This is reflected in the IPPMD sample, which found that only 39% of agricultural households have formal titles to their land. The Ministry of Agriculture has recently re-emphasised the importance of providing land titles for rural households, since secure ownership may encourage greater investments in productive agriculture activities. What do the IPPMD data say about the links between land titles and migration? The analysis shows that households with land titles are much more likely to have an emigrant (43% vs. 21%) and to be receiving remittances (39% vs. 25%), than those without the titles to their lands (Figure 1.6).

Immigrant households are not fully integrated into the education system

Migration and education are closely linked. Migration may change the skills composition of the population, while remittances can boost households' income and allow them to invest in educating their family. Access to education is also key for immigrant integration. Policies that improve access to quality education or provide financial support to keep children in school may decrease emigration motivated by the desire to finance children's education. However, they might also have the opposite effect – 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.

What does the IPPMD study tell us about the link between migration and education in the Dominican Republic? The findings show both positive and negative effects of migration on education outcomes. Emigration and return migration tend to increase educational spending, and lead to a shift towards more private schooling, especially among households with return migrants. At the same time, the results show that households that receive conditional cash transfers[2] are less likely to receive remittances. This lends weight to the idea that government financial support programmes can "crowd out" private transfers.

Figure 1.6. **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.

Education is a fundamental tool for the social integration of immigrant
children and children of immigrant parents. However, the IPPMD findings show
that children with an immigrant background are less likely to attend school
than native-born children. The findings also show that immigrant households
have less access to educational support programmes (Figure 1.7). This may be
undermining immigrant integration, and the achievement of the country's goal
of ensuring universal education.

Financial inclusion and literacy could spur remittance-led investment

Migration, notably through return migration and remittances, can help
households overcome credit constraints and encourage investments in business
activities and real estate. Simultaneously, a favourable investment climate
and an inclusive financial sector can strengthen the development impact
of remittances by encouraging more savings, as well as better matching
savings with investment opportunities. Access to the formal financial sector –
i.e. possessing a bank account – can facilitate the sending and receiving of
higher levels of remittances and through formal channels.

The IPPMD findings show that remittances are positively linked with
business ownership in the Dominican Republic, but only in urban areas. Return

migration does not seem to be linked to entrepreneurship in either rural or urban areas. Furthermore, only 36% of households in the IPPMD sample have a bank account, meaning that almost two-thirds of the households in the sample are unbanked. While the findings confirm that households with a bank account are more like to receive remittances, having a bank account does not seem to affect the level of remittances received. The findings also show that most households receive remittances through money transfer operators. A remittance market largely dominated by a few money transfer operators may push up remittance transfer costs.

Figure 1.7. **Immigrant households are the least likely to benefit
from education policies**

Share of households benefiting from education programmes (%), by migration status
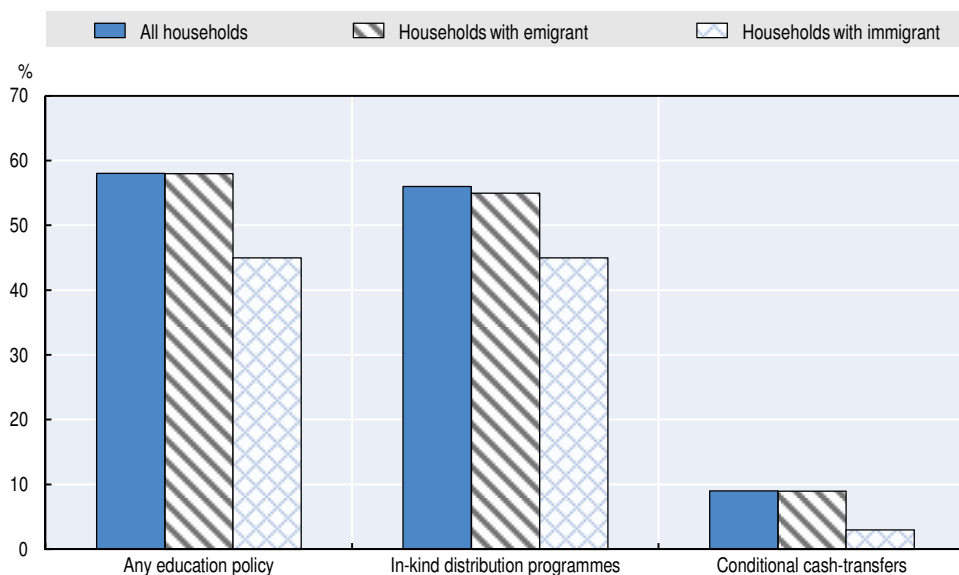
Note: The category "Any education policy" includes all cash-based and in-kind distribution programmes included in the household survey. The sample includes households with children in school age (6-20 years old).
Source: Authors' own work based on IPPMD data.

While financial training programmes and business management courses help to build financial literacy, and can encourage investment in productive assets, the coverage of such training in the Dominican Republic is low. Only 3% of households in the sample had participated in a financial training programme in the past five years (Figure 1.8). In addition, few of the surveyed communities offer financial training or courses in business management. This might be a missed opportunity to channel remittances into more productive investments.

Figure 1.8. **Household participation in financial training programmes is very low**

Share of communities which offer financial and business training (left graph);
share of households participating in financial training programmes (right graph)
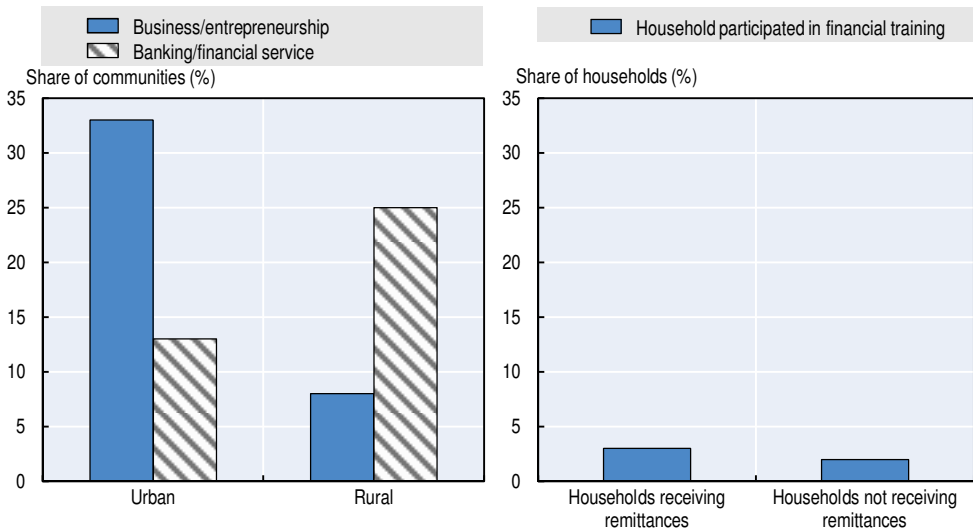
Source: Authors' own work based on IPPMD data.

Immigrants are less covered by social protection and health care

Widespread social protection and healthcare coverage can reduce people's need to emigrate and improve conditions for immigrants, allowing them to integrate better and become net contributors to the country's welfare system (OECD/European Union, 2015; Huber, 2015). The Dominican Republic's 2010-30 National Development Strategy sets out to guarantee health and comprehensive social security for everyone, while a 10-year health plan (2006–2015) addressed the principal challenges necessary to transform the country's health situation (MISPAS, 2006). In practice, implementing universality in health access has been difficult, however, and many individuals and regions remain without adequate coverage.

IPPMD analysis of how immigration affects the social protection and health sectors found little evidence that immigrants in the Dominican Republic are net beneficiaries of welfare payments or healthcare. Immigrant households tend to be *less* likely than other households to receive social transfers from the government, especially in rural areas. In addition, immigrants in both rural and urban areas are less likely to have access to a health centre than non-immigrants.

Formal labour contracts are a common way in which workers and their families access health care and other social benefits. Apart from providing social benefits, such contracts may also enable workers to join unions and

strengthen their rights on the labour market in other ways. Informality is a challenge in the Dominican labour market, and the IPPMD findings show that immigrants are significantly less likely to be covered by formal contracts and social benefits than native-born workers (Figure 1.9). Only 38% of immigrant workers have a formal labour contract, 27% have health benefits and 16% have pension benefits. The differences between immigrant and native-born workers are particularly pronounced in urban areas. The results also show that the difference in access to social protection and health benefits between immigrant and native-born workers is more pronounced for women. Addressing the inequalities in access to employment in the formal sector is important in order to better integrate immigrants into the labour market and society at large.

Figure 1.9. **Immigrants in urban areas have less access to social protection**

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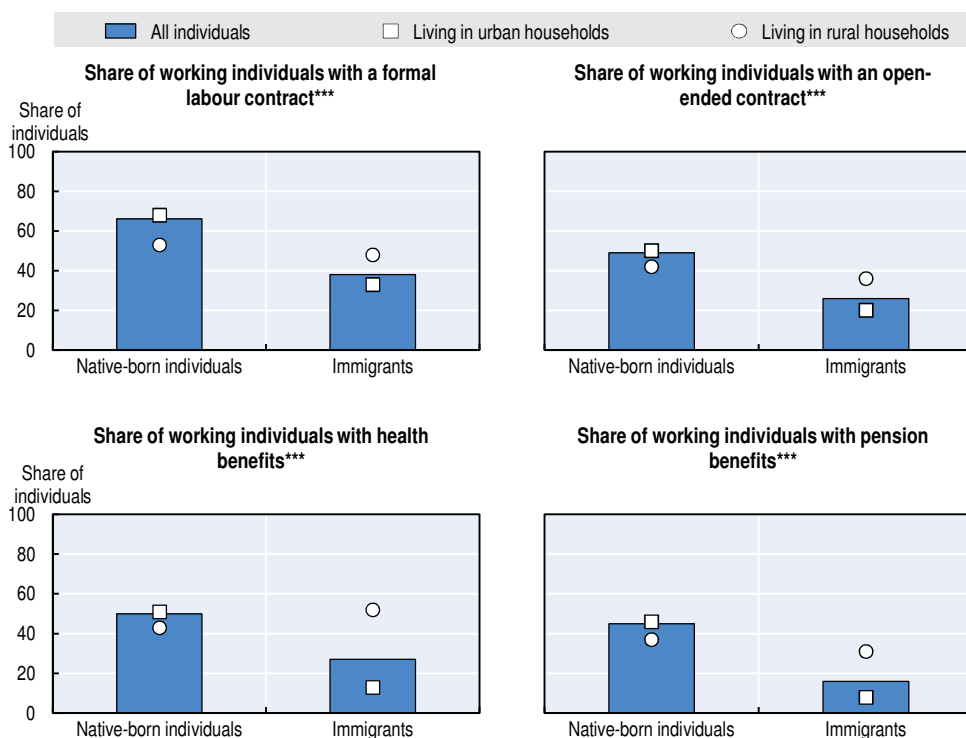
Note: A chi-squared test was used to measure the level of statistical significance between each set of groups (all individuals). The sample includes all individuals, whether they are working in agriculture or not. Results that are statistically significant are indicated as follows: ***: 99%, **: 95%,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

Source: Authors' own work based on IPPMD data.

A more coherent policy agenda can unlock the development potential of migration

The report suggests that migration, through the dimensions analysed in the IPPMD study – emigration, remittances, return migration and immigration – can contribute to economic and social development in the Dominican Republic. However, this development potential does not seem to be fully realised.

To harness the development impact of migration, the country requires a more coherent policy framework. The current development agenda is placing emphasis on the challenges rather than the potentials of migration. The following sections provide policy recommendations for each sector studied in the IPPMD project in the Dominican Republic. Policy recommendations across different sectors and different dimensions of migration stemming from the ten-country study are also specified in the IPPMD comparative report (OECD, 2017).

Integrate migration and development into labour market policies

The IPPMD study found close, and sometimes unexpected, links between migration and labour market in the Dominican Republic. Remittances appear to reduce people's need to work, especially women, while vocational training programmes appear to be giving people, particularly women and those in urban areas, the skills required to seek work overseas. Immigrants, however, are not getting equal access to employment agencies or vocational training. What do these findings suggest for policy?

- Refine and target vocational training programmes to better match demand with supply. Mapping labour shortages and strengthening co-ordination mechanisms with the private sector are important steps.
- Target training programmes at return migrants and immigrants, to help them (re)integrate into the labour market.
- Widen the coverage of employment agencies to reach immigrants, return migrants and current emigrants to ensure they are adequately informed about formal salaried jobs. Building closer connections between employment agencies and the private sector will be important for achieving this.

Leverage migration for agricultural development

The IPPMD findings show that agricultural households are losing valuable labour to emigration. If they cannot afford to replace these workers – if they are not receiving remittances, for example – food security and poverty could deteriorate. Emigration may contribute to revitalising the agriculture sector by increasing the demand for paid jobs in the sector, but only where remittances and income levels allow. Land titling is an important policy component of

the agricultural landscape in the Dominican Republic, but may be spurring emigration. These findings suggest the following policy recommendations:

● Ensure that agricultural households can replace lost labour by ensuring better coverage by labour market institutions in rural areas.

● Tie land-titling programmes to migration and development schemes, such as increasing the coverage of money transfer operators in rural areas, creating programmes to channel remittances towards agricultural investment and to facilitate investment and integration by return migrants in rural areas.

Enhance the links between migration and investment in education

The study has revealed a desire amongst the population for better quality education: people are using emigration to enable them to spend more on educating their children, including private schooling. At the same time, while access to education is a fundamental tool for the social integration of immigrant children and children of immigrant parents, the findings show that such children are less likely to attend school than native-born children, and have less access to educational support. Existing educational access programmes, such as conditional cash transfers, however, are reducing remittance inflows. These findings suggest the need to:

● Increase investments in education quality and access so as to meet the growing demand for education driven by remittances and immigration.

● Enforce and ensure quality and access to public and private educational institutions to meet the higher demand for good education driven by remittances and return migration.

● Expand cash and in-kind distribution programmes in areas with high immigration rates, and make sure that immigrants have equal access to such programmes in order to support universal education and immigrant integration.

● Collect migration and remittance information in conditional cash transfer programme data to monitor remittance changes over time and better understand the full impact of the programme.

Strengthen the links between migration, investment, financial services and development

Migration can help increase investments in productive activities such as businesses and entrepreneurship. Simultaneously, a favourable investment climate and an inclusive financial sector can strengthen the development impact of remittances by encouraging more savings and investments. The IPPMD findings show that more can be done to tap into the investment and entrepreneurial opportunities on offer from migration. While remittances are positively associated with business ownership in the Dominican Republic in urban areas, return migrants do not seem to be investing as much as they could. The large share of households in the Dominican Republic still without bank

accounts and poor coverage of financial training mean the country may be missing opportunities for promoting the productive investment of remittances.

The following steps could help to improve this situation:

- Expand financial service provision by increasing competition among service providers
- Increase financial literacy and entrepreneurial skills among households in communities with high emigration rates to boost remittance investment.
- Facilitate business start-up, for example by providing business management courses and access to credit to encourage remittance investments in new businesses.

Expand the coverage of social protection and health services to improve migration and development outcomes

Increasing immigration flows into the Dominican Republic, particularly in the past 15 years, have raised concerns about potential negative effects on the local labour market, and on limited health and social protection resources. The analysis reported here, however, finds little evidence that immigrants in the Dominican Republic are net beneficiaries of welfare payments or healthcare. In fact, immigrant households tend to be less likely than other households to access health care centres and to receive social transfers from the government. Immigrants are also significantly less likely to be covered by formal contracts and social benefits than native-born workers, especially in urban areas. Addressing these inequalities in access to employment in the formal sector is important in order to better integrate immigrants into the labour market and society at large. To achieve this, policy makers can:

- Increase *de jure*, but also *de facto*, universal access to social protection, such as pension plans, medical benefits, labour union membership and formal labour contract provisions, especially in rural areas.
- Investigate why immigrants use health facilities less frequently, and where needed adjust investments in such facilities in neighbourhoods where there are high levels of immigration, particularly in rural areas.

Roadmap of the report

The next chapter describes the migration landscape for the Dominican Republic, describing how migration has evolved and reviewing the existing research on the links between migration and development. It also briefly describes the current policy context and institutional frameworks related to migration. Chapter 3 explains the implementation of fieldwork and the analytical approaches used for the empirical research. It also summarises the broad findings of the IPPMD survey in terms of general emigration, immigration, remittances and return migration patterns. Chapter 4 discusses how the four

dimensions of migration affect five key sectors in the Dominican Republic: the labour market, agriculture, education, investment and financial services, and social protection and health while Chapter 5 explores how the policies in these sectors can influence migration outcomes.

Notes

1. Ministerio de Economía, Planificación y Desarrollo.

2. 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.

References

FAO (2016), "Country fact sheet on food and agriculture policy trends: Dominican Republic," Food and Agriculture Organization of the United Nations, Rome.

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*.

MISPAS (2006), *2006-15 Decadal Health Plan*, Ministry of Public Health and Social Assistance, Republic of Dominican Republic, Santo Domingo.

OECD/European Union (2015), *Indicators of Immigrant Integration 2015: Settling In*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264234024-en*.

UN DESA (2015), *International Migration Stock: The 2015 Revision* (database), United Nations Department of Economic and Social Affairs, New York, *www.un.org/en/development/ desa/population/migration/data/estimates2/estimates15.shtml*.

World Bank (2016), "Annual Remittances Data (inflows)", *World Bank Migration and Remittance data* (database), World Bank, Washington, DC, *www.worldbank.org/en/ topic/migrationremittancesdiasporaissues/brief/migration-remittances-data*, accessed 22 May 2017.

Chapter 2

The Dominican Republic's migration landscape

The Dominican Republic is a country of both emigration and immigration. An estimated 12% of its population currently resides abroad, while immigrants constitute about 4% of the population. The country benefits from a large volume of remittances, representing around 7% of its gross domestic product and easily exceeding foreign direct investment. This chapter paints a broad picture of the Dominican Republic's migration landscape, drawing from the literature, censuses and surveys. It gives a brief overview of the country's history of migration and current trends: its drivers and impacts, who the immigrants and emigrants are and where they have gone, how they remit and the impacts on their household and country. Finally, it lays out the legal, policy and institutional framework relevant to migration.

Migration has constituted a fundamental part of the life and development of the Caribbean for centuries. From early forced movements of slave trade in the 18th and 19th century, to voluntarily and economically driven migration flows in the past century (Ferguson, 2003). Historically, the Dominican Republic has been a country of destination, with significant recruitment of immigrant workers from English-speaking Caribbean countries and Haiti to work in the Dominican sugar plantations. In more recent years, the country has shifted to becoming a net emigration country (OECD, 2009). Large-scale emigration began in the 1960s. In the wake of the assassination of Dictator Rafael Trujillo in 1961, social and political tensions spurred emigration to the United States, which continued in large numbers in the following decades. Between 1990 and 2000, the number of Dominicans in the United States nearly doubled, from 350 000 in 1990 to 879 000 in 2000 (MPI, 2014). At the same time, immigration has also remained a prominent feature in the Dominican Republic, and immigrants are estimated to constitute about 4% of the population. Haitian immigrants constitute the majority of immigrant in the country, at 79% (UN DESA, 2015).

The Dominican Republic has enjoyed relatively rapid growth and improvements in a number of key outcomes in recent years. The growth rates have been one of the strongest in the Latin America and the Caribbean (LAC) area, with an annual average of close to 7% in the 1990s and 5% in the 2000s. From 2014 and forward, the growth rate has accelerated again and the economy has been growing at a rate of 7% annually. Unemployment is low, at 2.7% in 2014 (OECD/ECLAC/CAF, 2016). At the same time, growth is not inclusive and poverty rates have not been declining at the same pace. The banking crises in 2003-04 resulted in one million Dominicans moving into poverty, and poverty rates touched 50% of the population in 2004. Poverty rates have slowly been falling as the economy recovered from the crises, and reached pre-crises levels about one third of the population in 2015 (World Bank, 2016a). The high rate of economic growth, low oil prices, public investments in construction and schools and school meal programmes are factors believed to have contributed to the falling poverty rates in recent years. Inequality in the country has also improved in the period 2000-15 (World Bank, 2016a).

Despite the sustained growth and political stability during the last decade, emigration has not decreased over time. Today, about 1.3 million Dominicans (12% of the population) are estimated to reside abroad, with a majority (940 874, or 72% of the total stock of emigrants) in the United States (UN DESA, 2015).

Migration is also playing an important role for the Dominican economy. Remittances from emigrants abroad reached over USD 5.2 billion in 2015 and constitute almost 8% of the country's national income (World Bank, 2016b).

Haiti immigrants also contribute to economic activity, as young workers are willing to take on the jobs that the Dominican citizens do not want to fill (World Bank, 2016a). An increasing number of Haitians are employed in low-paying jobs in agriculture, construction, tourism and other service professions (ICG, 2007). However, increasing immigration flows, particularly in the past 15 years, have raised concerns about potential negative effects on the local labour market. Challenges faced in the local labour market, particularly after the banking crisis in 2003-04, have generated fears that immigration may reduce employment opportunities for local workers and contribute to stagnation in wage levels and poverty reduction. Evidence for a negative impact on real wages is however weak (World Bank, 2016a).

This chapter explores some of these issues in the Dominican Republic, setting the scene for the chapters and analysis that follow. It outlines current trends in migration and reviews what the existing research tells us about the key issues linked to migration in the country. It also reviews the role of migration in national development policies, outlines specific migration-related policies and the institutional framework for managing migration.

A brief overview of migration and remittance trends in the Dominican Republic

The Dominican Republic is characterised by being a country of both immigration and emigration. The number of emigrants who have left the country outnumber the numbers of immigrants: the latest estimates show that while immigrants constitute about 4% of the population, around 12% of Dominicans born in the country are currently residing abroad (UN DESA, 2015).[1] Between 1960 and 2010, the net outflow of migrants is estimated to have reached more than 1.2 million individuals. Table 2.1 displays the evolution of net migration (the number of people immigrating minus the number of people emigrating) from 1960 to 2015.

Twelve percent of the population lives abroad, mainly in the United States

The history of emigration in the Dominican Republic is marked by several periods of particularly large outflows. The first period, 1961 to 1980, took place after the fall of the Dictator Rafael Trujillo in 1961. After times of high restrictions on movements during the dictatorship, the fall of Trujillo sparked economic and political turmoil, and led to mass emigration, particularly to the United States. Emigration continued to expand in the following decade, mainly to the United States, Puerto Rico and Venezuela. Parts of the emigration took place

through regular channels, facilitated by the easing of visas and immigration restrictions in the US Immigration Act of 1965 and support for asylum seekers and refugees. However, a significant part of the emigration flows was however irregular (OECD, 2009).

Table 2.1. **Dominican Republic emigrants significantly outnumber immigrants**

Evolution of net migration stocks and flows, 1960-2015

Time period	Net migration	Annual average
1960-1965	-43 490	-8 698
1965-1970	-56 172	-11 234
1970-1975	-70 824	-14,165
1975-1980	-87 098	-17 420
1980-1985	-141 635	-28 327
1985-1990	-149 226	-29 845
1990-1995	-153 106	-30 621
1995-2000	-161 042	-32 208
2000-2005	-196 000	-39 200
2005-2010	-204 999	-41 000
2010-2015	-192 736	-38 547

Source: UN DESA (2015), *International Migration Stock: The 2015 Revision*, (database), *www.un.org/en/development/desa/population/migration/data/estimates2/estimates15.shtml*.

The second period ranged from the early 1980s to mid-1990s, and responded to economic crises, especially in the agro-export sector. This involved a sequence of structural adjustments and economic reforms to reduce the dependence on sugar production and agriculture and diversify into low-wage export-oriented manufacturing, non-traditional agriculture and tourism (Ferguson, 2003). The economic crises had a major negative impact on the living standards of the population and sustained emigration flows to the United States and Puerto Rico, as well as towards Europe.

The third migration period spans the end of the 1990s to today. Emigration has stabilised at a high rate, both due to push factors such as low employment rates, wage differences and economic and social inequality, but also pull factors in the form of transnational social networks between emigrants and the country of origin that facilitate emigration.

The available estimations of the volume of Dominican-born population currently residing abroad are mainly derived from census data and other types of surveys, either from immigrant surveys in the main host countries or from domestic large-scale surveys carried out in the Dominican Republic. The numbers vary slightly depending on the source. UNDP estimated the stock of Dominican emigrants to have steadily risen since 1980, from 220 131 people in 1980 to 454 754 in 1990 and reaching 959 396 in 2000 (UNDP, 2005). The

demographic and health household survey, *Encuesta demográfica y de Salud*, included a questionnaire specifically aimed at investigating international migration patterns in the 1991 round. The data showed that close to 13% (12.9%) of the households had a member residing abroad and estimated the stock of international emigrants to be 507 000 (IEPD-PROFAMILIA, 1992). Later rounds of the survey do not include any questions on migration. An annual household survey administered by the National Statistical Office (ONE), *Encuesta Nacional de Propósitos Múltiples*, included questions on international migration in its 2007 and 2011 rounds. In 2007, 9.2% of the households were recorded to have a former member who emigrated abroad, and the emigrant stock was estimated at 298 166 individuals, while the 2011 survey recorded 9.4% of households with an emigrated member and 366 261 (ONE 2009; ONE, 2012).

The most up-to-date, and widely used, source of emigration stocks is the United Nations Department of Economic and Social Affairs (UN DESA) data. The latest available update, from December 2015, shows that the stock of emigrants increased by 89% (or 415 285 individuals) between 1990 and 2000 (Figure 2.1). Since then, emigration has continued to grow, but at a slower pace, to reach close to 1.3 million individuals in 2015, representing over 12% of the population.

Figure 2.1. **Emigrants now constitute about 12% of the population**

Stock of emigrants and emigrants as share of population (%), 1990-2015
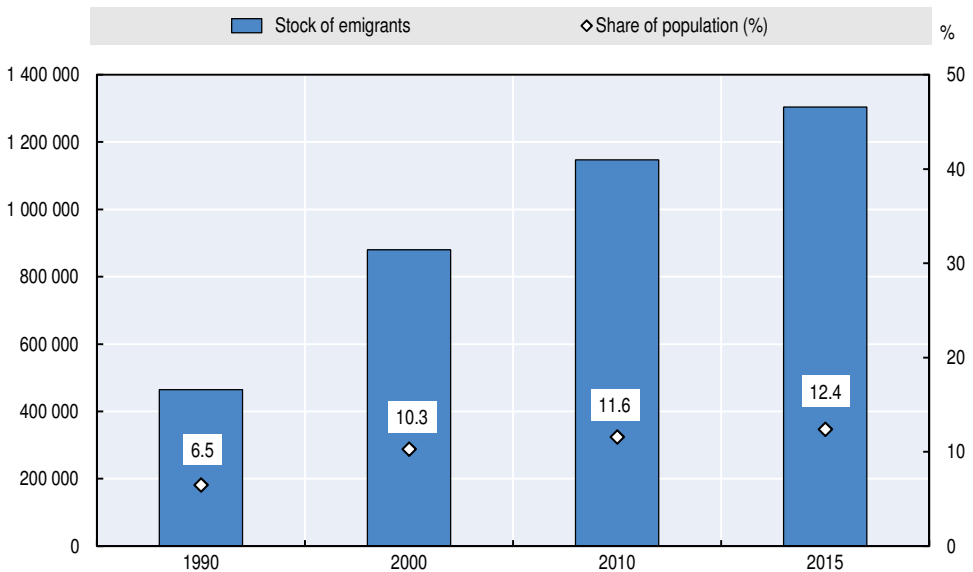
Source: UN DESA (2015), *International Migration Stock: The 2015 Revision*, (database), *www.un.org/en/development/desa/population/migration/data/estimates2/estimates15.shtml.*

When it comes to the main destination countries, several trends can be noted (Table 2.2). First, the United States is the predominant destination for Dominican emigrants, home to just over 70% of migrants. Emigration to the United States intensified during the migratory wave of 1985-1995, supported by high visa admission rates and a regularisation process. The adoption of the 1996 US Immigration Act introduced more restrictions and selectivity into the admission process, and these restrictions were further strengthened after the terrorist attacks in September 2001. These later events can in part explain the slowdown from the mid-1990s.

In the late 1980s, emigration flows also started to diversify towards new destination countries, particularly Europe. Spain has become the second destination country for Dominican emigrants after the United States. The share of Dominican migrants in the top five European destination countries has increased over time, from 7% of the total emigrant stock in 1990 to 17% in 2015. Another trend is the decline in Dominican emigration to Venezuela and the relative stagnation of emigration to Puerto Rico. Venezuela was an important destination for Dominicans during the 1970s and the first half of the 1980s, in the context of the oil boom. Puerto Rico was the second destination of Dominican emigrants in the 1960s, especially as a transit country for emigration to the United States.

Table 2.2. **After the United States, Spain is the second-most popular destination for emigrants, 1990-2015**

Countries	Number of emigrants				% increase		
	1990	2000	2010	2015	1990-2000	2000-10	2010-15
The United States	347 858	687 677	802 001	940 874	98	17	17
Spain	15 160	36 953	136 976	151 369	144	271	11
Puerto Rico	37 207	61 563	63 981	57 891	66	4	-10
Venezuela	18 280	14 293	14 254	14 743	-22	0	3
Italy	8674	17 793	42 262	42 269	105	138	0
The Netherlands	2 403	5 593	7 792	8 688	133	39	12
Switzerland	4 751	7 223	9 151	10 754	52	27	18
Canada	2 668	5 106	8 772	9 803	91	72	12
Germany	1 012	6 279	10 721	11 091	521	71	4
Panama	1 474	5 859	6 893	8 095	298	18	17
Other countries	25 512	31 945	44 498	48 916	25	39	10
Total	464 999	880 284	114 7301	1 304 493	89	30	14

Source: UN DESA (2015), *International Migration Stock: The 2015 Revision* (database).

Immigration is also on the rise, but measuring the numbers is a challenge

The Dominican Republic has historically been a destination country for migrants. Starting in the second half of the 19th century, cane cutters were recruited to work in Dominican sugar plantations, mainly from English-speaking

Caribbean countries and Haiti. Labour immigration from Haiti was actively encouraged during the United States' occupation of the Dominican Republic (1916-24), as the sugar production was expanding under American rule. The migratory movement from Haiti continued after the end of the occupation in 1924. The regime, led by dictator Trujillo, was both dependent on the supply of immigrant workers from Haiti while at the same time anti-Haitian. In 1937, a massacre of thousands of Haitians took place as a political warning to Haiti. However, later Trujillo took over much of the control of the sugar industry, and started to see Haitian labour as a necessity rather than a threat (Ferguson, 2003). Labour shortages and a growing interest by the government in the sugar plantations saw a series of bilateral agreements (*convenios*) signed between Haiti and the Dominican Republic, allowing Haitians to enter the country and work for specified periods. Over time, the settlements around the sugar plantations – so-called *bateyes* – became permanent (OECD, 2009).

Over the years, poverty, political unrest and natural disasters in Haiti have pushed people to continue to cross the border from Haiti. In the beginning of the 1990s, a political crisis and coup d'état led to an economic embargo and subsequent US military occupation. In the first decade of the present century, two dramatic events – a political crisis involving armed revolt and the earthquake in 2010 – also affected emigration flows from Haiti. On the Dominican side, the expansion of the tourism sector, free trade zones and an expanding and dynamic economy have also attracted a growing number of immigrants. The Dominican Republic is also a transit country for migrants on their way to the United States.

Estimating the total population of immigrants in the country is difficult given the large number of undocumented migrants that reside in the country. Several data sources collect information about immigration, included census data, national surveys and UN Population data. The numbers differ slightly depending on the source (Table 2.3).

It can be noted that the 2010 census registered four times as many immigrants (364 598 immigrants) compared to the 2002 census data (78 307), constituting 3.6% of the population. The large increase in immigrants in the most recent round of the census can however not only be attributed to an increase in the immigrant inflows ,but is likely partly due to changes in how the data was collected. The 2010 census data collection put more emphasis on tracking and registering immigrants and devoted more time spent in the field during the collection period, which may partly explain the increase in immigration shown in the last round.

On the other hand, other national surveys have yielded higher numbers of immigrants than what was reported in the census data, and has also pointed towards a growing number of immigrants over time. In 2012, the United Nations Population Fund (UNFPA) implemented the first national immigration survey (*Primera Encuesta Nacional de Inmigrantes*, ENI-2012). The main purpose

of ENI-2012 was to estimate the size of the immigrant population residing in the Dominican Republic, and to gather data on socio-demographic, labour and migration characteristics of the immigrants, and evaluate its contribution to the labour market and other sectors of the economy (UNFPA, 2013). The survey registered a population of 524 632 immigrants in the country, while UN DESA data estimates slightly lower numbers, at 415 564 in 2015.

Table 2.3. **Estimates of immigrant numbers in the Dominican Republic vary according to the source**

	Immigrants, total	% of population
	Population census	
2002	78 307	0.9
2010	364 598	3.6
	Surveys	
1991/Endesa	112 000	1.5
1996/Endesa	145 800	1.8
2003/EFT	183 000	2.1
2007/Enhogar	204 948	2.2
2008/EFT	243 680	2.4
2011/Enhogar	328 055	3.3
2012/ENI	524 632	5.2
	Estimations, UN DESA	
1990	291 151	4.1
2000	355 611	4.2
2010	393 720	4
2015	415 564	3.9

Source: ONE (2015); ENDESA (1991; 1996), *Encuesta Demográfica y de Salud*; EFT (2003; 2008), *Encuesta de Fuerza de Trabajo*; UNFPA (2013), *Encuesta Nacional de Inmigración (ENI-2012)*; ONE (2009; 2010; 2012), *Encuesta Nacional de Hogares de Propósitos Múltiples (Enhogar)*; UN DESA (2015), *International Migration Stock: The 2015 Revision.*

In addition, various other estimates of the volume of immigration in the country, particularly Haitian immigration, exists, as well as simple estimates that are disseminated through the media and nourish popular perceptions of an extraordinary invasive inflow of immigrants from Haiti, with figures between one and three million Haitian immigrants.

Table 2.4 compares data based on the 2010 census data, the ENI-2012 immigrant survey and UN DESA estimates for 2015 on the composition of immigrants by their main countries of origin. Haitian immigrants are by far the largest immigrant group according to all three data sources, constituting close to 80% of the stock of immigrants in the census and UN DESA data (the UN DESA draws significantly on the census data), and 87% according to the ENI-2012 survey. Immigrants from the United States are the second most prominent group, although the number recorded by the census is almost twice that of the survey data (24 457

vs. 13 514 immigrants). Other important countries of origin include Spain, Puerto Rico and Venezuela, reflecting the top countries of emigration (Table 2.2).

Table 2.4. **Haitians are the largest immigrant group in the Dominican Republic**

Number and share of immigrants, according to the main countries of origin

Immigrant origin countries	2010 Census		ENI-2012		UN DESA	
	Immigrants	%	Immigrants	%	Immigrants	%
Haiti	311 969	78.8	45 8233	87.3	329 281	79.2
United States	24 457	6.2	13 514	2.6	25 814	6.2
Spain	6 691	1.7	6 720	1.3	7 062	1.7
Puerto Rico	5 763	1.5	4 416	0.8	6 083	1.5
Venezuela	5 132	1.3	3 434	0.7	5 417	1.3
Cuba	3 639	0.9	3 145	0.6	3 841	0.9
Italy	3 595	0.9	4 044	0.8	3 795	0.9
Colombia	3 416	0.9	2 738	0.5	3 606	0.9
France	1 936	0.5	3 599	0.7	2 043	0.5
Germany	1 574	0.4	1 792	0.3	1 661	0.4
China	1 406	0.4	3 643	0.7	1 484	0.4
Other countries	26 213	6.6	19 354	3.7	25 477	6.1
Total	395 791	100	524 632	100	415 564	100

Source: ONE (2010), *IX Censo Nacional de Población y Vivienda 2010* (database); UNFPA (2013), *Encuesta Nacional de Immigracion 2012 (ENI-2012)*, 2012; UN DESA (2015) *International Migration Stock: The 2015 Revision*, (database), *www.un.org/en/development/desa/population/migration/data/estimates2/estimates15.shtml*.

Remittances make an important contribution to the Dominican economy

Remittances sent home by Dominican migrants have continued to grow steadily since the early 1990s, at 19% annually between 1990 and 2000, and 8% annually over 2000-10. The growth in remittances reflects the evaluation of emigration flows described above, but has also been affected by economic and financial factors such as currency devaluation; growing wages for Dominican immigrants abroad; and the development and expansion of the remittance market, facilitating international transactions (UNDP, 2005).

Figure 2.2 shows how total remittances have continued to grow over the past 15 years, except during the 2009 economic crisis when the economies of the main destination countries slowed down. In 2015, the country received USD 5 196 million in remittances. Since 2000, the share of the value of remittances in relation to GDP has remained at around 7% (with a peak during the economic crises in 2003-04 when GDP fell substantially), despite the strong growth experienced by the Dominican economy in the period. Remittance flows have by far exceeded foreign direct investment (World Bank, 2011). A majority of the remittances are sent from the United States (74%), followed by Spain (11%) (UN-DESA, 2015).

Figure 2.2. **The volume of remittances continues to grow steadily**

Evolution of remittance flows over time, in USD and as share of GDP (%)
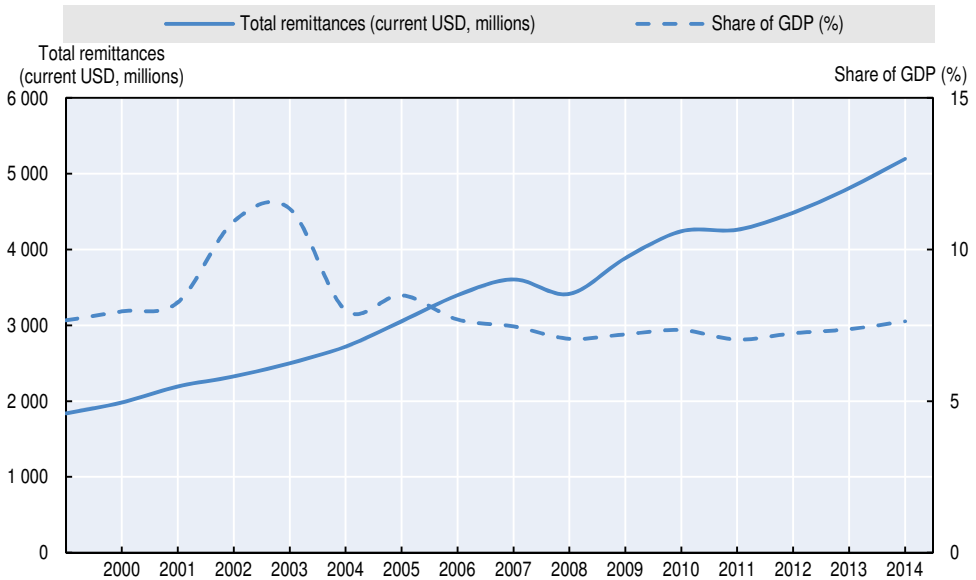
Information about remittances at the household level is more limited and less conclusive. According to demographic and health survey data, about 12% of households received remittances in 1996 (ENDESA, 1996). The 2002 census – the only national population census to measure remittances – showed that about 10% of households received remittances. On the other hand, the 2007 and 2011 household surveys by the Statistical Office (EnHogar) both estimate that about 17% of households receive remittances (ONE, 2009; ONE, 2012). The Inter-American Development Bank (IDB) conducted a remittance survey in 2004, which estimated that 70% of the Dominican emigrants abroad send remittances to relatives back home, and that about 38% of all adults residing in the Dominican Republic country receive remittance (IDB, 2004). The majority of the remittances where sent from the United States (59%), followed by 30% from Europe and 9% from Puerto Rico. The average remittance amount received by the households on a yearly basis ranged from USD 1 500 to USD 2 000 (IDB, 2004).

Statistics related to return migration is scarce

Much less is known about return migration to the Dominican Republic. In 2013, the National migration body, Dirección Nacional de Migración (DGM), recorded 2 008 deported Dominican emigrants returning to the country,

including 1 981 from the United States, 218 from Puerto Rico, 180 from Spain, 105 from Panama, 93 from Curacao, 72 from Mexico and the rest from Trinidad and Tobago, Chile, Canada, San Martin and Guadalupe. The United States is the country of destination that sends back most Dominican emigrants. The US Department of Homeland Security estimated that a total of 32 444 Dominican emigrants have been deported from the United States in the period 2003 to 2012, including 2 883 emigrants in 2012 and 2 462 emigrants in 2013, which is slightly higher than the numbers reported by the DGM (OBMICA, 2014).

Apart from being deported, emigrants also return voluntarily to the Dominican Republic, either by themselves or with the assistance of a return programme. For example, 41 Dominican emigrants are reported to have returned to the country between 2009 and 2014 through the Spanish return programme *Plan de Retorno Voluntario* (OBMICA, 2016). Compared to other significant Latin American immigrant groups in Spain (originating from for example Argentina, Colombia, Ecuador and Peru), Dominican emigrants seem less prone to use the Spanish voluntarily return programme (OBMICA, 2014).

What are the key issues and knowledge gaps?

In the past four decades, a strand of research and literature on Dominican migration, supported by field studies, case studies and socio-anthropological investigations, has emerged. Systematic studies using data over time are however still rare. The following section gives a brief overview of the key literature related to immigration and emigration in the context of Dominican Republic. The literature addresses a wide range of topics related to both emigration and immigration.

Immigration studies are largely focused on Haitian labour migration

Historical migration studies have to a large extent focused on the formation of the sugar plantation systems and labour immigration and the *braceros* agreements regulating immigration flows of workers from Haiti (see for example del Castillo, 1979; Báez Evertsz, 1986; Inoa, 1999). Haitian immigration has in many respects been central for the creation and expansion of the sugar plantation system, which contributed to the development of the Dominican economy. Several studies in the 1980s and 1990s emphasised the social exclusion and systematic abuse of Haitian workers' rights in the form of underpayments and denied medical attention, as well as physical abuse (Ferguson, 2003). Another relevant historical aspect in the migration literature is the massacre of more than 10 000 Haitian nationals ordered by the dictator Trujillo in 1937 (see for example Castor, 1988 and Vega, 1983; 1995).

At the end of the 1990s, studies started to become more and more oriented towards the so-called new Haitian immigration. The crises in the sugar industry led to a decrease in the demand for labour in the sugar plantations, and immigrant workers started moving into other sectors of the economy. In line

with this development, focus shifted towards studying immigrants working in agriculture outside the plantations and in the urban economy. Subsequently, more systematic studies were carried out on specific sectors, such as the production of bananas for export and urban constructions.

More recent studies have focused on the role of immigration for the labour market, including the informal sector and changes in the composition of immigrants. The significant inflow of immigrants, particularly from Haiti, has led to perceptions that migration might have negative effects on wages and employment opportunities on the native-born population. Empirical evidence does not support these perceptions, however, as Haitian immigrant labour is to a large extent unskilled and informally employed, constituting a complement rather than a substitute to the relatively more skilled Dominican workers in the labour market (World Bank, 2016a). The UNFPA data collection on immigrants in 2012 (ENI-2012) paved the way for a new wave of studies based on national immigration survey data, focusing on key areas such as the labour market, gender and youth. The studies also contained in-depth analysis related to the socio-economic conditions of immigrants compared to the native-population, and the role of immigrant workers for the economy (see Murphy, 2013; Lozano, 2013; Lizardo and Gratereaux, 2013; Maguid, 2013; Vargas, 2013). The results showed, among other things, that while immigrant workers make important contributions to the Dominican economy, immigrants have very limited access to the social security system (Lozano, 2013).

Remittances tend to reduce poverty and increase schooling

Studies of emigration from the Dominican Republic have mainly been carried out by American scholars, with a focus on impacts in the United States. Studies on emigration to destinations other than the United States are only starting to develop (see Duanny, 1990 on emigration to Puerto Rico and Báez Evertsz, 2001 on Spain).

Studies of the emigration impacts in the Dominican Republic are substantially smaller in number. At the macroeconomic level, studies have shown that remittances play a major role in supporting the Dominican balance of payments (Suki, 2004). At the micro level, a study covering 11 Latin American countries showed that remittances tend to reduce poverty headcounts in the Dominican Republic (Acosta, Fajnzylber, and Lopez, 2007). The effect on school attendance was more mixed, but showed that remittances also tend to lead to an increase in schooling. Another study investigating the impact of remittances on schooling found a positive impact on girls' school attendance, as well as for secondary school-age children and younger siblings. However, the study also found that emigration has such a negative impact on school attendance that it cancels out any positive impacts of remittances (Amuedo-Dorantes and Pozo, 2010). Furthermore, remittances have also been found to be associated

with a reduced likelihood of business entrepreneurship (Amuedo-Dorantes and Pozo, 2006).

What role does migration play in national development strategies?

International migration has historically constituted an important component of the development processes in the Dominican Republic, dating back to the late 19th century when the country developed a sugar industry with connections to the world market. However, the importance of immigration for development is not fully reflected in the country's policy framework, which has mainly been focused on regulating the inflows of immigrants from Haiti. The development potential of emigration, through remittances and the diaspora, has also received little attention. Until recently, public policies formulated in the area of migration have not been set within a broader or systematic framework.

Migration policies have largely focused on regulating immigration flows

During the United States' military occupation of the Dominican Republic (1916-24), labour migration was actively encouraged as the sugar industry expanded (OECD, 2009). It was also around this time that the first immigration policy schemes were introduced. The measures taken by the US interventionist government focused on the seasonal immigration of *braceros*. The policies did not target other types of immigrants, or emigration.

In 1939, the Dominican State created its first legislation on immigration, Law 95, which focused on seasonal immigrant workers in the sugar plantations but did not grant them any fundamental rights or recognise them as citizens. Over the years, immigration policies in the Dominican Republic have largely focused on regulating immigration from Haiti. Expulsion has been a common response to unwanted Haitian migrants – as large-scale and widely reported mass expulsions, as well as less publicised but frequent expulsions of individuals and groups (Ferguson, 2003).

While early migration policies were largely focused on immigration, no policies regulated the other dimension of the migration phenomenon: emigration. It was not until the 1970s that interest shifted towards the foreign earnings of emigration in the form of remittances. The Dominican government has implemented initiatives to strengthen its links with the diaspora, including a constitutional amendment recognising dual nationality and granting overseas Dominicans the right to vote (OECD, 2009).

The current national development strategy highlights immigration challenges

The main development strategy document of the Dominican Republic, *Estrategia Nacional de Desarrollo (END) 2010-2030*, recognises that migration, both in terms of emigration and immigration flows, have important implications for

the country. In the preparation of the END, Migration and Diaspora was included as one of 32 main thematic areas (MEPyD, 2009).

Although the national strategy document acknowledges the positive contribution migration can have for development, the focus of the strategy document is large on the challenges that migration, and particularly immigration, poses. The first risk factor identified in the END is the educational bias in Dominican migration. The education level of emigrants is higher than that of immigrants, which leads to a loss in human capital. Another concern discussed in the document is the large share of undocumented immigrants in the country. Furthermore, it is also highlighted that unskilled labour may put negative pressure on local wage levels, and could put pressure on fiscal-, health- and educational systems (MEPyD, 2009).

When it comes to emigration, the national strategy raises a concern around the socio-economic conditions of the Dominican diaspora abroad. The poverty rate among Dominicans in the United States is the highest among the Latino immigrant groups (MEPyD, 2009).

Two priority areas are identified in order to address the challenges posed by migration:

- Strengthen immigration regulations, and effectively enforce the regulations
- Increase efforts to make the international community participate more actively in the capitalisation of the Haitian economy, through donations or foreign investment.

What is the institutional framework governing migration?

A number of fundamental legal and institutional instruments regulate migration in the country:

- the Constitution of the Republic
- the Migration Law (LM) (285-04)
- the Labor Code (Law 16-92) and a set of provisions and resolutions that complement it.

The right to nationality is a controversial issue

From 1929 until January 2010, the Dominican constitution granted birth-right citizenship (*Jus Soli*), with the exception of children born to diplomats and to parents "in transit". The "in transit" concept was legally interpreted as a limited period of less than ten days, meaning that any child born in the country to migrants and other temporary and permanent residents with a stay that exceeded ten days had a constitutional right to Dominican nationality. Haitians and Haitian descendants, born in the Dominican Republic to Haitian parents, have however faced administrative and legal barriers to Dominican citizenship for generations.

Until 2004, Dominicans of Haitian descendants had a constitutional right to nationality. Many Haitian parents used Haitian identification documents in the process to obtain birth registration of their children born in the Dominican Republic. However, different and inconsistent documentary requirements imposed by different civil registry offices was a common challenge, and in the 1980s and 1990s some offices started require more official proof of identity, and migrants were often turned away on the basis that they were "in transit" (OSF, 2010). In 2004, the General Law on Migration (Law 285-04) was passed, which expanded the "in transit" exception to apply to all non-residents, including children of tourists, temporary workers, individuals with expired residency status and unauthorised migrants. Consequently, despite being born in the country, children of "non-resident" parents were no longer granted nationality. A new birth certification system was also introduced under the migration law, issuing "certifications of foreigner live birth" instead of the standard proof-of-birth document to non-residents, which made it difficult to obtain birth certificates from the Dominican Civil registry. The new law was met with heavy criticism from the national community, and the United Nations' Committee on the Rights of the Child raised serious concerns that the policy would generate a large number of stateless children (UN Human Rights Council, 2008).

The new migration law also started being applied retrospectively, and the central election board (*Junta Central Electoral*) offices started removing the nationality of Dominicans of Haitian descent born decades before the law entered into force (OSF, 2010). On 26 September 2013, the Constitutional Court issued a ruling to officially revoke the citizenship of the children of unauthorised migrants born in the Dominican Republic since 1929, which consequently made generations of persons of Haitian descent, born in the Dominican Republic, stateless. In the same year, the Government announced a national regularization plan, *Plan Nacional de Regularización de Extranjeros en Situación Migratoria Irregular (PNRE)*. The PNRE allowed all irregular migrants to apply for legal status, according to categories defined in the 2004 Migration law. The implementation of the plan was planned for 18 months, including an initial planning stage of 6 months followed by one year of application reception. Applicants were required to present an official identification document meet three conditions additional conditions related to the length of stay in the country, links with Dominican society and proof of employment and socio-economic stability. At the end of the application period, 288 466 applications had been submitted, of which 83% were approved and 17% were denied, mainly due to failure in providing the necessary documents.

Besides the Constitution and the Migration law, migration is further regulated by the Labor Code. Labour relationships in the Dominican Republic are governed by the Dominican Labor Code (Law 16-92). The Labor Code introduces limitations on the hiring of immigrant foreign workers, especially those hired for a fixed period

of time, and in particular those hired under temporary conditions in agricultural work. Article 135 of the Labor Code limits the hiring of immigrant labour per establishment to 20% of the total labour force contracted, with some exceptions in the agro-industry sector, such as sugar mills, for the recruitment of *braceros* (workers hired only for field work), but always for a limited time not exceeding one year.

Several institutions are governing migration and migration policies

The Dominican institutional scheme regulating immigration rests on two basic institutions: the Ministry of Interior and Police and the Ministry of Foreign Affairs. The former is in charge of enforcing the migration law, while the latter controls issues related to foreign relations in migratory matters, including granting visas. In addition, the Ministry of Labour is enforcing the labour laws in matters related to the hiring of labour, including the regulations governing the recruitment of immigrant workers. The Ministry of Labour also collects labour-related migration information

The General Directorate of Migration (DGM) is the executive branch of the Ministry of Interior and Police, directly responsible for enforcing the migration law. A number of other state institutions also play an important role in the governing of migration. The main institutions are summarised below:

- *Consejo Nacional de Migración (CNM)* (National Migration Council) is the country's highest governing body for migration policies and co-ordinates the actions of the institutions responsible for implementing the national migration policy. In addition, the Council contributes to the design of national migration policies. It functions as a state advisory body, and is constituted by a number of state institutions.

- *Dirección General de Migración (DGM)* (General Directorate of Migration) is a body under the Ministry of the Interior and Police, responsible for the execution of the General Law on Migration 285-04 and its regulations.

- *Instituto Nacional de Migración (INM)* (The National Migration Institute) carries out studies related to migration, and act as an advisory body to the CNM. It aims to contribute to the design and implementation of migration policies and migration management, including the protection of human rights and security of migrants.

- *Junta Central Electoral (JCE)* (Central election board) issues birth certificates, national identity cards and passports. It is also the state agency responsible for administering the country's civil registry system and in charge of the state civil registry offices.

Conclusions

Historically, the Dominican Republic has been a country of destination for immigrants from Haiti and other parts of the region. In more recent years, the country has shifted to becoming a net emigration country. Today immigrants

are estimated to constitute about 4% of the population, while about 12% of the population have emigrated abroad.

Immigrants, mainly from Haiti, contribute with labour, and remittances sent home by emigrants abroad constitute an important part of the national income. However, the importance of immigration for development is not fully reflected in the country's policy framework, and focused has mainly been on regulating immigration flows, particularly from Haiti. The potential of emigration, through the remittances and the diaspora, to contribute to development has also received little attention.

Notes

1. The definition of immigrant and emigrant is based on country of birth, not nationality or descent.

References

Acosta, P.A., Fajnzylber, P. and H. Lopez (2007), "The impact of remittances on poverty and human capital: evidence from Latin American household surveys", *World Bank Policy Research Working Paper* no. 4247, Washington, DC.

Amuedo-Dorantes, C. and S. Pozo (2010), "Accounting for remittance and migration effects on children's schooling", *World Development* 38 (12), 1747-1759.

Amuedo-Dorantes, C. and S. Pozo (2006), "Remittance receipt and business ownership in the Dominican Republic", *The World Economy*, 29 (7), 939-956.

Báez Evertsz, C.J. (2001), *Dominicanos en España. Españoles en Santo Domingo*, Editora Universitaria, UASD.

Báez Evertsz, F. (1986), *El Bracero Haitiano en la República Dominicana*, Editora Taller, Santo Domingo.

Castor, S (1988), *Le Massacre de 1937 et les Relations Haitiano-Dominicaines*, Imprimerie le Natal, Port au Prince.

Del Castillo, J. (1981), "Las emigraciones y su aporte a la cultura Dominicana (finales del Siglo XIX y Principios del XX) (1979): in *EME-EME Estudios Dominicanos*, Vol. VIII, No. 45.

Duanny, J. (1990) (ed.), *Los Dominicanos en Puerto Rico: Migración en la semiperiferia*, Rio Piedras, Puerto Rico.

EFT (2008), *Encuesta de Fuerza de Trabajo – 2008* (database), Banco Central de la República Dominicana, Oficina Nacional de Estadística – Ministerio de Economía, Planificación y Desarrollo (MEPyD), Dominican Republic.

EFT (2003), *Encuesta de Fuerza de Trabajo-2003* (database), Banco Central de la República Dominicana, Oficina Nacional de Estadística – Ministerio de Economía, Planificación y Desarrollo (MEPyD), Dominican Republic.

ENDESA (1996), *Dominican Republic- Encuesta Demográfica y de Salud* (database), accesible at *http://microdata.worldbank.org/index.php/catalog/1366*.

ENDESA (1991), *Dominican Republic- Encuesta Demográfica y de Salud* (database), accesible at *http://microdata.worldbank.org/index.php/catalog/1365*.

Ferguson, J. (2003), *Migration in the Caribbean: Haiti, the Dominican Republic and Beyond*, Minority Rights Group International, London, *http://estudiosdemigracion.org/inedim2013/documentosypub/forosydebates/oea/tratadepersonas/09.pdf*.

ICG (2007), "Peacebuilding in Haiti: Including Haitians from Abroad", International Crisis Group. Latin America/Caribbean Report No. 24, Port-au-Prince/Brussels.

IDB (2004). "Sending money home: Remittance recipient in the Dominican Republic and remittance senders in the US", Multilateral Investment Fund/Inter-American Development Bank.

IEPD-PROFAMILIA (1992), *Encuesta Demográfica y de Salud* (database), *http://microdata.worldbank.org/index.php/catalog/1365/accesspolicy*

Inoa, O. (1999) *Azúcar; árabes, cocolos y haitianos*, Editora Cole, Santo Domingo.

Lizardo, J. and H.C., Gratereaux, (2013), "El aporte de los trabajadores inmigrantes a la actividad económica en la República Dominicana: una primera aproximación". Estudio complementario a partir de ENI-2012, UNFPA, Santo Domingo.

Lozano, W., (2013), "Inmigración, Género y Mercado de Trabajo en la República Dominicana". Estudios Complementarios ENI-2013, UNFPA, Santo Domingo.

Maguid, A.M. (2013), "Familia, Migración y Género". Estudios Complementarios ENI-2013, UNFPA, Santo Domingo.

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/*.

MPI (2014), "Immigrants from the Dominican Republic in the United States", online article, Migration Policy Institute, 18 July 2014, *www.migrationpolicy.org/article/immigrants-dominican-republic-united-states* (accessed 20 March 2017).

Murphy, M. (2013), "Análisis comparativo de las condiciones socioeconómicas de las poblaciones de inmigrantes, descendientes de inmigrantes y población nativa". Estudios Complementarios ENI-2013, UNFPA, Santo Domingo.

OBMICA (2016), "Estado de las migraciones que atañen a la República Dominicana 2015", Editora Búho, Santo Domingo.

OBMICA (2014), "Estado de las migraciones que atañen a la República Dominicana 2013", Editora Búho, Santo Domingo.

OSF (2010), "Dominicans of Haitian Descent and the Comprised Right to Nationality", Open Society Foundation, the Open Society Institute, *https://www.opensocietyfoundations.org/sites/default/files/Dominican-Republic-Nationality-Report-ENG-20110805.pdf*

OECD (2009), "Country note: Dominican Republic", in *Latin American Economic Outlook 2010*, OECD Publishing, *http://dx.doi.org/10.1787/leo-2010-en*.

OECD/ECLAC/CAF (2016), *Latin American Economic Outlook 2017: Youth, Skills and Entrepreneurship*, OECD Publishing, *http://dx.doi.org/10.1787/leo-2017-en*.

ONE (2015), *Estimaciones y Proyecciones Nacionales de Población 1950-2100*, Volume I, Oficina Nacional de Estadística, *www.one.gob.do/Categoria/Publicaciones/950*, (accessed 21 March 2017).

ONE (2012), "Encuesta Nacional de Hogares de Propósitos Múltiples, ENHOGAR–2011", Informe General, Santo Domingo.

ONE (2010), *IX Censo Nacional de Población y Vivienda 2010* (database), Oficina Nacional de Estadística, Santo Domingo.

ONE (2009), "Encuesta Nacional de Hogares de Propósitos Múltiples, ENHOGAR–2007", Informe General, Santo Domingo, *www.one.gob.do/Estadisticas/268/enhogar-2007*

Suki (2004), "Financial institutions and the remittances market in the Dominican Republic", Center on Globalization and Sustainable Development, The Earth Institute at Columbia University, New York, *http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=547045*.

UN DESA (2015), *International Migration Stock: The 2015 Revision*, (database), United Nations Department of Economic and Social Affairs, New York, *www.un.org/en/development/desa/population/migration/data/estimates2/estimates15.shtml*.

UNDP (2005), *The Dominican Republic's 2005 Human Development Report. Towards an inclusive and renewed global insertion*, United Nations Development Programme, New York, *http://hdr.undp.org/en/content/national-human-development-report-2005*.

UNFPA (2013), "Primera encuesta nacional de inmigrantes en la República Dominicana ENI-2012", Santo Domingo, *http://countryoffice.unfpa.org/dominicanrepublic/drive/InformeENI-2012-General.pdf*.

UN Human Rights Council (2008), "Report of the Special Rapporteur on contemporary forms of racism, racial discrimination, xenophobia and related intolerance, Doudou Diène, and the independent expert on minority issues, Gay McDougall: addendum : mission to Dominican Republic", *www.refworld.org/docid/47e23b252.html* (accessed 15 May 2017).

Vargas, L. (2013). "Características y análisis comparativo entre jóvenes inmigrantes y descendientes de inmigrantes según la Primera Encuesta Nacional de Inmigrantes en la República Dominicana (ENI)", Estudios Complementarios ENI-2013, UNFPA, Santo Domingo.

Vega, B. (1983), "Haití y la República Dominicana, Volumen I: 1930-1937", Fundación Cultural Dominicana. Santo Domingo.

Vega, B. (1995), "Haití y la República Dominicana, Volumen II: 1937-1938", Fundación Cultural Dominicana. Santo Domingo.

World Bank (2016a), "Building a better future together: Dominican Republic policy notes", World Bank, Washington, DC, *http://documents.worldbank.org/curated/en/949151486105331993/pdf/112502-WP-P156995-PUBLIC-DRPolicyNotesenglishfinal.pdf*.

World Bank (2016b), *Migration and Remittances Data* (database), World Bank, Washington, DC, *http://data.worldbank.org/indicator/BX.TRF.PWKR.CD.DT* (accessed 27 March 2017).

World Bank (2011), *Migration and Remittance Factbook*, The World Bank, Washington, DC, *http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1199807908806/DominicanRepublic.pdf*.

Chapter 3

Understanding the methodological framework used in the Dominican Republic

In order to provide an empirical foundation to the analysis of the links between migration and policy, the Interrelations between Public Policies, Migration and Development (IPPMD) project used three evidence-gathering tools: household surveys, community surveys, and interviews with representatives of public, private, non-government and international institutions to provide additional qualitative information about the migration context in the Dominican Republic. This chapter explains how the sampling framework was designed and implemented, as well as the statistical approaches used in this report to analyse the link between key policy sectors and emigration, immigration, return migration and remittances. The chapter also includes descriptive statistics drawn from the survey data. It outlines some key characteristics of the migrants in the sample as well as some background on immigration, emigration, remittances and return migration.

The Interrelations between Public Policies, Migration and Development (IPPMD) project framework is empirically based. In order to provide evidence-based analysis on the interrelationship between migration and the various sectors under study (Chapter 1), the project carried out data collection in the Dominican Republic from July 2014 to February 2015. The OECD Development Centre developed three analytical tools for the fieldwork, each tailored to the Dominican context, in collaboration with the research centre *Centro de Investigaciones y Estudios Sociales* (CIES) at the Universidad Iberoamericana in Santo Domingo, who conducted the fieldwork. The three tools included:

1. **A household survey**, administered to 2 037 households (see Box 3.1 for definitions). The household questionnaire gathered information about individual and household characteristics related to five key development sectors: (1) the labour market; (2) agriculture; (3) education; (4) investment and financial services; and (5) health and social protection, as well as household members' experience with immigration, emigration, remittances and return migration. It also asked about their experience of specific public policies which may affect their migration and remitting patterns. More details on the specific modules of the household survey can be found in Annex 3.A2.

2. **A community survey**, carried out in the 54 communities where the household survey took place. Respondents were mayors and locality leaders or technical staff with key information about the localities. The questionnaire gathered information on the community's demographic, social and economic background as well as the existence of policies and development programmes.

3. **Stakeholder interviews:** 21 interviews were held with representatives of government ministries and other public institutions, non-government organisations, private sector institutions, academia and international organisations based in the Dominican Republic. These interviews were used to collect qualitative information on trends, policies, opinions and predictions related to various aspects of migration in the country. The information they provided helped enrich and interpret the quantitative data by including additional details on the specific context of the Dominican Republic.

This chapter describes how the tools were implemented in the Dominican Republic. It explains the sampling design adopted for the household and community surveys, and outlines the analytical approach taken in the study. Finally, it presents basic descriptive statistics on the four migration dimensions analysed in the report: emigration, remittances, return migration and immigration.

How were the households and communities sampled?

The first step was to select the enumeration areas in which the household and community surveys were to be administered. A challenge with migration surveys is to design a sampling strategy that ensures a significant representation of migrant households in the sample. Despite the relatively high incidence of international migration in the Dominican Republic, random sampling would not generate a sufficiently large sample of migrant households for the purpose of the project. Over-sampling of migrant households is therefore necessary. Since there are no national-level data with complete and up-to-date information on migration density, information about the prevalence of migration was based on multiple sources, including various household surveys and census data.[1]

The country is divided into 31 provinces and one National District (*Distrito Nacional*), in which the national capital is located. The provinces are the first-level administrative subdivisions of the country. Of these, 11 provinces from different regions were selected for enumerations.[2] Four provinces were selected based on the magnitude and density of international migration. Each province was stratified into urban and rural areas.

The second step of the process involved creating a sampling frame. The Dominican National Census list of enumeration areas, last updated in 2010, was used to develop the sampling frame. From the sampling areas, 252 primary sampling units (PSUs) were selected for enumeration, 63 from each region. These PSUs were enumeration areas from the census list. The distribution of PSUs over urban and rural areas within the province was proportionate to the square root of the population in these areas. Within each of the eight strata, PSUs were randomly selected with a probability proportionate to the number of households in the PSU.

The last stage of sampling involved the selection of households for interview. For the sake of comparison, two groups of households were selected from the sampled enumeration areas: migrant households and non-migrant households. The target ratio for each group was about 50%. The size of the selected PSUs ranged from 30 to 200 households; nine households were to be selected from each PSU. The project set a target of interviewing 2 040 households. Since the average response rate in similar surveys in the Dominican Republic has been about 91% in recent years, the sampling framework included a total of 2 268 selected households in order to reach the target of 2 040 completed household interviews.

The emigration and immigration rates in the Dominican Republic are not high enough to allow for random sampling and at the same time reach the target of 50% migrant households in the sample. Households and communities were therefore sampled using multi-stage stratified cluster sampling. Since no data were available on which to base sampling of migrant households, all households in the 252 sampled PSUs were block listed prior to data collection. Block listing

allowed households to be categorised into three groups: households without migrants, with immigrants and with emigrants and/or return migrants (Box 3.1), and enabled random sampling within each household group from the lists produced. In each PSU, three households were selected from each group, to reach nine households per PSU. In PSUs with less than three immigrant households, immigrant households were replaced by emigrant households, and vice versa. In PSUs with less than six migrant households (emigrant, return migrant and immigrant households combined), migrant households were replaced by non-migrant households.

Box 3.1. **Key definitions of the household survey**

A **household** consists of one or several persons, irrespective of whether they are related or not, who normally live together in the same housing unit or group of housing units and have common cooking and eating arrangements.

A **household head** is the most respected/responsible member of the household, who provides most of the needs of the household, makes key decisions and whose authority is recognised by all members of the household.

The **main respondent** is the person who is most knowledgeable about the household and its members. He or she may be the head, or any other member (aged 18 or over). The main respondent answers the majority of the modules in the questionnaire, with the exception of the immigrant and return migrant modules which were administered directly to the immigrants and returnees themselves. As it was not possible to interview migrants who were abroad at the time of the survey, questions in the emigrant module were asked of the main respondent.

A **migrant household** is a household with at least one current international emigrant, return migrant or an immigrant.

A **non-migrant household** is a household without any current international emigrant, return migrant or immigrant.

An **international emigrant** is an ex-member of the household who left to live in another country, and has been away for at least three consecutive months without returning.[a]

An **international return migrant** is a current member of the household, who was born in the Dominican Republic, and had previously been living in another country for at least three consecutive months and returned to the country.

An **international immigrant** is a current member of the household who was born in another country, and has lived at least three months in the Dominican Republic.

International **remittances** are cash or in-kind transfers from international emigrants. In the case of in-kind remittances, the respondent is asked to estimate the value of the goods the household received.

Box 3.1. **Key definitions of the household survey** (cont.)

A **remittance-receiving household** is a household that received international remittances in the past 12 months prior to the survey. Remittances can be sent by former members of the household as well as by migrants that never been part of the household.

[a] Migration surveys often consider individuals to be migrants only after they have been away for either 6 or 12 months. Including shorter migration spells ensures the inclusion of seasonal migrants in the sample (temporary trips such as holidays are however not considered in this definition). The survey also captures migration experiences that date long back in time as the definitions do not put any restrictions on the amount of time that elapsed since the time of emigration, immigration or return migration (although it is likely that more recent migration experiences are better captured in the survey as emigrants that left long ago are less likely to be reported by the household).

Household surveys

The household survey data collection included two rounds of fieldwork. A first phase of interviews, from August to October 2014, collected data on 1 870 households, of which 808 (43%) were migrant households. This was an overall response rate of 82%, hence lower than the expected 91%; among emigrant households the response rate was only 71%. In order to increase the total number of households in the sample in general, and the number of emigrant households in particular, a second round of fieldwork was carried out in February 2015. Twenty additional PSUs were sampled, using the same sampling strategy as the first round. The selection of households gave priority to migrant households, and a total of 156 migrant households and 11 non-migrant households were interviewed in the second round. This brought the total number of households with a migrant (emigrant, immigrant or return migrant) to 964, or 47% of the sample, and the total number of households interviewed to 2 037 (Table 3.1).

The fieldwork was carried out by 24 interviewers and 6 supervisors, and questionnaires were administered in Spanish and Creole. Given that the large majority of immigrants in the Dominican Republic are from Haiti, it was important to allow them to be interviewed in their native language (Creole). A total of 30 enumerators were invited to the enumerator training, 24 of whom were eventually hired based on their performance during training and the pilot test. The enumerator and supervisor training lasted five days, plus two days of pilot interviews to test the questionnaire and one day to discuss the observations made during the pilot (see Annex 3.A1 for a summary of sampling design and fieldwork).

Table 3.1. **Household distribution per region**

	Gran Santo Domingo		Región Norte		Región Este		Región Sur		Total
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	
Non-migrant	49	222	58	177	50	238	93	186	1 073
Migrant	18	247	46	177	99	172	54	151	964
Sub total	67	469	104	354	149	410	147	337	
Total	536		458		559		484		2 037

Source: Authors' own work based on IPPMD data.

Community surveys

The community surveys were carried out with local government representatives (mayors, public servants or technical staff) with good knowledge of the community. Local governments play a key role when it comes to local development, for example in agriculture and infrastructure. A total of 54 communities were selected for enumeration. As the PSUs are small and do not represent administrative units, the geographical areas covered by the community questionnaires were substantially larger than the enumeration areas – one community covered multiple PSUs.

The questionnaire included around 75 questions to gather demographic, social and economic information on the communities, as well as specific questions on policies and programmes implemented in the localities, questions on the share of households that currently have a family member living in another country and their most common country of residence, and the most common occupational activities of those living in the community. A small team of enumerators with previous experience of similar surveys and local knowledge was recruited to carry out the interviews.

Stakeholder interviews

In order to supplement the quantitative data, semi-structured interviews with stakeholders from different backgrounds were conducted using an interview guide developed by the OECD Development Centre. The guide was divided into five topics:

1. general awareness of migration
2. actions, programmes and policies directly related to migration
3. main actions, programmes and policies likely to have a link with migration
4. perceptions of migration-related issues
5. co-ordination with other stakeholders on migration.

Questions for each topic were modified according to whether the institution interviewed was working on migration issues directly or indirectly, and its role vis-à-vis migration policy. A list of 40 potential stakeholder institutions was

created in the selection process. The recruitment was however challenging due to the sensitivity of the topic in the Dominican Republic, and in the end 21 stakeholder interviews were carried out. The institutions selected included migration-related government agencies, non-migration related government, civil society organisations, the private sector, academics and international organisations. About half of the interviewees represented public institutions, both at national and regional level (Table 3.2). The interviews were conducted in Spanish by the core research team from CIES.

Table 3.2. **Summary of interviewees for qualitative interviews, by type of organisation**

Type of organisation	Number of interviews
Public institutions	10
International organisations/academia	3
NGOs	5
Private sector	3
Total	21

How were the data analysed?

Having described the tools used to collect data for the project, this section provides an overview of how the data were analysed, followed by a general overview of the key migration characteristics of the sample. The remaining chapters in the report present the results of the analysis on the links between migration and public policies.

The analysis in this report incorporates both statistical tests and regression analysis. Statistical tests determine the likelihood that the relationship between two variables is not caused by chance:

● A t-test compares the means of a dependent variable for two independent groups. For example, it is used to test if there is a difference between the average number of workers hired by agricultural households with emigrants and those without.

● A chi-squared test is used to investigate the relationship between two categorical variables, such as private school attendance (which only has two categories, yes or no) by children from two types of households: those receiving remittances and those not.

These types of statistical tests do not control for other factors. Regression analysis, on the other hand, is useful to ascertain the quantitative effect of one variable upon another while controlling for other factors that may also influence the outcome. The household and community surveys included rich information about households, their members, and the communities in which they live.

This information was used to create control variables that were included in the regression models in order to single out the effect of a variable of interest from other characteristics of the individuals, households and communities that may affect the outcome, such as the household's business investments or an individual's plans to emigrate.

Two basic regression models were used in the analysis: ordinary least square (OLS) and probit models. The choice of which one to use depends on the nature of the outcome variable. OLS regressions are used when the outcome variable is continuous (i.e. can take on an infinite number of values). Probit models are used when the outcome variable can only take two values, such as owning a business or not.

The analysis of the interrelations between public policies and migration was performed at both household and individual level, though this depended on the topic and hypothesis investigated. The analysis for each sector is divided into two sections:

- The impact of a **migration dimension** on a **sector-specific outcome**

$$Y_{sector\,specific\,outcome(C)} = \alpha + \beta E_{migration\,dimension(A1)} + \gamma X_{characteristics(D)} + \varepsilon;$$

- The impact of a **sectoral development policy** on a **migration outcome**

$$Y_{migration\,outcome(A2)} = \alpha + \beta E_{sector\,dev.\,policy(B)} + \gamma X_{characteristics(D)} + \varepsilon.$$

The regression analysis rests on four sets of variables:

A. **Migration**, comprising: (1) **migration dimensions** including emigration (sometimes using the proxy of an intention to emigrate in the future), remittances, return migration and immigration; and (2) **migration outcomes**, which cover the decision to emigrate, the sending and use of remittances, the decision and sustainability of return migration, and the integration of immigrants.

B. **Sectoral development policies:** a set of variables representing whether an individual or household took part or benefited from a specific public policy or programme in five key sectors: the labour market, agriculture, education, investment and financial services, and social protection and health.

C. **Sector-specific outcomes:** a set of variables measuring outcomes in the project's sectors of interest, such as labour force participation, investment in livestock rearing, school attendance and business ownership.

D. **Household and individual-level characteristics:** a set of socio-economic and geographical explanatory variables that tend to influence migration and sector-specific outcomes.

What do the surveys tell us about migration in the Dominican Republic?

Overall, the 2 037 household surveys collected information on 7 462 individuals. Of these, 1 016 were immigrants living in 529 households. This represented 26% of all sampled households (Figure 3.1, third pie chart). Only 3% of households (59 households) contained a return migrant: in all there was a total of 65 return migrants (Figure 3.1, middle pie chart). Data were also collected on 622 emigrants from 417 households, representing 20% of all households in the sample (Figure 3.1, first pie chart).

Figure 3.1. **Immigrant households make up 26% of the surveyed households**

Share of households, by migration experience
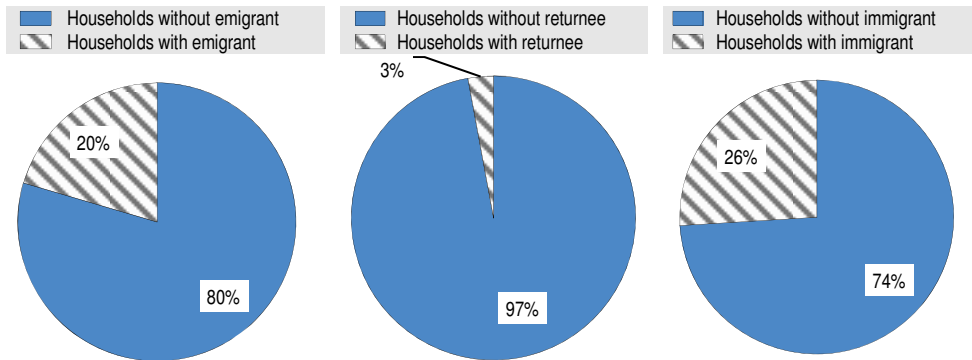
Source: Authors' own work based on IPPMD data.

The split between emigration and return migrants in the sample was left to chance in the sampling of migrant households, whilst the share of immigrant households is a direct result of the sampling strategy. The emigrant and return migrant numbers hence reflect their relative importance. Figure 3.2 shows the prevalence of emigrant and return households by area, based on the household-level data. This shows that return migration is relatively rare, and more prevalent in urban than in rural areas.

Table 3.3 compares the characteristics of the sampled households according to their migration experience. Overall 23% of the households are rural, but this rate differs across groups. Households with returnees are the least likely to be found in a rural setting, with only 8%, while 31% of households with immigrants are rural. Households without migration experience tend to have the most members, averaging 3.9 people compared to 3.7 for households with emigrants and returnees, and only 3.2 for immigrant households. Immigrant households also have the lowest dependency ratio, at close to two adults of working age for every child or elderly person. Even so, immigrant households contain a relatively high share of children: about half of the immigrant households have at least

one child between the age of 0 and 14 years, which is slightly higher than the share for emigrant households (47%) and households with return migrants (34%), but lower than that of households without migration experience (59%).

Figure 3.2. **Return migration is more prevalent in urban areas**
Relative share of emigrant households and return migrant households (%)
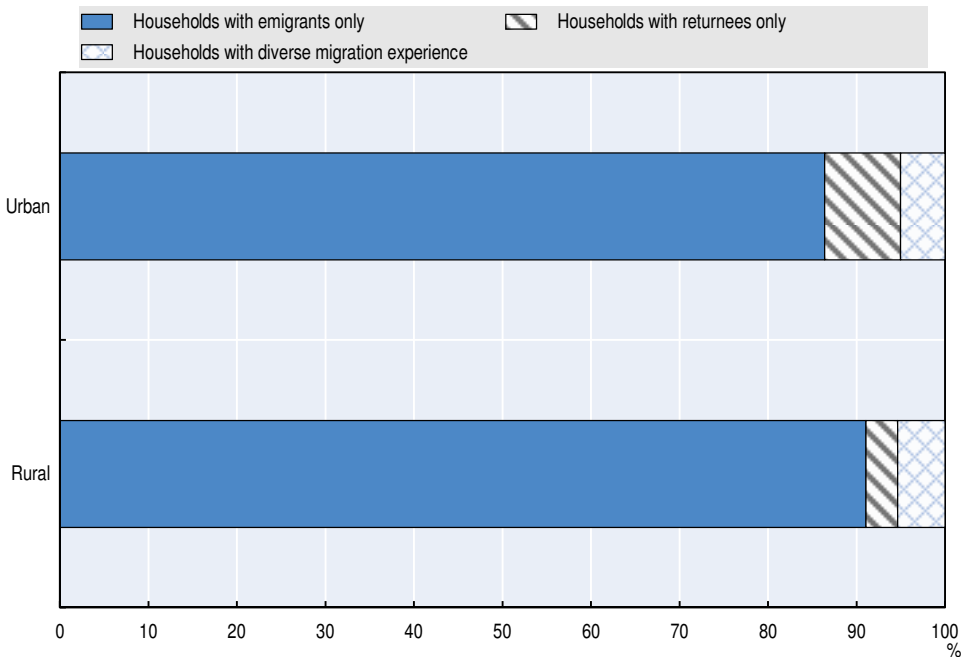
Note: Only households with emigrants or return migrants are included. Households with diverse migration experience are households with both emigrants and return migrants.
Source: Authors' own work based on IPPMD data.

Overall, about one in three households in the sample has a female household head. Households with emigrants have the highest share of female-headed households (45%), which is surprising given that 59% of all emigrants are women. Households with emigrants are the most educated, while households with immigrants are the least likely to have a member who has completed post-secondary education.

For the purposes of this project, a household-level wealth indicator was constructed based on questions in the household survey on the number of assets owned by the household, ranging from cell phones to real estate. The wealth indicator was created using principal component analysis. It suggests that households with emigrants, returnees, and households that receive remittances are the wealthiest households, while households with immigrants are the least wealthy.

The survey also asked whether or not members of the households aged 15 or over were planning to live or work in another country. On average, one in five households in the sample had a member who planned to emigrate. The data show that plans to emigrate are more prevalent in households which have migration experience. Among households with return migrants, 46% had a member who planned to emigrate. This rate includes return migrants themselves, 29% of whom were planning to emigrate again in the year following the survey.

Table 3.3. **Households with emigrants or return migrants are wealthier on average than non-migrant households**

Characteristics of sampled households

	Total sample	Households without migrants	Households with emigrants	Households receiving remittances	Households with returnees	Households with immigrants
Number of households	2 037	1 073 (53%)	417 (20%)	588 (29%)	59 (3%)	529 (26%)
Households in rural areas (%)	23	23	13	13	8	31
Household size, number of members	3.7	3.9	3.7	3.7	3.7	3.2
Dependency ratio[a]	0.64	0.70	0.70	0.73	0.59	0.52
Households with children (0-14 years, %)	53	59	47	52	34	49
Households with female household heads (%)	35	40	45	45	41	17
Share of households with at least one member that completed post-secondary education (%)	23	28	33	31	41	5
Wealth indicator[b]	3.4	3.6	4.6	4.1	4.5	2.1
Households with members planning to emigrate[c] (%)	20	14	37	38	46	19

Notes: The groups in the column headings are not mutually exclusive, e.g. a household with an emigrant and an immigrant falls both in the category of households with emigrants, and in the category of households with immigrants.
a. The dependency ratio is the number of children and elderly persons divided by the number of people of working age (15-65).
b. The wealth indicator is standardised ranging from 0 to 100, with higher scores indicating wealthier households.
c. The share of households with a member planning to emigrate is based on a direct question asked to all adults (15 years or older) on whether or not they have plans to live and or work in another country in the future.
Source: Authors' own work based on IPPMD data.

Table 3.4 compares the characteristics of individuals (15 years and older) from the sampled households, broken down by whether they are emigrants, returnees, immigrants or lack migration experience. Return migrants are the oldest group, with an average age of 55, compared to non-migrants (40 years), current emigrants (39 years) and immigrants (31 years). While the

share of women among the non-migrants is 52%, the groups with migration experience are less gender balanced. The share of women is highest among current emigrants, at 59%, while they make up only 46% of the return migrants, suggesting that women are more likely to emigrate more permanently, or that gender patterns in migration have been changing over time.

Among all the individuals surveyed aged 25 and above, 14% have finished post-secondary education. Comparing education levels with migration experience, however, shows more marked differences. The most highly-educated group are emigrants, 23% of whom have finished at least post-secondary education. For both return migrants and non-migrants this share is 16%, while immigrants are the least highly educated group, with only 2% having completed at least post-secondary education. Among individuals planning to emigrate (not shown), 20% have finished post-secondary education.

Table 3.4. **A majority of emigrants are female**

Characteristics of individuals from the sampled households

	Non-migrants	Emigrants	Return migrants	Immigrants
Number of individuals	4 380	622	65	1 016
Average age	40	39	55	31
Share of women (%)	52	59	46	39
Share of adults (25+) having completed post-secondary education (%)	16	23	16	2

Note: The group of non-migrants includes individuals in households without migrants. Only adults (15+) are included. To calculate education status, the analysis only included individuals aged 25 or over – the age by which they would have completed post-secondary level education.

Source: Authors' own work based on IPPMD data.

Emigration patterns are similar for women and men

Data collected on emigrants included their current country of residence, the time since migration and the reasons they left. The destination countries are very similar for men and women, with the majority of emigrants living in the United States (Figure 3.3). Spain is the second most popular destination country for both women and men.

The three main reasons given for emigrating were to search for work (50%), for marriage or to reunite family (26%); and to support the family financially (10%; Figure 3.4). These reasons were similar for both men and women. About 18% of the emigrants left the Dominican Republic less than two years before the survey, while 41% left more than ten years previously. The time since emigrating differs between women and men. Women were more likely to have left more than ten years ago (47%) than men (34%).

Figure 3.3. **The majority of emigrants, both women and men, reside in the United States**

Emigrants' current country of residence (%), by gender

United States
EU-28 (excluding Spain)
Spain
South America
Puerto Rico
Other

Women

7%
2%
8%
4%
16%
63%

Men

6%
3%
8%
4%
10%
69%
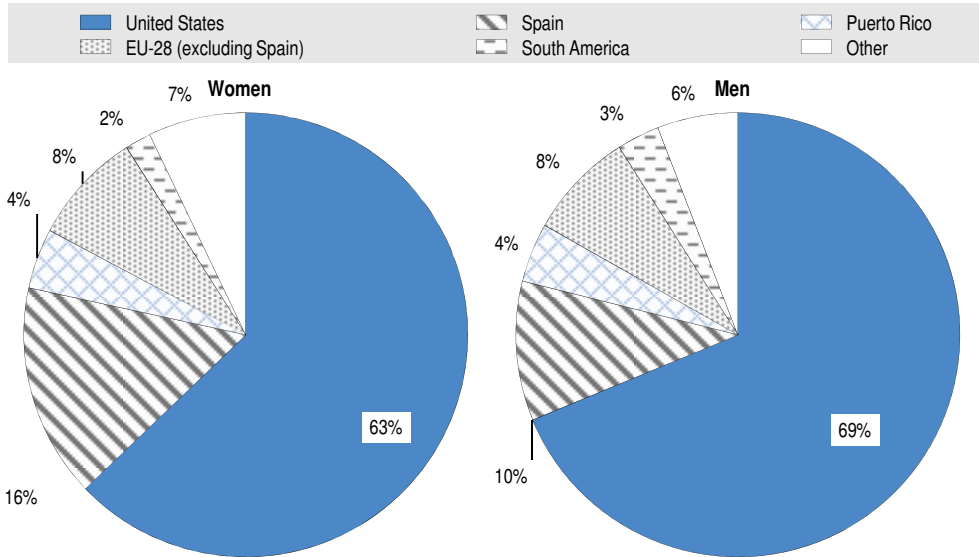
Source: Authors' own work based on IPPMD data.

Figure 3.4. **Work related reasons are the main motivation to emigrate**

Relative share of reasons for emigrating (%), by gender

To search for work
Marriage/family reunion
To study abroad
Other
To take a job
To provide financial support to the family
To provide better education opportunities for the children

Women
50 | 2 | 29 | 10 | 2 | 4 | 2

Men
51 | 4 | 21 | 10 | 4 | 4 | 5

0 10 20 30 40 50 60 70 80 90 100 %
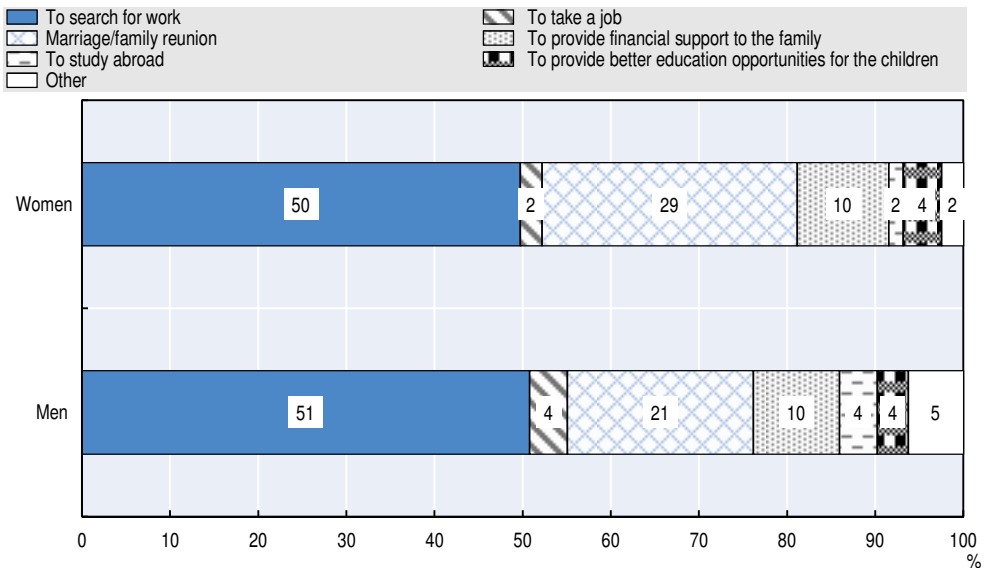
Note: Respondents were given the chance to provide two reasons for emigrating, but only the first reason was taken into account.

Source: Authors' own work based on IPPMD data.

Remittances are not received by all emigrant households

While remittances and emigration are linked, one does not necessarily imply the other. Among the 2 037 households surveyed, 15% had received remittances from a former member of the household (which represents 54% of households receiving remittances), while 13% received remittances from an emigrant who had never lived in the household (Figure 3.5). Overall 28% of all households (588) had received remittances in the 12 months leading up to the survey; 81% of emigrant households had received remittances. Sixty percent of emigrants had sent remittances in the past 12 months, either in cash or kind.

Figure 3.5. **More than a quarter of surveyed households receive remittances**

Share of households receiving remittances in the 12 months leading up to the survey (%)
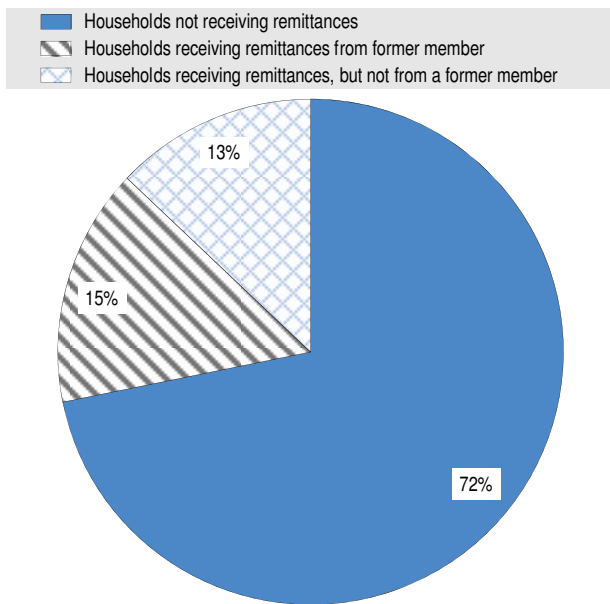
Note: The category 'households receiving remittances from former member' does not imply that they solely receive remittances from a former member, it includes households that receive remittances also from other emigrants.
Source: Authors' own work based on IPPMD data.

The average amount remitted by emigrants over the 12 months prior to the survey was DOP 56 516 (Dominican peso, equivalent to USD 1 306). Men and women remit at approximately the same rate: 80% of female and 79% of male emigrants send remittances home. The average amount sent by men is slightly higher, however: DOP 58 130 (USD 1 334) for men compared to DOP 55 443 (USD 1 281) for women.

The survey asked households receiving remittances from former members whether they undertook any major expenditures after the member left the household, such as taking out a loan or investing in productive or human capital.

The top four activities undertaken by the households were taking out a bank loan, accumulating savings, repay debt, and paying for a household member's health treatment (Figure 3.6). However, most households (63%) stated that they had not undertaken any of the suggested activities.

Figure 3.6. **Taking out a loan and accumulating savings were the most common activities for remittance-receiving households**

Activities undertaken by households following the emigration of a member
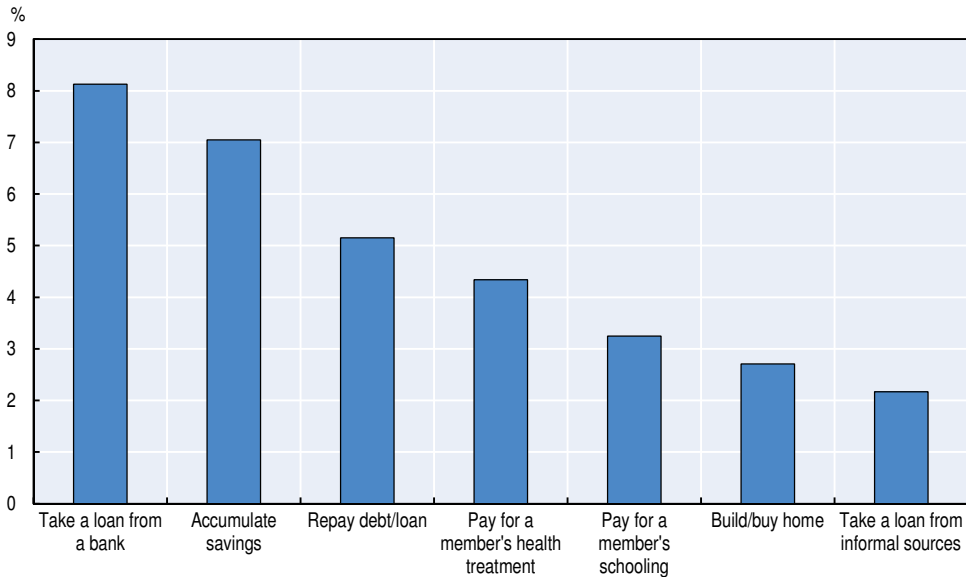
Note: The sample only includes households that receive remittances from a former member. The figure displays the seven most common activities reported by households. Respondents could specify different activities undertaken after a migrant left the household from the following list: taking a loan from a bank, take a loan from an informal source, paying for health treatment or schooling for a household member, accumulating savings, repaying a debt/loan, building or buying a home, building a dwelling to sell to others, buying land, and restoring or improving housing.
Source: Authors' own work based on IPPMD data.

Return migration from the United States is the most common

Returnees' former countries of destination are similar for women and men, and are very similar to the current emigrants' countries of destination (Figure 3.7). Most return migrants come back from the United States, though the share is lower than the share of Dominican emigrants currently living there, which may suggest that emigrants to the United States are more likely to stay longer or permanently. The second largest group of return migrants returned from Spain. Half of the return migrants had spent less than two years in the country of destination. Similar to emigrants, the main reason for returnees' initial emigration was to search for work, followed by marriage or to reunite family. The main reason to return was family related, while the second most common reason was a lack of legal status in the country of destination.

Figure 3.7. **Most return migrants came back from the United States**
Returnees' former countries of destination (%)
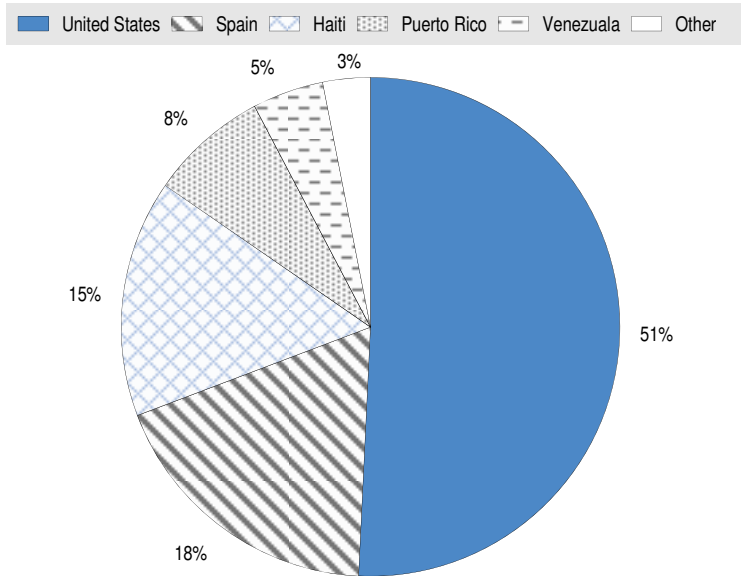
Source: Authors' own work based on IPPMD data.

Immigration largely involves people from low-income countries

The household survey included some additional questions for immigrants, including their reasons for migrating, their experience before migration and their experience of integration.

A large majority of the immigrants in the Dominican Republic (96%) were born in Haiti (Figure 3.8). Only 5% of women and 3% of men were born in other countries, mainly Spain and the United States. On average, immigrants have been residing in the Dominican Republic for about ten years. Six percent of the immigrants were reportedly seasonal migrants, regularly returning to their country of origin after doing seasonal work. Around 2% of immigrants have Dominican citizenship. One in five immigrants plan to permanently return to their country of origin in the future.

The main reasons for moving to the Dominican Republic include better job opportunities (52%), being closer to family or friends (10%) or because the immigrant knew people in the Dominican Republic (18%). Job-related reasons were more important for men, while being close to family or friends was more important for women (Figure 3.9). Fourteen percent of the immigrants reported having invested money in a business or property in the Dominican Republic, with slightly higher rates for women (15%) than for men (13%).

Figure 3.8. **Immigrants in the Dominican Republic are mainly from Haiti**

Immigrants' country of origin (%), by gender
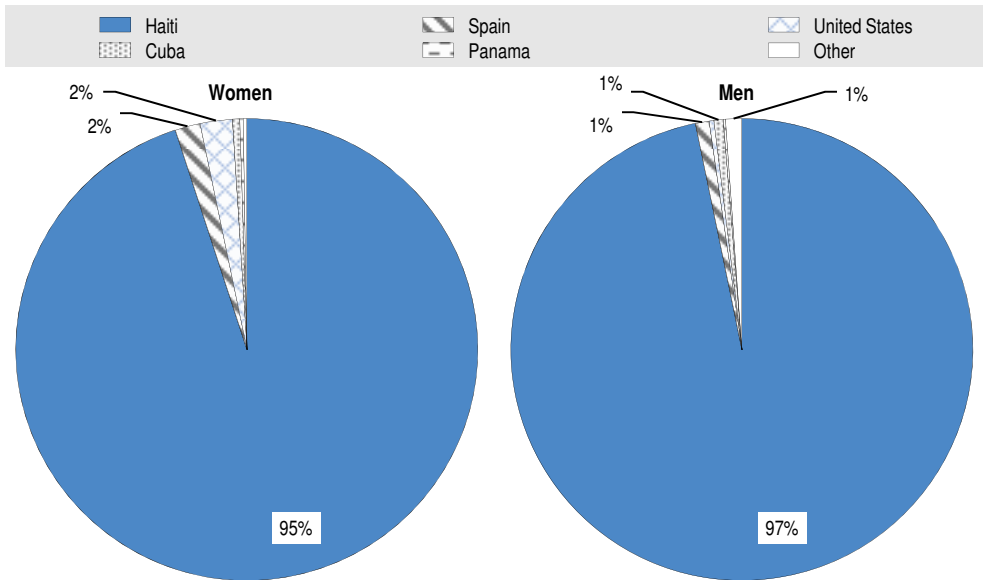
Source: Authors' own work based on IPPMD data.

Figure 3.9. **Most immigrants come to the Dominican Republic for work**

Reasons to immigrate to the Dominican Republic (%), by gender
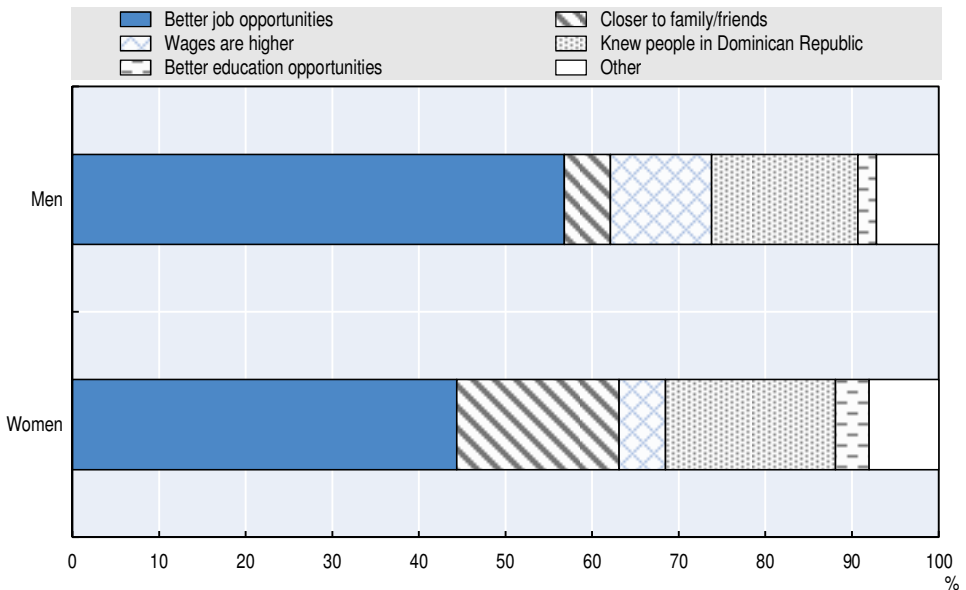
Source: Authors' own work based on IPPMD data.

This chapter has presented the three tools used to collect data – household and community surveys and the qualitative stakeholder interviews – and the analysis techniques for exploring the links between migration, public policies and development. The following chapter takes a sector-by-sector approach to presenting the results of the data analysis, focusing on the labour market, agriculture, education, investment and financial services, and social protection and health.

Notes

1. Notably the 1991 demographic and health survey, the 2002 survey of Haitian Immigrants in the Dominican Republic (FLACSO), the IX National Housing and Population Census of December 2010, the multiple purpose surveys ENHOGAR-2007 and ENHOGAR-2011 and the 2012 National Survey of Immigrants (ENI). See chapter 2 for more details on these surveys.

2. Distrito Nacional and Santo Domingo in the Gran Santo Domingo region; Santiago, Duarte and Valverde in the Northern o Cibao region; Peravia, Barahona and San Juan in the Southern region; San Pedro de Macorís, La Romana and La Altagracia in the Eastern region

ANNEX 3.A1

Summary of sampling design and fieldwork

Household survey overview	
Number of strata	Two (urban and rural, migrant and non-migrant households)
Estimated percentage of population covered	67%
Total number of Primary sampling units (PSU) sampled	272
Number of households interviewed	2 037
Number of enumerators	24
Number of field supervisors	6
Date of fieldwork	August 2014-February 2015
Days of fieldwork	Wednesday to Sunday
Hours of fieldwork	9am-9pm
Languages used	Spanish and Creole

ANNEX 3.A2

Summary of the modules included in the Dominican Republic household survey

Module 1 **Household roster**	The household roster includes questions on household characteristics, including the number of household members, relationship to the household head, sex, age, marital status etc. The module asks about intentions to migrate internationally of all household members aged 15 and above. The module also includes questions to identify return migrants and immigrants.
Module 2 **Education and skills**	The education module records information on child school attendance and child labour. It collects information about language skills, the educational attainment of all members, and a series of policy questions related to education. Education programmes in the questionnaire include scholarships, conditional cash transfers (CCTs) and distribution of school supplies.
Module 3 **Labour market**	The labour market module collects information on the labour characteristics of all household members aged 15 and above. This includes employment status, occupation and main sector of activity; and means of finding jobs which include government employment agencies. It also asks if members of the household participated in public employment programmes and vocational training.
Module 4 **Expenditures, assets, income**	This module contains questions on household expenditure patterns, asset ownership and various types of income sources.
Module 5 **Investment and financial services**	The investment module covers questions related to household financial inclusion, financial training and information on businesses activities. It also collects information about the main obstacles the household faces to operate its business, and if the household received government support through for example subsidies and tax exemptions.
Module 6 **Agricultural activities**	The agriculture module is administered to households involved in agricultural activities including farming, livestock husbandry and aquaculture. It records information about the agriculture plot (number of plots, size, crops grown, how the plot was acquired and the market potential) as well as information about the number and type of livestock raised. The module also collects information on whether households benefited from agricultural policies such as subsidies, agricultural related training or crop price insurance.
Module 7 **Emigration**	The emigration module captures information on all ex-members of the household 15-years and above who currently live abroad, and their characteristics such as sex, age, marital status, relationship to the household head, language skills and educational attainment. It also collects information on destination countries, the reasons the migrant left the country and the employment status of the migrant both at the time of emigration and in the destination country.
Module 8 **International remittances**	The remittance module collects information on remittances sent by current emigrants. It records the frequency of receiving remittances and the amount received, the channels through which remittances were sent as well as the usage of remittances.
Module 9 **Return migration**	The return migrant module collects information on all members of the household, 15-years and above, who previously lived abroad for at least three consecutive months and returned to the country. It records information about the destination country, the duration of migration as well as the reasons for emigration and for return.

Module 10 *Immigration*	The immigration module is administered to immigrants of the household 15-years and above, and captures information related to citizenship, reasons for immigration, employment status and occupation prior to immigration, and investments in the host country. The module also includes questions on discrimination in the host country.
Module 11 *Health and social protection*	The module on health and social protection concerns all members of the household 15 years and above, and gathers information about health visits and health and employment protection.

Chapter 4

What impacts does migration have on development in the Dominican Republic?

Migration – both emigration and immigration – is a significant feature of the Dominican Republic. Yet the links among the various dimensions of migration and development are not very well understood. This chapter uses the data from the IPPMD surveys to untangle some of the complex links between emigration, remittances, return migration and immigration and five key development sectors: the labour market, agriculture, education, investment and financial services, and social protection and health. The significant immigration flows into the country represent an analytical opportunity to better understand the dynamics of immigration and its links to job availability and use of government services and resources. The chapter concludes by assessing the extent to which the full development potential of migration and remittances is being realised in the Dominican Republic.

The Dominican economy has become one of the fastest-growing economies in the Latin American and Caribbean (LAC) region in recent decades (World Bank, 2016a). However, despite sustained growth and improved living conditions, people are continuing to emigrate, and an estimated 12% of the Dominican population is now living abroad. This has led to a significant increase in remittances to the country in recent decades. Growth in remittances to Latin America and the Caribbean was the most rapid among all geographical regions in 2015, at 4.8% compared to the average remittance growth rate to developing countries of 0.4%. The growing economy has also attracted a steady flow of immigrants, particularly from Haiti. Immigrants constitute an important part of the labour force, especially in low-skilled occupations.

Previous research has shown that migration and remittance have positive impacts on key development outcomes such as poverty reduction, growth and investments in human and physical capital in many Latin American countries (Fajnzylber and López, 2007). However, migration does not come without costs, and may generate losses in human capital, household income and cause social disruptions. The link between the various dimensions of migration and development in the Dominican Republic is relatively understudied (Chapter 2).

This chapter analyses how migration affects development the Dominican Republic in five policy sectors: the labour market; agriculture; education; investment and financial services; and social protection and health. The chapter presents findings from data analysis exploring the impact of four dimensions of migration: emigration, remittances, return migration and immigration.

Migration and the labour market

How does migration affect the labour market in the Dominican Republic? According to data from the Central Bank, in 2014, the country's labour force participation was 57.3%, with a higher rate for men (69%) than for women (50%). Likewise, the employment rate was higher for men than women, at 63% versus 35%, with a national employment rate of 49%. The unemployment rate was 14.5% at the national level and much higher for women (23.1%) than for men (8.7%) (BCRD, 2014). Youth unemployment (people between 15 and 24 years old) was 28.7%. The service sector was the biggest employer (68%), followed by industry (17%) and agriculture (15%). One of the country's main employment

challenges is the large informal sector. In 2014, informal employment was 55.5%, two percentage points lower than in 2012. This decrease was because of a reduction in informality in manufacturing and some services; while agriculture, construction and transportation remain highly informal (BCRD, 2015).

The IPPMD survey data (see Chapter 3) mostly echo these national patterns. For instance, the labour force participation rate among the survey sample (for people aged 15-64) was about 59%: 73% for men and 44% for women. The rate is higher in urban areas (61%) than in rural areas (51%). The employment rate is 49%: 66% for men and 31% for women, and is higher in urban areas (50%) than in rural areas (44%). The unemployment rate in the IPPMD sample is however significantly higher than national statistics, at 17%: 10% for men and 30% for women. Around 35% of the working population (aged 15 to 64) reported not being engaged in paid employment and not looking for work.

Remittances reduce the supply of labour

Emigration reduces labour supply if the migrants had been participating in the labour market before leaving. About 95% of all current emigrants in the Dominican Republic IPPMD survey are of working age (15 to 64). Among them, around 60% had been participating in the labour market before leaving. What does this loss of labour mean for households? The effects are complicated by whether emigrants send home remittances once they find employment abroad. Without remittances, the remaining household members may need to seek work; receiving remittances on the other hand can reduce their need to work. These patterns are well identified in various contexts and parts of the world (Acosta, 2007; Amuedo-Dorantes and Pozo, 2006; Funkhouser, 2006; Kim, 2007; Osaki, 2003).

How do the IPPMD data shed light on this complex situation? Figure 4.1 compares the average share of working household members in non-migrant households with the share in emigrant households *not* receiving remittances and in households that *are* receiving remittances. These descriptive statistics show that overall, remittance-receiving households have the lowest share of working adults, while households with an emigrant but not receiving remittances have the highest. This suggests a negative link between receiving international remittances and the need for those left behind to seek work. It also shows that emigrant households that are not receiving remittances have the highest share of working adults. There is a gender-differentiated pattern, however. Women in emigrant households not receiving remittances are much more likely to be working, while the difference for men in these two types of households is marginal. Remittance-receiving households also have a much lower share of men working than the other types of households compared.

Figure 4.1. **Households receiving remittances have fewer working members**
Share of household members aged 15-64 who are working
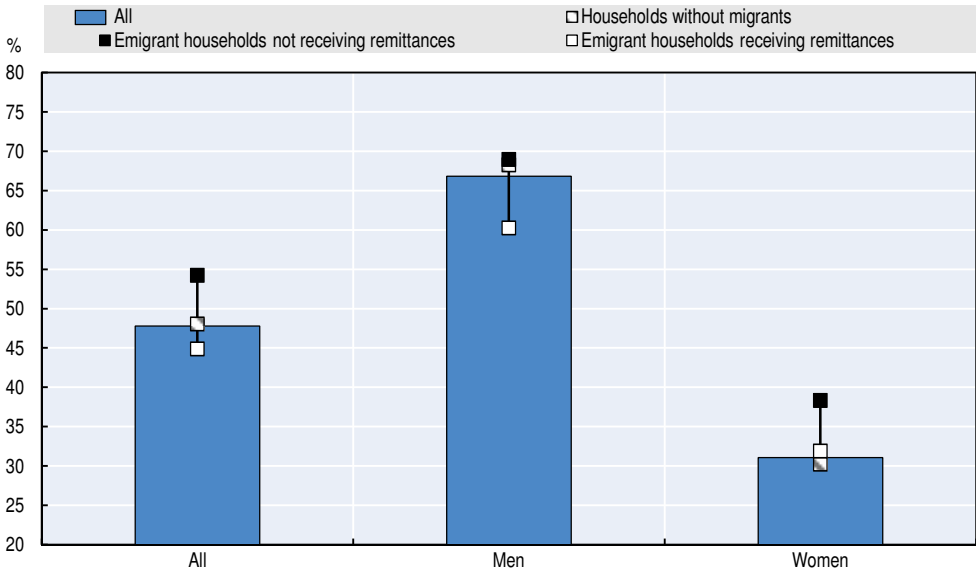
Note: The sample excludes households with return migrants only and those with immigrants only.
Source: Authors' own work based on IPPMD data.

This link was investigated further using a regression framework that controlled for other factors that may affect households' labour decisions (see Chapter 3 for methodological background). The analysis in Box 4.1 seems to confirm that household members withdraw from the labour market when they receive remittances (Table 4.1). Unlike the descriptive statistics shown above, the receipt of remittances appears to play a stronger role in women's employment than for men. There seems to be no clear link between the emigration of a household member and a households' labour decisions, however.

Immigrants constitute an important source of labour

Apart from being a country of emigration, the Dominican Republic is also a destination country for immigrants (Chapter 2). There has been a high demand for Haitian labour, particularly for low-skilled labour in urban construction and agriculture (Lozano, 2013). Despite the commonly perceived negative impacts of immigration on native populations' employment and wages, the literature generally finds little impact of immigration (Basso and Peri, 2015; Dustmann et al., 2013; Facchini et al., 2013; Gindling, 2008) with a slightly negative impact on the low-skilled native workers' wage level (Camarota, 1998; Orrenius and Zavodny, 2003).

Box 4.1. **The links between migration and employment**

To investigate the link between migration and households' labour decisions, the following regression models were used:

$$share\_working_{hh} = \beta_0 + \beta_1 emig_{hh} + \beta_2 remit_{hh} + \gamma_1 controls_{hh} + \delta_r + \varepsilon_{hh} \qquad (1)$$

$$m\_share\_working_{hh} = \beta_0 + \beta_1 emig_{hh} + \beta_2 remit_{hh} + \gamma_1 controls_{hh} + \delta_r + \varepsilon_{hh} \qquad (2)$$

$$f\_share\_working_{hh} = \beta_0 + \beta_1 emig_{hh} + \beta_2 remit_{hh} + \gamma_1 controls_{hh} + \delta_r + \varepsilon_{hh} \qquad (3)$$

where $share\_working_{hh}$ signifies households' labour supply, measured as the share of household members aged 15-64 who are working; $m\_share\_working_{hh}$ is the share of male household members that are working among men; and $f\_share\_working_{hh}$ for female household members. $emig_{hh}$ represents a variable with the value of 1 where a household has at least one emigrant, and $remit_{hh}$ denotes a household that receives remittances. $controls_{hh}$ stands for a set of control variables at the household level.[a] δ_r implies regional fixed effects and ε_{hh} is the randomly distributed error term. The coefficients of variables of interest are shown in Table 4.1.

Table 4.1. **Remittances and migration seem to reduce labour market participation**

Dependent variable: Share of the employed among household members aged 15-64
Main variables of interest: Having an emigrant/receiving remittances
Type of model: ordinary least squares (OLS)
Sample: All households with at least one member working

Variables of interest	Share of the employed household members among:		
	(1) All	(2) Men	(3) Women
Household has at least one emigrant	-0.007	-0.034	0.029
	(0.027)	(0.037)	(0.035)
Household receives remittances	-0.050**	-0.045	-0.060**
	(0.023)	(0.033)	(0.031)
Number of observations	1 297	1 037	1 202

Note: Results that are statistically significant are indicated as follows: ***: 99%, **: 95%, *: 90%. Standard errors in parentheses. The sample excludes households with return migrants only and those with immigrants only.

a. Control variables include the household's size and its squared value, the dependency ratio (number of children 0-15 and elderly 65+ divided by the total of other members), the male-to-female adult ratio, family members' mean education level, its wealth estimated by an indicator (Chapter 3) and its squared value.

According to the IPPMD data, about 90% of all immigrants surveyed in the Dominican Republic are of working age (15 to 64), while the corresponding share is 60% for native-born populations. Furthermore, young people (aged 15 to 34) account for 78% of all immigrants, but make up only 43% of the native

population. Immigrants are also more likely to be working than native-born people. Among adults aged 15 and above, the share of employed people is much higher for immigrants (58%) than for native people (43%). Likewise, the economically non-active population (those who are not working and not looking for jobs) is twice as large for native populations (42%) than immigrants (21%).

Immigrants constitute 21% of the total labour force surveyed. The labour brought by immigrants to the country can benefit specific sectors. The IPPMD research explored this for four key sectors – agriculture, construction, education and health – by comparing the share of immigrants in the total number of workers in each sector. The agriculture and construction sectors have larger shares of immigrants than the education and health sectors (Figure 4.2, left-hand chart). This is related to the skills level of immigrants in the Dominican Republic, who are more likely than native-born workers to have low-skilled occupations (Figure 4.2, right-hand chart).

Figure 4.2. **Immigrant workers are more likely to have low-skilled occupations in agriculture and construction**
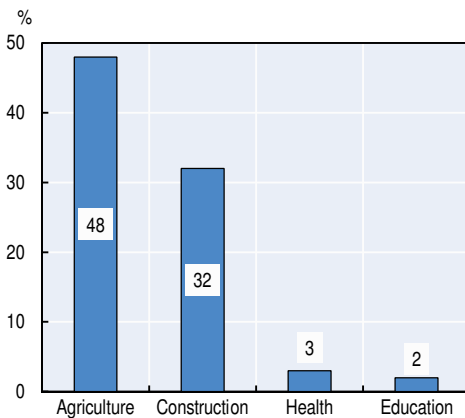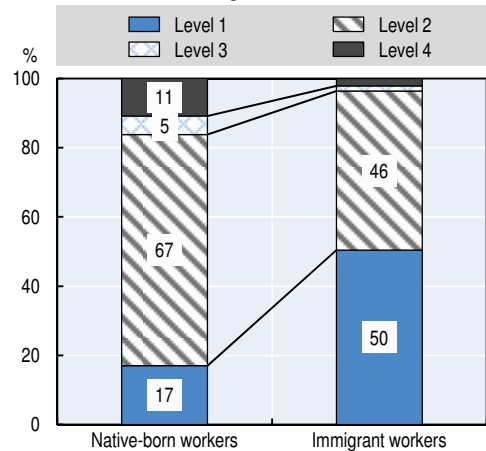
Note: The skills level of occupations has been categorised using the International Standard Classification of Occupations (ISCO) provided by the International Labour Organization (ILO, 2012). Skills level 1: occupations which involve simple and routine physical or manual tasks (includes elementary occupations and some armed forces occupations). Skills level 2: clerical support workers; services and sales workers; skilled agricultural, forestry and fishery workers; craft and related trade workers; plan and machine operators and assemblers. Skills level 3: technicians and associate professionals and hospitality, retail and other services managers. Skills level 4: Other types of managers and professionals.

Source: Authors' own work based on IPPMD data.

Migration and agriculture

While agriculture plays an important role in the Dominican Republic, its weight in gross domestic product (GDP) is relatively small compared to other IPPMD countries. Most of the structural transformation in the sector happened in the 1990s, when value-added in agriculture as a share of GDP shrank from 15% to 8% between 1990 and 1999 (World Bank, 2017). Agriculture also employs a smaller share of the country's labour force than in most other IPPMD countries (OECD, 2017). In 2013, 14% of the employed population worked in the agricultural sector (FAO, 2016a) – the ninth lowest rate amongst IPPMD partner countries (Costa Rica is lowest at 13%). The third lowest rate is in the Philippines – at 31%. Productivity in the sector is good, however. An agricultural production per capita index measured at 100 in 2004-2006 had increased to 120 by 2013, the fourth biggest increase amongst IPPMD partner countries over that period (FAO, 2016b).

Few households in the Dominican IPPMD sample are involved in agricultural activities.[1] Of the 2 037 households interviewed, only 402 (20%) were agricultural at the time of the survey. This is largely a reflection of the low share of rural households in the sample (23%), and in the country as a whole (22%, United Nations, 2014). Of the agricultural households in the IPPMD data, 74 households or 18% exclusively grow crops, 185 households or 46% exclusively rear livestock, while 143 households or 36% do both. This section looks at these households to see whether emigration and remittances are helping to modernise and increase productivity in the agricultural sector.

Emigration contributes to revitalising the agricultural labour market

Studies of other countries have shown that emigration decreases labour availability within the household and can lead to agricultural labour shortages (Tacoli, 2002) and food insecurity in certain communities (Skeldon, 2009; Cotula and Toulmin, 2004; Cissé and Daum, 2010; Tsiko, 2009). As we have seen above, the impact of emigration and remittances on household labour decisions is complex. There are few empirical studies which explore this for agricultural households specifically, however.

What do the IPPMD data tell us about the impact of labour lost to emigration on rural households in the Dominican Republic? There are two ways agricultural households can fill the labour gap – they may either put more household members to work in their fields, or they may have to hire in workers. Figure 4.3 suggests that emigrants are being replaced by hired-in labour. Compared to households without emigrants, households with emigrants draw on slightly less household labour (1.3 vs. 1.1 household members). However, emigrant households are more likely to hire in external workers (75% vs. 56%) and in larger numbers than non-emigrant households (11.8 vs. 5.4 external workers). This would suggest that emigration is causing

households to draw on the external labour market, relieving congestion in the agricultural labour market and perhaps even improving productivity (though data on productivity was not collected).

Figure 4.3. **Agricultural households with emigrants are more likely to hire in external workers and in higher numbers than non-emigrant households**

Use of labour in agricultural activities, by whether the household has an emigrant
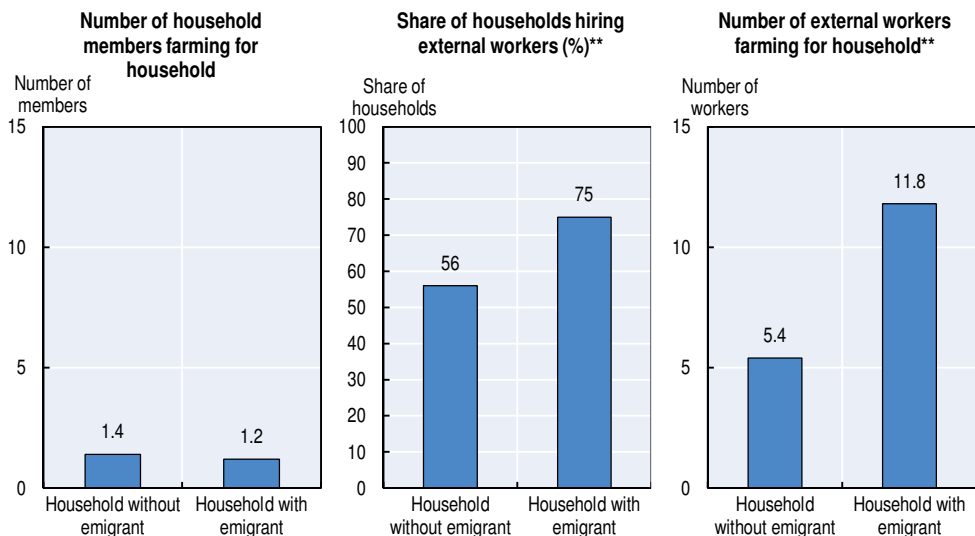
Note: Statistical significance calculated using a t-test (1st and 3rd graphs) and chi-squared test (middle graph) is indicated as follows: ***: 99%, **: 95%, *: 90%.

Source: Authors' own work based on IPPMD data.

Regression analysis controlling for a number of factors that may also affect use of farm labour was used to explore these links more fully (Box 4.2). To help isolate the effects of emigration and remittances (which may also affect the labour behaviour of the household), an initial model excluded remittance-receiving households. The results (shown in Table 4.2, top rows) suggest that there are no statistically significant links between emigration and the number of household members working on the farm, the probability of hiring external workers, or the number hired.

However, as remittances can reduce the need to hire more labour, either because they allow the household to live on lower agricultural outputs or because remittances are used in other productive ways, a second model includes remittance-receiving households and controls for the fact that a household may receive remittances (Table 4.2, bottom rows). The results confirm the lack of a link between emigrant households and use of household labour in agricultural activities, and also confirm that they are more likely to hire in more labour, unless they receive remittances. There does not seem to be a link between emigration and the number of external workers hired, however.

Box 4.2. **The links between emigration and farm labour**

To estimate the probability that an emigrant agricultural household draws on more household or external labour, the following ordinary least squares (OLS) regression model was developed:

$$number\_workers_{hh} = \beta_0 + \beta_1 emig_{hh} + \gamma controls_{hh} + \delta_r + \varepsilon_{hh} \qquad (4)$$

where the unit of observation is the household *hh* and the dependent continuous variable *number_workers* in equation (4) represents the number of people working in the fields; $emig_{hh}$ represents the whether the household has a former member who has emigrated or not; $control_{hh}$ stands for a set of household-level regressors;[a] while δ_r represents regional-level fixed effects. Standard errors, ε_{hh}, are robust to heteroskedasticity.

In addition, the following probit model was estimated:

$$Prob(hire\_external)_{hh} = \beta_0 + \beta_1 emig_{hh} + \gamma controls_{hh} + \delta_r + \varepsilon_{hh} \qquad (5)$$

where Prob(hire_external) takes on a value of 1 if the household has hired at least one external worker and 0 otherwise. The other variables are defined as in equation (4).

Table 4.2. **Emigrant households draw on more agricultural labour**

Dependent variable: Agricultural labour working for the household
Main variables of interest: Household has an emigrant
Type of model: OLS/Probit
Sample: Agricultural households

Variables of interest	Dependent variables		
	(1) Number of household members working for the household (equation 4)	(2) Household has hired external labour (equation 5)	(3) Number of external workers hired by household[1] (equation 4)
Sample: Agricultural households excluding remittance-receiving households			
Household has an emigrant	-0.331 (0.248)	0.118 (0.180)	-0.515 (1.728)
Number of observations	146	146	86
Sample: Agricultural households including remittances-receiving households			
Household has an emigrant	0.077 (0.156)	0.301*** (0.103)	3.778 (3.301)
Household receives remittances	-0.215 (0.145)	-0.244* (0.129)	5.052 (5.370)
Number of observations	191	192	113

Notes: Statistical significance is indicated as follows: ***: 99%, **: 95%, *: 90%. Coefficients resulting from probit model estimations reflect marginal effects. Standard errors are in parentheses and robust to heteroskedasticity.
1. This regression model is estimated only for those households that hired at least one external worker.

Results are presented in Table 4.2. Column (1) presents results on the number of household members working in agricultural activities for the household, column

Box 4.2. **The links between emigration and farm labour** (cont.)

(2) presents results on whether the household hired external labour for their agricultural activities, while column (3) presents results on the number of external workers hired by the household. Results are also divided into two sections. The top rows present results based on a sample excluding non-migrant households receiving remittances, while the bottom rows present results based on a sample including remittance-receiving migrant households and show coefficient results related to both emigration and remittances.

a. Control variables for all regression model estimations related to agriculture include the household's size, its dependency ratio (number of children 0-15 and elderly 65+ divided by the total of other members), the male-to-female adult ratio, its wealth estimated by an indicator (Chapter 3), whether it is in a rural or urban region and a fixed effect for its administrative region.

The finding that emigrant households are more likely to hire external workers provides some evidence that emigration is helping to revitalise the labour market by shifting labour demand outside of the household. Remittances, on the other hand, seem to reduce the need to hire labour from outside the household.

Migration and education

Migration and education are closely linked, and migration can play an important role in enhancing educational outcomes at national and individual levels. People emigrate to obtain quality education abroad for themselves or their children, or to earn money to pay for schooling for children left in the country of origin. Emigration and immigration can also change the skills composition of the population in a country, and access to education is crucial for immigrant integration.

The Dominican Republic has seen significant gains in access to education at all levels in the past 15 years, with a closing gap in educational achievement between the bottom 40% and the top 60% (World Bank, 2016a). Net primary education enrolment rates reached 84% in 2014 (World Bank, 2016b). The mean years of schooling of the adult population is 7.8 years, and about 12% have finished post-secondary education (UNESCO, 2016). However, the Dominican Republic, like many other countries in the region, is facing high school dropout and low completion rates. In the age group 15-29, 27% have dropped out of school without competing secondary education. Youth educational attainment is slightly lagging behind the average for the region, with 54% of youth (aged 25-29) completing secondary education and 12% completing tertiary education, compared to the LAC average of 55% and 15% respectively (OECD/ECLAC/CAF, 2016).

Children in immigrant households are less likely to attend school

Research has shown that remittances can ease financial constraints and allow households to invest in human capital (see for example Cox Edwards and Ureta, 2003; Hanson and Woodruff, 2003; Yang, 2008). On the other hand, the departure of a household member may have disruptive effects on child and youth schooling due to emotional stress or the need to take on more housework, farm work or work outside the household to compensate for the loss of a household member (Amuedo-Dorantes and Pozo, 2010; Save the Children, 2006).

Evidence from various Latin American countries shows that children in remittance-receiving households tend to be less likely to drop out of school (Acosta et al., 2008; Calero et al., 2009; Cox-Edwards and Ureta, 2003; Hanson and Woodruff, 2003). However, evidence from Mexico also points to the fact that migration can have a negative impact on educational attainment of children in secondary school (López-Córdoba 2005; McKenzie and Rapoport, 2006). There is little research into the link between migration and school outcomes in the Dominican Republic, however. The evidence that does exist shows limited links between migration and remittances and school attendance. For example, one study finds that remittances have a positive impact on secondary school attendance, while the emigration of a household member negatively affects children's school attendance, thereby tempering or even eliminating the positive effects of remittances in households that both have an emigrant and receive remittances (Amuedo-Dorantes and Pozo, 2010). Another study finds that though remittances raise educational attainment in several Latin American countries, this is not the case in the Dominican Republic (Fajnzylber and López, 2007).

What do the IPPMD data tell us about these links? The descriptive data show that among children of primary school age (6-14 years), school attendance is almost universal, at 97%. Primary school age children living in immigrant households are slightly less likely to attend school, however, at 90%.[2] Among youth in the age 15-22, 47% attend school. Youth in households that receive remittances or have a return migrant are more likely to attend school (at 50% and 52% respectively) than those in households not receiving remittances or without a return migrant (46% and 47% respectively). However, these differences are not statistically significant. Youth in immigrant households are significantly less likely to attend school than youth in non-immigrant households: only 24% of youth living in an immigrant household attend school (Figure 4.4).

More in-depth analysis, controlling for household characteristics, shows no statistically significant link between youth school attendance and emigrant households and those receiving remittances (Box 4.3, column 3). In line with the descriptive statistics in Figure 4.4, children living in immigrant households are however significantly less likely to attend school, and this link is statistically significant. Failure to provide education to first and second generation immigrants may negatively affect their integration and future

employability, as well as constituting a lost opportunity for the country when it comes to long-term human capital accumulation.

Figure 4.4. **Immigrants are less likely to attend school**

Share of youth (aged 15-22) attending school
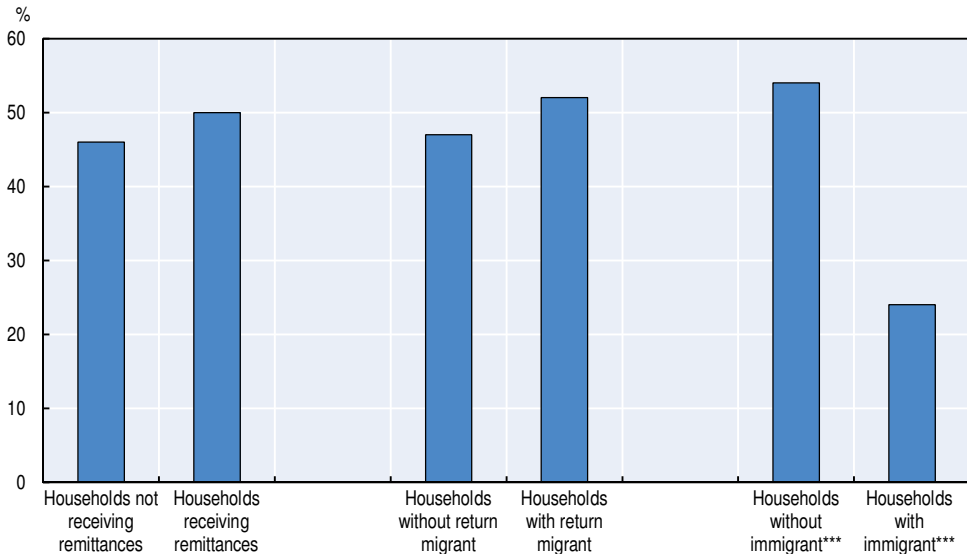
Note: Statistical significance calculated (using a chi-squared test) is indicated as follows: ***: 99%, **: 95%, *: 90%.
Source: Authors' own work based on IPPMD data.

As well as affecting school attendance, migration and remittances may also affect educational expenditures. Students in developing countries are often required to pay for books, education supplies or tutoring fees (Amuedo-Dorantes and Pozo, 2010). Remittances or funds brought back by return migrants can help finance these additional educational expenditures, or allow households to send their children to better schools. The results in Box 4.3 (Table 4.3, column 1 and 2) show no statistically significant association between households receiving remittances and educational expenditures. However, having an emigrant in the household is positively associated with the amount that the household spends on education, as is having a return migrant in the household. The findings suggest that it is the decision to emigrate and return rather than the income increase from remittances that links migration to higher educational expenditures. This could be due to changing preferences for schooling due to migration, or perhaps emigrant and return migrant households have unobservable characteristics such as a strong preference for child schooling. Another explanation that has been put forward in previous studies is that households separate migrant income from remittance income. Migrant income may be considered to be "life-cycle" income by the household, to be used for investment that would generate greater opportunity for children in the future, while remittances are seen more as more

"targeted earnings" that are used to overcome income shocks (Jakob, 2015). Finally, the results show no statistically significant link – either positive or negative – between immigration and educational expenditures (Table 4.3, lower part).

Box 4.3. **The links between migration and education**

A regression framework was developed to estimate the effect of migration and remittances on education expenditures using the following equation:

$$Prob(education_i) = \beta_0 + \beta_1 remit_{hh} + \beta_2 emig_{hh} + \gamma controls_{hh} + \gamma controls_i + \delta_r + \varepsilon_i \tag{6}$$

$$Ln(edu\_exp_{hh}) = \beta_0 + \beta_1 remit_{hh} + \beta_2 emig_{hh} + \gamma controls_{hh} + \delta_r + \varepsilon_{hh} \tag{7}$$

$$\frac{edu\ exp_{hh}}{total\ exp_{hh}} = \beta_0 + \beta_1 remit_{hh} + \beta_2 emig_{hh} + \gamma controls_{hh} + \delta_r + \varepsilon_{hh} \tag{8}$$

where $Prob(education_i)$ in equation (6) represents a binary variable for whether an individual is attending education or not. The dependent variables $Ln(edu\_exp_{hh})$ in equation (7) and $\frac{edu\ exp_{hh}}{total\ exp_{hh}}$ in equation (8) represent household educational expenditures measured in absolute (logged) values or as share of total household yearly budget respectively; $remit_{hh}$ represents a binary variable for households receiving remittances, where "1" denotes a household receiving remittances and "0" if not, while $emig_{hh}$ takes on value "1" if the household has at least one emigrant and "0" if not. $controls_{hh}$ and $controls_i$ are two sets of observed household characteristics influencing the outcome.[a] δ_r represents regional-level fixed effects, standard errors, ε_{hh}, are robust to heteroskedasticity.

Table 4.3. **Emigration and return migration are linked to educational expenditures**

Dependent variable: Educational expenditures (values and share of household budget), school attendance
Main variables of interest: Receiving remittances/having an emigrant/return migrant/immigrant
Type of model: OLS, Probit
Sample: All households (column 1 and 2), youth aged 15-22 (column 3)

Variables of interest	Dependent variable		
	(1) Educational expenditure (amount)	(2) Educational expenditure (share)	(3) School attendance (age 15-22)
Household receives remittances	-0.038	0.002	-0.032
	(0.095)	(0.003)	(0.041)
Household has at least one emigrant	0.197*	0.000	-0.003
	(0.108)	(0.003)	(0.041)
Number of observations	841	1 820	1 117
Household has a return migrant	0.471**	0.002	0.109
	(0.206)	(0.006)	(0.108)
Number of observations	841	1 820	1 117
Household has an immigrant	0.166	-0.001	-0.213***
	(0.107)	(0.002)	(0.050)
Number of observations	841	1 820	1 117

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

Box 4.3. **The links between migration and education** *(cont.)*

The middle part of the table analyses the association between return migration and educational spending and attendance. The remittance variables are replaced by a binary variable indicating if the youth is living in a return migrant household.

The lower part of the table analyses the association between immigration and educational attendance and spending. The migration and remittance variables are replaced by a binary variable for an individual living in an immigrant household, or an individual being an immigrant him/herself.

a. The set of household and individual explanatory variables included in the model are the following: household size and household size squared, household dependency ratio (defined as the number of children and elderly in the household as a share of the total adult population), mean education level of the members in the household, number of children and youth in the household, binary variables for urban location, and finally an asset index (based on principal component analysis) that aims to capture the wealth of the household (for all three equations), in addition the model for school attendance also includes a control for age and gender of the youth and the male to female ratio in the household. Regressions related to emigration and return migration control for household having an immigrant and regressions related to immigration controls for household having an emigrant.

Return migration encourages investments in private schooling

Migration and remittances may also create a demand for better quality schooling, such as private schooling, which is often more costly but may offer higher quality education. Previous research has shown that children in remittance-receiving households in Latin America are more likely to attend private schools (Medina and Cardona, 2010; Jakob, 2015). The IPPMD descriptive statistics also show that children in households that receive remittances are more likely to attend private schools (20%) than children in households that do not receive remittances (16%). However, an even bigger difference is found among children in return migrant households: 43% of children living in return migrant households attend private school, compared to 17% for children in households without return migrants (Figure 4.5).[3] This indicates that parts of the increase in education investments due to migration may be directed towards private schools, especially among households with return migrants.

Emigrants often return with additional skills

Whether or not migrants acquire education and skills in the destination country affects the economic payoff of migration (Dustmann and Glitz, 2011). Migrants who acquire education abroad and return with new skills can help increase human capital back home. The extent to which this will happen

depends on the degree to which emigrants improve their skills during their migration period, and whether migrants return to their origin countries or not. The Dominican emigrants in the IPPMD sample are relatively well educated compared to individuals without migration experience. Among emigrants, 23% have completed post-secondary education, compared to 16% of return migrants and individuals without migration experience (Table 3.5, Chapter 3). Comparing the sample of emigrants and return migrants in more detail shows that male return migrants are the most likely to have acquired training in the country of destination (31%) (Figure 4.6). Women – both current emigrants and returnees – are more likely to have completed post-secondary education than men, but less likely to have acquired education in the country of destination. Even so, 23% of female return migrants state that they acquired training abroad. The results further indicate that although the Dominican Republic is losing some of its highly educated workforce to emigration, return migration is contributing to human capital to a certain extent.

Figure 4.5. **Children in return migrant households are more likely to attend private school**

Share of children (aged 6-15) attending private school (%)
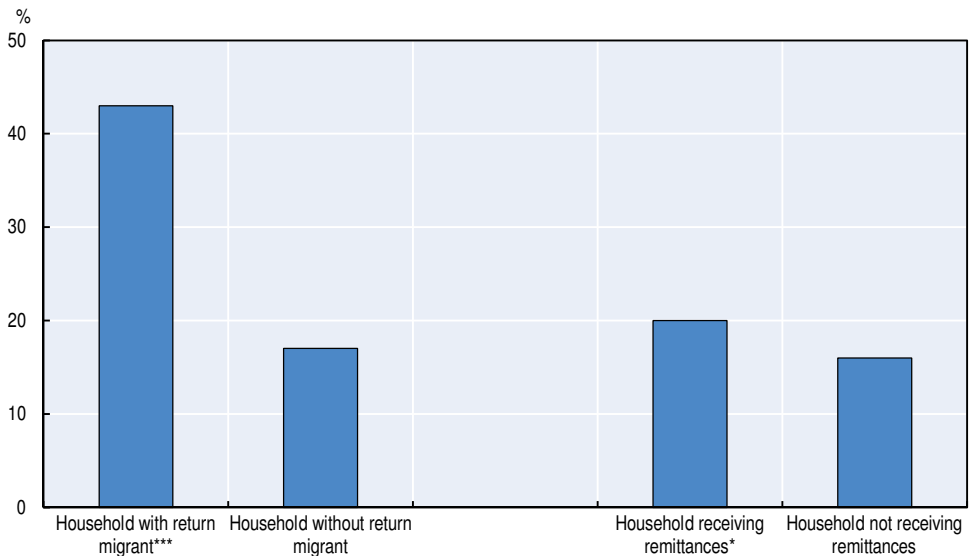
Note: Statistical significance calculated (using a chi-squared test) is indicated as follows: ***: 99%, **: 95%, *: 90%.
Source: Authors' own work based on IPPMD data.

Figure 4.6. **One in three male return migrants come back with new qualifications acquired overseas**

Education and skills levels of emigrants and return migrants (%)
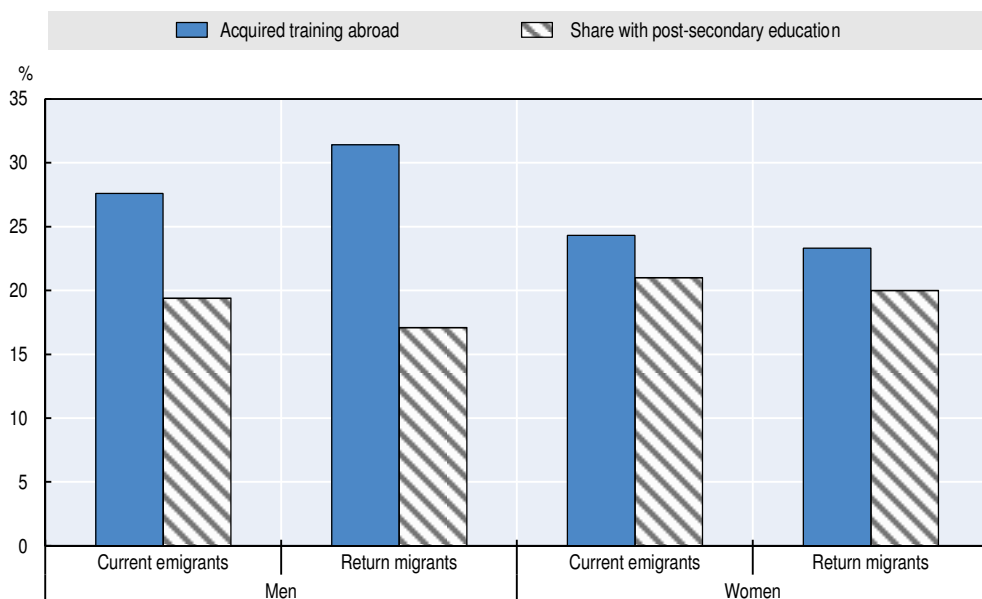
Note: Post-secondary education includes vocational post-secondary education and tertiary education.
Source: Authors' own work based on IPPMD data.

Migration, investments and financial services

Migration can ease credit constraints and positively contribute to capital investments and entrepreneurial activities, such as financing the opening or expansion of small businesses, in the emigrants' country of origin. There are three main ways in which migration can achieve this:

● Remittances can be invested in productive capital in the form of business and real estate.

● Return migrants can bring funds, entrepreneurial skills and valuable networks back to their country of origin.

● Immigrants can contribute to entrepreneurial activity and employment creation in their host countries.

Studies from other countries have found that remittances are linked to higher self-employment (Funkhouser, 1992) and business investments (Yang, 2008; Woodruff and Zenteno, 2007), and that return migrants are likely to engage in entrepreneurial activities (McCormick and Wahba, 2001; Dustmann and Kirchkamp, 2002). These patterns may be linked to both the human and financial capital stemming from migration (Amuedo-Dorantes and Pozo, 2006). In addition, immigrant entrepreneurs can maintain and develop economic

activities and revitalise the economy of host countries by developing innovative forms of businesses and building on their transnational linkages. In many OECD countries, immigrants exhibit higher rates of self-employment than the native-born population. Part of the explanation may be limited employment opportunities for immigrants in the host country, especially among low-skilled immigrants. Immigrants may also face particular barriers when it comes to starting and running a business, including limited knowledge of laws and regulations in the country of destination, lack of language skills and barriers to accessing credit (OECD, 2010).

A majority of the self-employed in the Dominican Republic are own-account workers rather than employers, and few define themselves as entrepreneurs. The barriers to entrepreneurship in the Dominican Republic are similar to the LAC average (OECD, 2016). The country is ranked 14 out of 33 LAC countries on the World Bank doing business index, and 103 out of 190 countries worldwide (World Bank, 2016c).

Remittances are linked to higher business ownership in urban areas

Remittances sent back by emigrants in the United States to home communities in Latin America have been shown to positively affect local development if they are invested productively (Woodruff and Zenteno, 2007). However, other studies show that remittances are not always used to accumulate productive capital, but rather used to support daily consumption (Adams and Cuechuecha, 2010). For example, a study cited in Chapter 2 showed that Dominican emigrants tend to use remittances mainly for consumption purposes (60%), with only a small share invested in entrepreneurial activities (5%; Suki, 2004).

The IPPMD data presented in Chapter 3 show that the most common financial activities for households receiving remittances from former members are savings (8%), taking out a bank loan (7%) and paying for health treatment (5%) (Figure 3.6). However, the vast majority of remittance-receiving households claimed not having undertaken any financial activity since a member left the household.

Overall, 22% of the households in the IPPMD sample own a business. Business ownership is higher among households in urban areas (23%) than in rural areas (17%). Households receiving remittances and households with return migrants are more likely to own businesses than those with no migration experience. Immigrant households are just as likely to own a business as households without immigrants (Figure 4.7).

The findings of other research into the link between migration and entrepreneurship in the Dominican Republic are mixed. A study examining the link between remittance receipt and business ownership found that while remittances do not increase the likelihood that the household owns a business,

business owners are more likely to receive remittances (Amuedo-Dorantes and Pozo, 2006). However, another study found that remittances are significantly and positively associated with self-employment (Fajnzylber and López, 2007).

Figure 4.7. **Households receiving remittances and with a return migrant are the most likely to own a business**

Share of households owning business, by migration experience
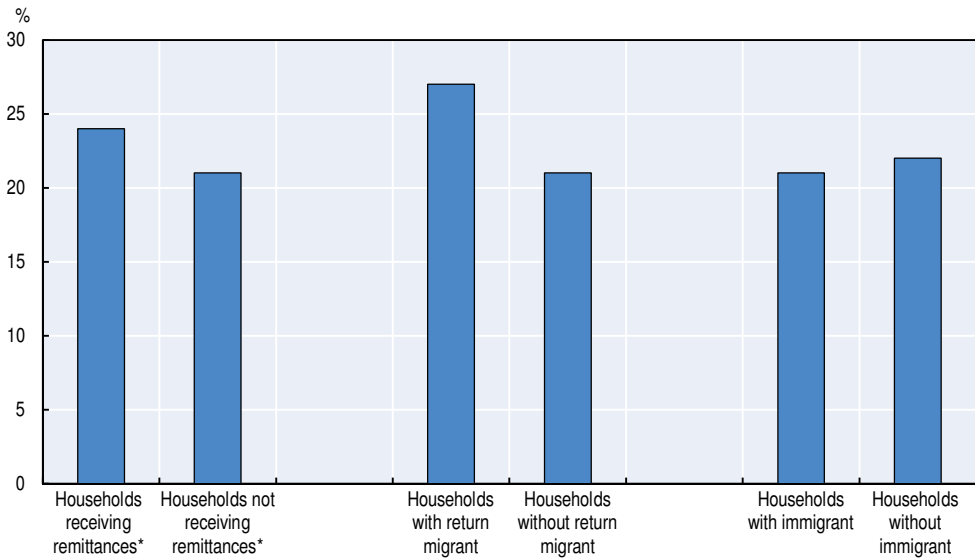
Note: Results that are statistically significant (calculated using a chi-squared test) are indicated as follows: ***: 99%, **: 95%, *: 90%.

Source: Authors' own work based on IPPMD data.

Box 4.4 probes more deeply the link between migration experience (emigration, remittances, return migration and immigration) and investments in business ownership, controlling for the characteristics and location of the household.

The results show that remittances are positively associated with business ownership, but only in urban areas (Table 4.4). Having an emigrant is on the other hand negatively associated with business ownership, although this link is not statistically significant. Return migration is not found to be linked to business ownership in either rural or urban areas.

The same analysis was also carried out for the link between immigration and business ownership. No statistically significant results were found. All in all, the results indicate that the link between migration and business investments in the Dominican Republic is weak.

Box 4.4. **The links between migration, remittances and business ownership**

To analyse the link between migration and business ownership, two probit model regression were run taking the following forms:

$$Prob(investment)_{hh} = \beta_0 + \beta_1 remit_{hh} + \beta_2 emig_{hh} + \beta_3 controls_{hh} + \varepsilon_{hh} \tag{9}$$

$$Prob(investment)_{hh} = \beta_0 + \beta_1 return_{hh} + \beta_2 emig_{hh} + \beta_3 controls_{hh} + \varepsilon_{hh} \tag{10}$$

where $investment_{hh}$ takes on value "1" if a household owns at least one business and "0" otherwise; $remit_{hh}$ in equation (9) represents a binary remittance variable with value "1" for households that receive remittances and "0" otherwise; $emig_{hh}$ represents a binary variable for whether the household has a migrant or not; and $controls_{hh}$ are a set of observed household and individual characteristics that are believed to influence the outcome. ε_i is a randomly distributed error term indicating, in part, the unobservable factors affecting the outcome variable.[a] In equation (10) $return_{hh}$ is a binary variable taking on value "1" if the household has at least one return migrant, and "0" for households without return migrants.

Table 4.4. **Remittances are linked to higher business ownership in urban areas**

Dependent variable: Household runs a business
Main variables of interest: Household has an emigrant/return migrant/immigrant, household receives remittances
Type of model: Probit
Sample: All households

Variables of interest	Dependent variable	
	(1) Business (urban)	(2) Business (rural)
Household receives remittances	0.058**	-0.062
	(0.029)	(0.060)
Household has at least one emigrant	-0.019	0.053
	(0.033)	(0.070)
Number of observations	1 490	423
Return migration		
Household has a return migrant	0.085	n/a
	(0.059)	
Number of observations	1 490	
Immigration		
Household has an immigrant	0.025	-0.026
	(0.029)	(0.051)
Number of observations	1 490	423

Note: Statistical significance is indicated as follows: ***: 99%, **: 95%, *: 90%. Analysis for return migration in rural areas is not included due to the small sample size of return migrants owning a business in rural areas. Excluding emigrant households from the analysis on the impact of immigration does not affect the results.

a. The set of household and individual explanatory variables included in the models are the following: household size and household size squared, household dependency ratio (defined as the number of children and elderly in the household as a share of the total adult population), mean education level of the members in the household, number of children in the household, binary variables for urban location and for household head being a female, and finally an asset index (based on principal component analysis) that aims to capture the wealth of the household (for all three equations). Regressions related to emigration and return migration control for household having an immigrant and regressions related to immigration controls for household having an emigrant.

Migration, social protection and health

Adequate social protection and health coverage in a country is essential for social cohesion, ensuring happier lives and improving productivity. In the Dominican Republic, however, the share of GDP spent on health has fallen substantially, from 5.9% in 2000 to 4.4% in 2014 (World Bank, 2017).[4] Social expenditures are also lower in the Dominican Republic than in other IPPMD countries. In 2010-11, public social expenditures amounted to 4.8% of GDP in the Dominican Republic. Although this was up from 3.4% in 2000, Costa Rica's social expenditures, in comparison, were much higher at 15.5% of its GDP in 2010-11 (ILO, 2014). The Dominican Republic's 2010-30 National Development Strategy describes the gap in the provision of health services and insufficient growth in decent employment as major shortcomings in the country's socioeconomic context. One of the strategy's four axes is to guarantee health and comprehensive social security for everyone within a framework of territorial cohesion (MEPyD, 2009).

One of the major issues surrounding migration is whether migration is allowing individuals to contribute more to the social protection and health system than they are taking out. Immigrants, for instance, can help finance such systems by paying taxes. However, they are often targeted as being net users of health and social protection services. Indeed a report showed that immigrants in the Dominican Republic were associated with a rise in malaria and tuberculosis cases. Around 20% of the reported cases of malaria in the Dominican Republic in 2006 were among Haitians (PAHO, 2012). This section compares the degree to which immigrants and native-born individuals benefit from government support and use health services.

Immigrants are less likely to receive government transfers and use health services

The IPPMD survey included questions on whether households had received government transfers for social services, and whether individuals had visited a health-related facility and if so, how often in the past 12 months. Data on government transfers were collected at the household level and questions on the use of health facilities were asked to every individual aged 15 years and older.

The analysis finds that immigrant households in the Dominican Republic tend to be less likely than other households to receive social transfers from the government (Figure 4.8). In the 12 months preceding the survey, 24% of non-immigrant households had received public transfers, compared to only 6% of households with immigrants, a statistically significant fourfold difference. Immigrants, in general, do not seem to be accessing public social funds more than households without immigrants, therefore. One might think that this is linked to the fact that immigrant households are more likely to be in rural

areas, where access to government services is more difficult and where work is often done informally. Indeed, 31% of immigrant households are located in rural areas, according to the IPPMD sample, compared to 20% of households without immigrants. However, this had no bearing on access to government transfers. Immigrant households in rural areas received a much lower share of government transfers than rural non-immigrant households (4% vs. 33%). It is notable, in fact, that the gap in rural areas is much wider than in urban areas, where it is 7% vs. 21%.

How do immigrants fare in terms of access to health services? Overall, 59% of the native-born population had visited a health centre in the 12 months prior to the survey, compared to 55% of the immigrant sample (Figure 4.8). However, the picture varies by gender. First, women tend to go to health centres much more than men in general (69% vs. 47%). Second, while immigrant men tend to be less likely to visit a health centre compared to native-born men (44% vs. 48%, statistically significant), this is not the case for women. In fact, immigrant women are more likely to visit a health centre than native-born women (73% vs. 69%, statistically significant). This may reflect Haitian women crossing the border for antenatal and maternity services[5], but may also be due to the lower quality living standards and the precarious conditions in the *bateyes*, the sugar plantations where many immigrant women work in the Dominican Republic. In addition, immigrants in both rural and urban areas were less likely, statistically speaking, to have visited a health centre than native-born individuals. In rural areas, 61% of immigrants had visited a health care centre compared to 66% of native-born individuals, whereas in urban areas this split was 53% vs. 57%, although only the result in urban regions was statistically significant (Figure 4.8).

How do immigrants compare with native-born individuals in the frequency with which they use health services? Overall, individuals who visited a health centre did so 5.5 times in the previous 12 months on average. Immigrants, however, had visited a health centre 4.9 times in the previous 12 months compared to 5.6 times for native-born individuals, a statistically significant difference (Figure 4.8). How do these results vary by gender? For women, the difference is not substantial. Immigrant women had visited health centres 6.2 times compared to 6.5 times for native-born women. Male immigrants had visited fewer times than native-born men, but the difference was also not statistically significant (3.6 vs. 4.3 visits). There was also very little difference between immigrants and native-born individuals in urban regions (5.2 vs. 5.5 visits). However, the difference between immigrants' use of health centres is significantly lower than native-born individuals in rural areas (4.3 vs. 6.2 visits). The difference between immigrants and native-born individuals in rural areas is strong statistically significant (Figure 4.8).

Figure 4.8. **Households with immigrants are less likely to receive governmental transfers than households without immigrants**
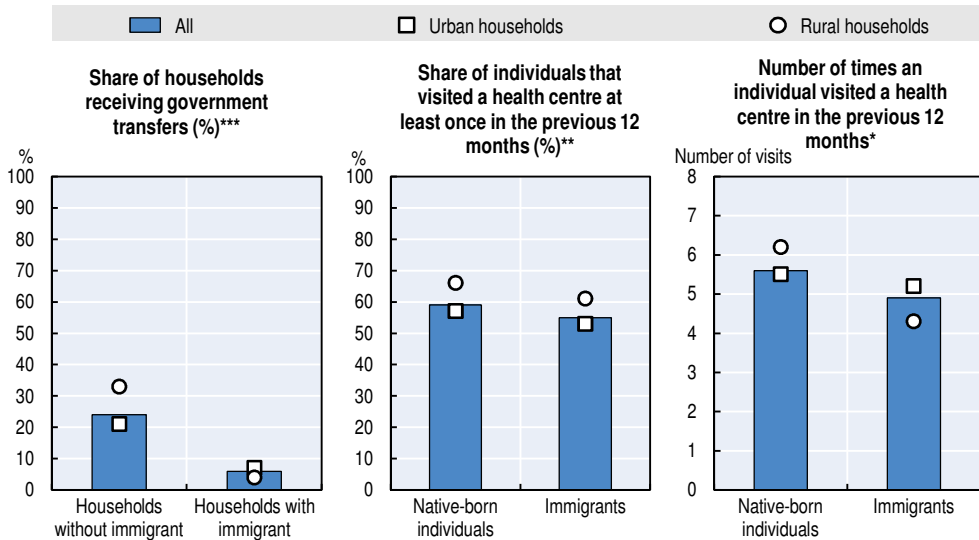
Note: Results that are statistically significant (calculated using a chi-squared test) are indicated as follows: ***: 99%, **: 95%, *: 90%. Statistical significance was tested on the basis of all households (and all individuals), and not on differences based on household location.

Source: Authors' own work based on IPPMD data

This provides more evidence that immigrants generally do not use health services more than native-born individuals – in fact in some cases they use them less. As mentioned earlier, part of the issue is likely due to difficulty of access in areas inhabited by immigrants, particularly in rural areas, their rights of residence in the country and the informal and temporary nature of their work. The IPPMD data, for instance, show that immigrants are substantially less likely than native-born individuals to have a formal labour contract (Chapter 5).

The overall descriptive statistics shown in Figure 4.8 do not account for the fact that older individuals in general are more prone to access health centres. In fact, the age of an individual is likely to be the most important determining factor for health demand, as immigrants are younger than the average native-born population and therefore tend to have less need for health services. Receiving public transfers and visiting a health centre are also related to other factors, apart from merely having or being an immigrant, such as one's individual education level and the household's wealth. Regression analysis explored these relationships more closely, controlling for a number of factors that may have a bearing on whether a household

receives public transfers and an individual visits a health centre (Box 4.5). The results suggest that households with immigrants indeed are less likely to receive public transfers than households without immigrants, for both rural and urban households, and that the amplitude in the relationship is larger in rural areas (Table 4.5, column 1).

Box 4.5. **The links between immigration, public transfers and use of health centres**

To estimate the probability that a household with an immigrant is more or less likely than a household without immigrants to receive public transfers, the following probit regression model was developed:

$$\text{Prob}(\text{rec\_transfers})_{hh} = \beta_0 + \beta_1 immig_{hh} + \gamma controls_{hh} + \delta_r + \varepsilon_{hh} \tag{11}$$

Similarly, to estimate the probability that an immigrant is more or less likely than a native-born individual to visit a health centre, the following probit regression model was also developed:

$$\text{Prob}(\text{visited\_centre})_i = \beta_0 + \beta_1 immig_i + \gamma_1 controls_i + \gamma_2 controls_{hh} + \delta_r + \varepsilon_i \tag{12}$$

where the unit of observation in equation (11) is the household *hh* and the individual *i* in equation (12), and the dependent binary variable is adapted to the outcome of interest (either receiving transfers (*hh*) or visiting health centre at least once (*i*)) and takes on the value of 1 if the household or individual outcome is true and 0 otherwise; $immig_{hh,i}$ represents whether the household has an immigrant or the individual is an immigrant or not; $controls_{hh,i}$ stands for a set of individual and household-level regressors;[a] while δ_r represents regional-level fixed effects. Standard errors, $\varepsilon_{hh,i}$, are robust to heteroskedasticity.

In addition, the following OLS model was estimated:

$$\text{Number\_visits}_i = \beta_0 + \beta_1 immig_i + \gamma controls_i + \delta_r + \varepsilon_i \tag{13}$$

where *Number visits* reflects the number of times an individual visited a health centre in the 12 months prior to the survey, amongst individuals who visited one at least once. The other variables are defined as in equation (12).

Results are presented in Table 4.5. Column (1) presents results on whether a household received public transfers in the previous 12 months, column (2) presents results on whether individuals visited a health centre and column (3) presents results on the number of times an individual has visited a health centre. Results are also divided into two sections. The top rows present results based on the entire sample, while the bottom rows present results based on individual regressions limited to samples of only men, women, rural households and urban households.

Box 4.5. **The links between immigration, public transfers and use
of health centres** (cont.)

Table 4.5. **Immigrants are less likely to receive public transfers**

Dependent variable: Household received a governmental transfer\Individual visited a health centre
Main variables of interest: Household has an immigrant\Individual is an immigrant
Type of model: Probit/OLS
Sample: All households (for governmental transfers)\Individuals aged 15 and older (for health visits)

Variables of interest	Dependent variables		
	(1) Household receives government transfers (equation 11)	(2) Individual visited a health centre at least once in the past 12 months (equation 12)	(3) Number of times individual visited a health centre (equation 13)
Household has an immigrant (col 1)	-0.182***	0.014	-0.178
Individual is an immigrant (col 2 and 3)	(0.015)	(0.020)	(0.352)
Number of observations	2 037	5 275	3 065
Samples based on gender and household location			
Sub-sample of men only	n/a	-0.014	0.114
		(0.028)	(0.349)
Sub-sample of women only	n/a	0.048*	-0.342
		(0.028)	(0.594)
Sub-sample of rural households only	-0.266***	0.024	-0.062
	(0.040)	(0.042)	(0.879)
Sub-sample of urban households only	-0.150***	0.012	0.124
	(0.017)	(0.024)	(0.372)

Note: Statistical significance is indicated as follows: ***: 99%, **: 95%, *: 90%. Regression results for the sub-sample of men and women are indicated as n/a in the first column because the regression is at the household and not the individual level.
a. Control variables for all regression model estimations include the individual's age, gender, education level, household size, whether the household is rural or urban, the household's wealth estimated by an indicator (Chapter 3) and a fixed effect for its geographic region.

The results also show that in terms of likelihood of visiting a health centre and frequency of visits, immigrants do not behave much differently from native-born individuals (Table 4.5, columns 2 and 3). Despite the descriptive statistics suggesting that overall immigrants are less likely to visit a health centre, regression analysis does not corroborate this claim. Regression analysis also does not support the fact that immigrant men and immigrants living in urban households are less likely to visit a health centre than their native-born counterparts. For men, this is rather due to age, smaller households and living in a rural setting. In urban settings, health visits are determined by age, being a woman and also living in a smaller household. This is not to say that immigrants are less likely to be visiting a health centre, but rather that the probability of doing so is not because they are immigrants, but rather due to other factors. On the other hand, the descriptive statistics also suggested that on average immigrant women are indeed more likely to visit a health centre, and this is

confirmed by regression analysis results, which is a trend that policy makers will need to monitor going forward, as resources may need to be mobilised.

The descriptive statistics also suggested that immigrants visit health centres less frequently than native-born individuals in rural areas, and that immigrant men visit less frequently than native-born men. Controlling for other factors that can lead to such visits in rural areas, the regression results suggest that health visits in rural areas are not linked to being an immigrant, but rather to being a woman and being older. For men as well, being an immigrant is not a statistically significant determinant to the frequency of health visits. Instead, health visits by men are determined by higher age and education levels and lower household wealth.

The overall findings do not support the notion that immigrants are net users of the public system, and in fact, they often are less likely to be receiving assistance or accessing services. As suggested earlier, their contributions to the labour market are therefore a great addition to the country, without it seeming to bear a high cost. The notable exception is that of women visiting health centres, where the government may want to monitor the situation and mobilise resources to avoid the system being overburdened.

Conclusions

This chapter has explored how migration affects five sectors in the Dominican Republic: the labour market, agriculture, education, investment and financial services, and social protection and health. The results indicate that different dimensions of migration have both positive and negative social and economic impacts on Dominican households and more generally on the country as a whole.

The results confirm previous research showing that migration encourages investments in human capital: households with emigrants and return migrants spend more on education, and return migration seems to encourage a switch from public to private education institutions. Migration also seems to contribute to human capital through the return of emigrants with new skills acquired abroad. In addition, emigration stimulates the hiring of external workers in the agriculture sector, which may help revitalise the agriculture labour market.

However, there are indications that the full development potential of migration and remittances is not yet being realised in the Dominican Republic. Remittances and return migration have limited impact on investments in businesses, and receiving remittances appears to reduce the incentives for the remaining household members to seek work, especially women.

The findings shed some new light on the dynamics of immigration in the Dominican Republic. It seems that immigrants help counter the labour lost to emigration by bringing in new labour, and are more likely than other

individuals to be working in low-skilled occupations. Due to their demographic characteristics, immigrants make an important contribution to the country's labour supply, especially in low-skilled sectors such as construction and agriculture. The IPPMD data show that most immigrants are of working age, and their labour market participation rate is considerably higher than that of the native population. However, the analysis also indicates that immigrants are less likely to receive public transfers and access health services. Youth in immigrant households are also considerably less likely to stay in school, which may have negative impacts on their integration and also on future national and individual human capital accumulation.

Notes

1. Any household declaring an involvement in arable farming or livestock rearing is considered to be an agricultural household.

2. The sample of immigrant children not attending school is however too small to carry out any in-depth regression analysis for children in this age group.

3. The number of children living in return migrant households is however quite low in the sample (34), resulting from the low number of return migrant households in the sample. Hence, no further in-depth analysis was carried out.

4. Health expenditure here includes both public and private health expenditures.

5. Gilger, Lauren, "Women Leaving Haiti to Give Birth," *The Washington Post*, 23 August 2011.

References

Acosta, P., C. Calderón, P. Fajnzylber and H. Lopez (2008), "What is the impact of international remittances on poverty and inequality in Latin America", *World Development* 36(1): pp. 89–114.

Acosta, P. (2007), "Entrepreneurship, labor markets and international remittances: Evidence from El Salvador", in *International Migration, Economic Development and Policy*, World Bank and Palgave Macmillan, Washington, DC, pp. 141-159.

Adams Jr, R.H. and A. Cuecuecha (2010), "The economic impact of international remittances on poverty and household consumption and investment in Indonesia", *World Bank Policy Research Working Paper Series*, Vol. 5433, World Bank, Washington, DC, *http://elibrary.worldbank.org/doi/abs/10.1596/1813-9450-5433*.

Amuedo-Dorantes, C. and S. Pozo (2010), "Accounting for remittance and migration effects on children's schooling", *World Development*, *38*(12), pp. 1747-1759.

Amuedo-Dorantes, C. and S. Pozo (2006), "Remittance receipt and business ownership in the Dominican Republic", *The World Economy*, 29(7): pp. 939-956.

BCRD (2014), The Labour Market 2014 (*Mercado de Trabajo 2014*), Banco Central de la República Dominicana, Santo Domingo.

BCRD (2015), Report of the Dominican Economy (*Informe de la Economía Dominicana*), January-December 2014, Banco Central de la República Dominicana, Santo Domingo.

Basso, G and G. Peri (2015), "The association between immigration and labor market outcomes in the United States", *IZA Discussion Paper* No. 9436, Institute for the Study of Labor Bonn.

Böhme, M.H. (2015), "Does migration raise agricultural investment? An empirical analysis for rural Mexico", *Agricultural Economics*, 46(2): pp. 211-225, 03.

Calero, C., A.S. Bedi and R. Sparrow, (2009). "Remittances, liquidity constraints and human capital investments in Ecuador", *World Development*, 37(6), pp. 1143–1154.

Camarota, S.A. (1998), "The Wages of Immigration: The Effect on Low-Skilled Labor Markets", Center for Immigration Studies, *Center Paper* 12.

Carletto, G., B. Davis, J.Miluka and Z.Zezza (2010), "The Vanishing Farms: The impact of international migration on Albanian family farming", *Journal of Development Studies*, Vol.46(1): pp. 140-161.

Cissé, P. and C. Daum (2010), "Migrations internationales maliennes, recomposition des territoires migratoires et impacts sur les sociétés d'origine", in *Dynamique migratoire, migration de retour et impacts sur les sociétés d'origine au Maghreb et en Afrique de l'Ouest*, IRD, Paris, *http://horizon.documentation.ird.fr/exl-doc/pleins_textes/divers10-05/010047869. pdf*.

Cotula, L. and C. Toulmin (2004), "Till to tiller: international migration, remittances and land rights in West Africa", *Drylands Issues Paper*, E 132, International Institute for Environment and Development (IIED), London, *http://pubs.iied.org/9508IIED*.

Cox Edwards, A. and M. Ureta, (2003), "International migration, remittances, and schooling: Evidence from El Salvador", *Journal of Development Economics*, 72(2), pp. 429–461.

Dustmann, C. and A. Glitz (2011), "Migration and education", *Handbook of the Economics of Education* 4, pp. 327-439, North Holland, the Netherlands.

Dustmann, C., T. Frattini and I.P. Preston (2013), "The Effect of Immigration along the Distribution of Wages", *Review of Economic Studies*, Vol 80, pp. 145-173.

Dustmann, C. and O. Kirchkamp (2002), "The Optimal Migration Duration and Activity Choice after Re-migration", *Journal of Development Economics*, Vol. 67, pp. 351-372.

Facchini G., A.M. Mayda and M. Mendola (2013), "South-South Migration and the Labor Market: Evidence from South Africa", *IZA Discussion Paper* No. 7362, Institute for the Study of Labor.

Fajnzylber, P. and J.H. López (2007), *Close to Home: The Development Impact of Remittances in Latin America*, Conference Edition, The International Bank for Reconstruction and Development/World Bank, Washington DC.

FAO (2016a), "Employment distribution, agriculture", *FAOSTAT* (database), *http://fenix.fao. org/faostat/beta/en/#data/OE* (accessed 1 October 2016).

FAO (2016b), "Gross per capita production index number (2004-2006 = 100)", *FAOSTAT* (database), *http://fenix.fao.org/faostat/beta/en/#data/QI* (accessed 1 October 2016).

FAO and IFAD (2008), *International Migration, Remittances and Rural Development*, Food and Agriculture Organization of the United Nations and International Fund for Agricultural Development, Rome, *https://www.ifad.org/documents/10180/aea35048-5287-4d8d-92db-3fee60c1653d*.

Funkhouser, E. (2006), "The effect of emigration on the labour market outcomes of the sender household: A longitudinal approach using data from Nicaragua," *Well-being and Social Policy*, 2(2), pp. 5-25.

Funkhouser, E. (1992), "Migration from Nicaragua: Some recent evidence", *World Development*, 20(8), pp. 1209–1218.

Gindling, T.H. (2008), "South-South Migration: the Impact of Nicaraguan Immigrants on Earnings, Inequality and Poverty in Costa Rica", *IZA Discussion Paper* No. 3279, Institute for the Study of Labor.

Hanson, G.H. and C. Woodruff (2003), "Emigration and educational attainment in Mexico", mimeo, University of California, San Diego.

ILO (2012), *International Standard Classification of Occupations: ISCO-08*, International Labour Organization, Geneva.

ILO (2014), *World Social Protection Report 2014-15*, International Labour Organization, Geneva, *http://www.ilo.org/global/research/global-reports/world-social-security-report/2014/WCMS_245201/lang--en/index.htm*.

Gonzalez-Velosa, G. (2011), "The effects of emigration and remittances on agriculture: evidence from the Philippines", mimeo, University of Maryland, Baltimore.

Jakob, P. (2015), "The impact of migration and remittances on children's education in El Salvador", master's thesis, University of San Francisco.

Kim, N. (2007), "The impact of remittances on labor supply: the case of Jamaica", *Policy Research Working Paper Series* No. 4120, World Bank, Washington, DC.

Lozano, W. (2013), "Inmigración, Género y Mercado de Trabajo en la República Dominicana", Estudios Complementarios ENI-2-13, United Nations Population Fund, Santo Domingo.

López-Córdoba, E. (2005) "Globalization, Migration, and Development: The Role of Mexican Migrant Remittances", *Economia* 6(1): pp. 217-56.

Lucas, R.E.B. (1987), "Emigration to South Africa's mines", *American Economic Review* 77(3).

McDowell, C. and A. de Haan (1997), "Migration and sustainable livelihoods: A critical review of the literature", *IDS Working Paper* 65, Institute of Development Studies, University of Sussex, Brighton, *www.ids.ac.uk/publication/migration-and-sustainable-livelihoods-a-critical-review-of-the-literature*.

McCormick, B. and J. Wahba (2001), "Overseas work experience, savings and entrepreneurship amongst return migrants to LDCs", *Scottish Journal of Political Economy*, Vol. 48/2, Scottish Economic Society, Aberdeen, pp. 164-178, *http://onlinelibrary.wiley.com/doi/10.1111/1467-9485.00192/abstract*.

McKenzie, D. and H. Rapoport (2006), "Can migration reduce educational attainment? Evidence from Mexico", *World Bank Policy Research Working Paper* No. 3952, Washington, DC.

Medina, C. and L. Cardona (2010), "The effects of remittances on household consumption, education attendance and living standards: The case of Colombia", *Lecturas de Economía*, 72: 11–43.

Mendola, M. (2008), "Migration and technological change in rural households: Complements or substitutes?" *Journal of Development Economics*, 85(1–2), February: pp. 150-175, *http://dx.doi.org/10.1016/j.jdeveco.2006.07.003*.

MEPyD (2009), *National Development Strategy 2010-2030* (Estrategia nacional de desarrollo 2010-2030), Ministry of Economy, Planning and Development (Ministerio de economía, planificación y desarrollo 2010-2030), Santo Domingo.

OECD (2017), *Interrelations between Public Policies, Migration and Development*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264265615-en*.

OECD (2010), "Entrepreneurship and migrants", Report by the OECD Working Party on SMEs and Entrepreneurship, OECD, Paris, *https://www.oecd.org/cfe/smes/45068866.pdf*.

OECD/ECLAC/CAF (2016), *Latin American Economic Outlook 2017: Youth, Skills and Entrepreneurship*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/leo-2017-en*.

Orrenius, P. M. and M. Zavodny (2003), "Does immigration affect wages? A look at occupation-level evidence", *FRB Atlanta Working Paper* 2003-2, Federal Reserve Bank of Atlanta.

Osaki, K. (2003), "Migrant remittances in Thailand: economic necessity or social norm?", *Journal of Population Research*, 20(2), pp. 203-222.

PAHO (2012), "Health in the Americas 2012: Dominican Republic," Pan American Health Organization, Washington, DC, *www.paho.org/salud-en-las-americas-2012/index.php?option=com_docman&task=doc_view&gid=127&Itemid*.

Save the Children (2006), *Left Behind, Left Out: The Impact on Children and Families of Mothers Migrating for Work Abroad*, Save the Children, Colombo, Sri Lanka.

Suki (2004), "Financial institutions and the remittances market in the Dominican Republic", Center on Globalization and Sustainable Development, The Earth Institute at Columbia University, New York, *http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=547045*.

Tacoli, C. (2002), "Changing rural-urban interactions in sub-Saharan Africa and their impact on livelihoods: a summary", *Rural-Urban Briefing Papers* 6, International Institute for Environment and Development (IIED), London, pubs.iied.org/pdfs/9153IIED.pdf.

Taylor, J. E. and F. Wouterse (2008), "Migration and income diversification: evidence from Burkina Faso", *World Development*, 36(4): pp. 625-640.

Tsegai, D. (2004), "Effects of migration on the source communities in the Volta Basin of Ghana: Potential links of migration, remittances, farm and non-farm self-employment activities", *Working Paper*, Economics and Technological Change, University of Bonn, Bonn.

Tsiko, S. (2009), "Impact of migration on food security in Chiredzi, Zimbabwe", Volens Africa.

UNESCO (2016), Institute for Statistics (UIS) database, *www.uis.unesco.org* accessed 30 March 2017.

Woodruff, C. and R. Zenteno (2007), "Migration networks and microenterprises in Mexico", *Journal of Development Economics*, 82(2): pp. 509-528.

World Bank (2016a), *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 (2016b), *World Data Bank*, *http://databank.worldbank.org* accessed 30 March 2017.

World Bank (2016c), *Doing Business 2017, Equal Opportunity for All: Regional Profile 2017 Latin America and Caribbean*, *www.doingbusiness.org/reports/~/media/WBG/DoingBusiness/Documents/Profiles/Regional/DB2017/LAC.pdf*.

World Bank (2017), *World Data Bank* (database): Health expenditure, total (% of GDP), *http://data.worldbank.org/indicator/SH.XPD.TOTL.ZS?locations=DO* accessed 1 February 2017.

Yang, D. (2008), "International migration, remittances and household investment: Evidence from Philippine migrants' exchange rate shocks", *The Economic Journal*, 118(528): pp. 591-630.

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	● Government employment agencies ● Vocational training programmes ● Public employment programmes
Agriculture	● Subsidy-type programmes ● Agricultural training programmes ● Insurance-based programmes ● Land titling
Education	● In-kind distribution programmes ● Cash-based programmes ● Other types of education programmes
Investment and financial services	● Policies related to businesses investments ● Policies related to financial inclusion and education
Social protection and health	● 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
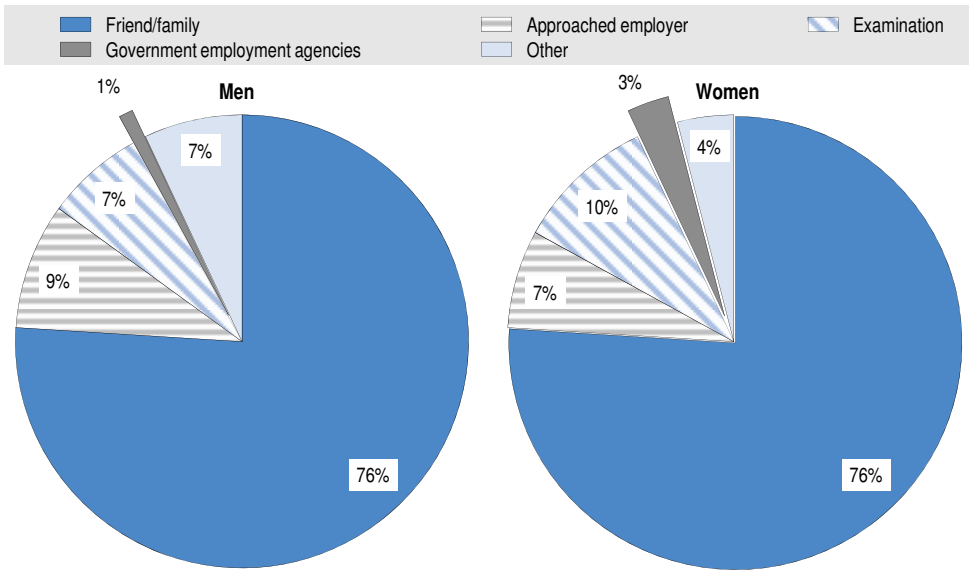
Source: Authors' own work based on IPPMD data.

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:

$$Prob(plan\_mig_i) = \beta_0 + \beta_1 voc\_training_i + \gamma_1 controls_i + \gamma_2 controls_{hh} + \delta_r + \varepsilon_i \qquad (1)$$

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**	0.030	0.055*	-0.033	0.053**
	(0.021)	(0.030)	(0.030)	(0.070)	(0.023)
Household has at least one emigrant	0.141***	0.131***	0.156***	0.135***	0.147***
	(0.017)	(0.021)	(0.028)	(0.040)	(0.019)
Individual is unemployed	0.041***	0.036	0.042*	-0.002	0.049**
	(0.018)	(0.027)	(0.026)	(0.039)	(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 adaption 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
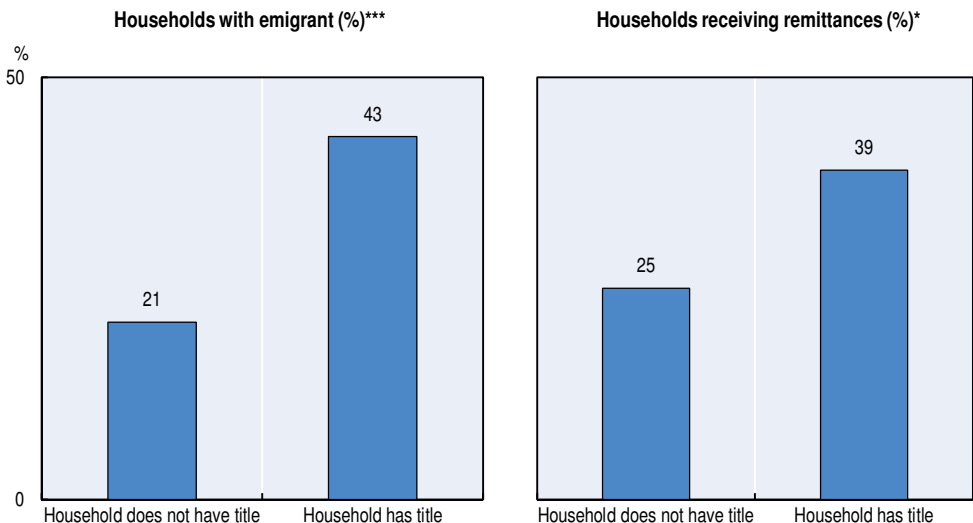
Note: Only households owning and working land are considered. A chi-squared test was used to measure the level of statistical significance between each set of groups. Results that are statistically significant are indicated as follows: ***: 99%, **: 95%, *: 90%.

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:

$$\Pr(mig_{hh}) = \beta_0 + \beta_1 land\_title_{hh} + \gamma\, controls_{hh} + \varepsilon_{hh} \tag{2}$$

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) ousehold 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)
Number of observations	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 polices 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 (%)
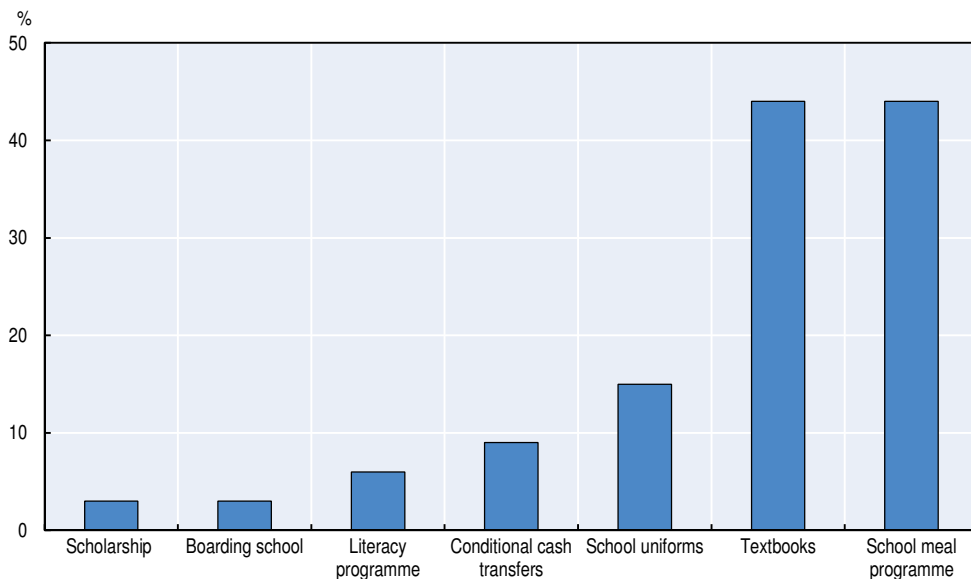
Note: The sample includes households with children in school age (6-20 years old).
Source: Authors' own work based on IPPMD data.

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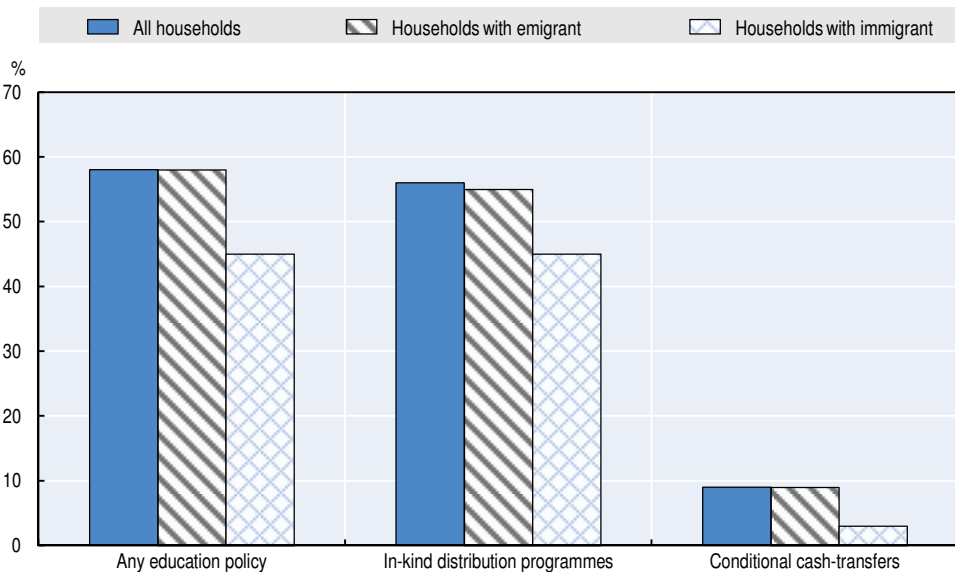
Note: The category "Any education policy" includes all educational programmes included in the survey. The sample includes households with children in school age (6-20 years old).

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 benefitting 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:

$$Prob(mig_{hh}) = \beta_0 + \beta_1 edu\_policy_{hh} + \gamma controls_{hh} + \delta_r + \varepsilon_i \qquad (3)$$

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)
Number of observations	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)
Number of observations	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 like 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
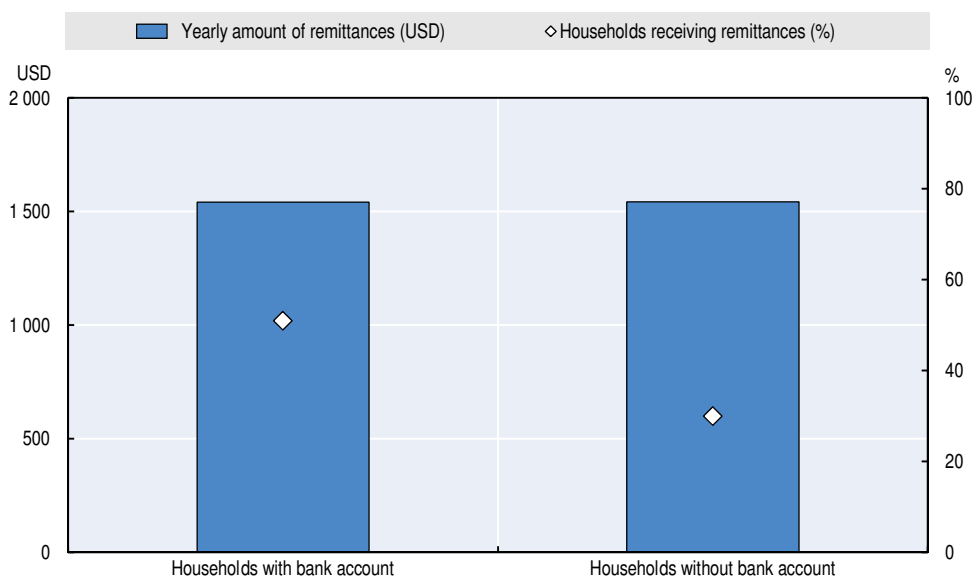
Source: Authors' own work based on IPPMD data.

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

$$Ln(remit)_{hh} = \beta_0 + \beta_1 bank\_account_{hh} + \gamma controls_{hh} + \delta_r + \varepsilon_{hh} \qquad (4)$$

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		
	Dependent variables	
Variables of interest	(1) Household receive remittances	(2) Amount of remittances, urban areas
Household has a bank account	0.399*** (0.071)	-409.7
Number of observations	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.

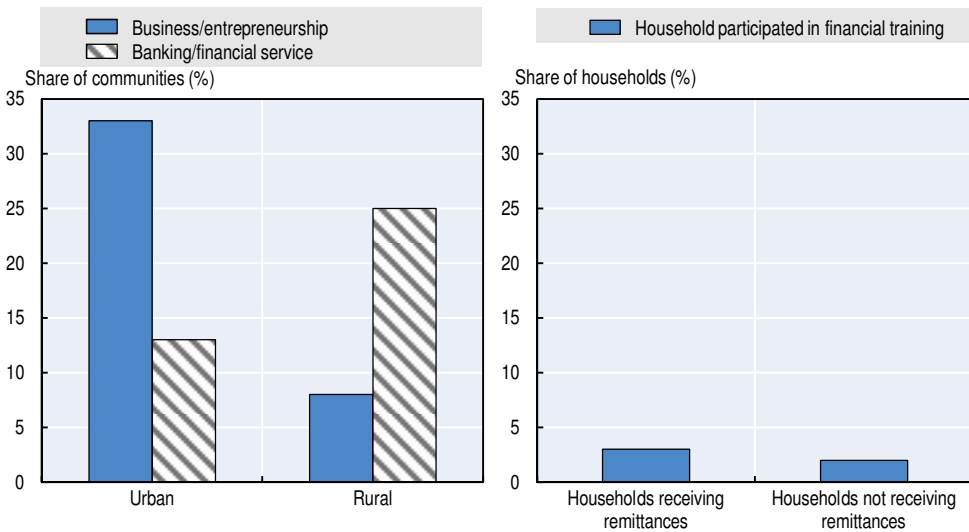### There is scope to expand financial literacy training

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 jobs[7] 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 agriculture[8], 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
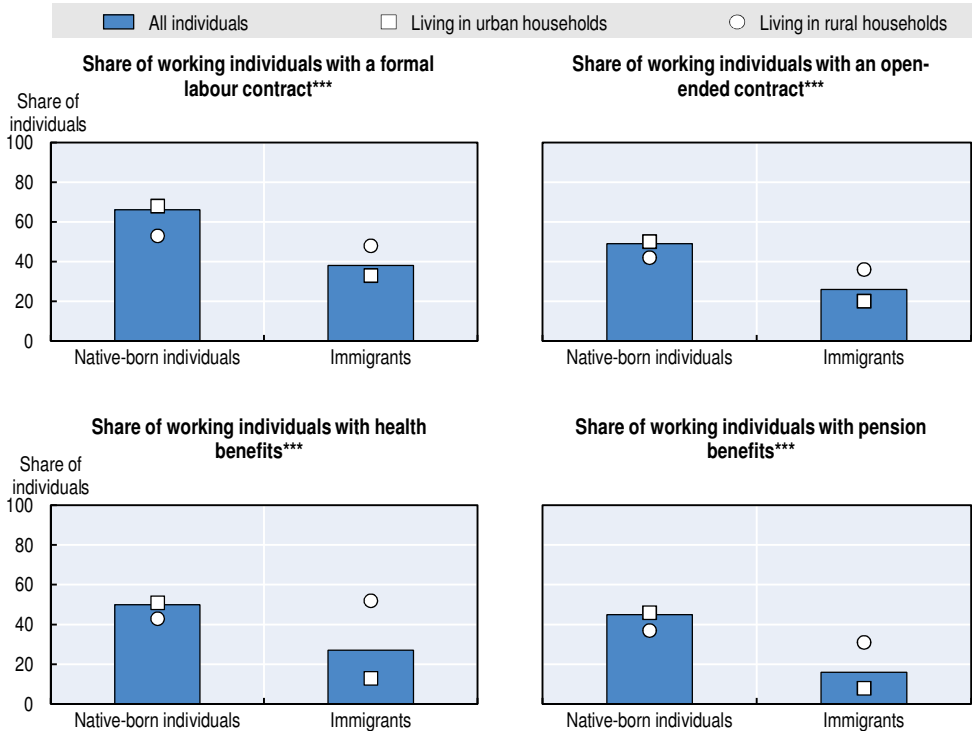
Note: A chi-squared test was used to measure the level of statistical significance between each set of groups (all individuals). The sample includes all individuals, whether they are working in agriculture or not. Results that are statistically significant are indicated as follows: ***: 99%, **: 95%, *: 90%.
Source: Authors' own work based on IPPMD data.

Regression analysis was used to probed 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:

$$\Pr(socpro_i) = \beta_0 + \beta_1 immig_i + \gamma controls_{i,hh} + \varepsilon_i \tag{5}$$

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. $controls_{i,hh}$ 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***	-0.154***	-0.160***	-0.205***
	(0.047)	(0.044)	(0.045)	(0.041)
Number of observations	1 200	1 200	1 198	1 193
Samples based on gender and household location				
Men only	-0.149***	-0.126***	-0.152***	-0.201***
	(0.050)	(0.047)	(0.048)	(0.043)
Women only	-0.509***	-0.431***	n/a	n/a
	(0.126)	(0.103)		
Living in urban households only	-0.258***	-0.224***	-0.323***	-0.337***
	(0.053)	(0.050)	(0.047)	(0.039)
Living in rural households only	0.044	0.004	0.087	0.047
	(0.101)	(0.100)	(0.105)	(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://dominicantoday.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 Progresa 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.pdfWorking* 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*.

OECD Development Pathways

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

The *OECD Development Pathways* series helps developing and emerging economies to identify innovative policy solutions to their specific development challenges. Higher levels of well-being and more equitable and sustainable growth cannot be achieved by merely reproducing the experience of industrialised countries. For each of the countries studied, the series proposes options for action in specific policy areas and at the broader strategic level. It identifies the binding constraints to development across all sectors and proposes whole-of-government solutions.

Interrelations between Public Policies, Migration and Development in the Dominican Republic is the result of a project carried out by the Centro de Investigaciones y Estudios Sociales (CIES) at the University Iberoamericana in the Dominican Republic and the OECD Development Centre, in collaboration with the Ministry of Economy, Planning and Development (MEPyD) and with support from the European Union. The project aimed to provide policy makers with evidence on the way migration influences specific sectors – the labour market, agriculture, education, investment and financial services and social protection and health – and, in turn, how sectoral policies affect migration. The report addresses four dimensions of the migration cycle that have become an important part of the country's social and economic contexts: emigration, remittances, return and immigration.

The results of the empirical work confirm that even though migration contributes to development in the Dominican Republic, the potential of migration is not fully exploited. One explanation is that many policy makers in the Dominican Republic do not sufficiently take migration into account in their respective policy areas. The Dominican Republic therefore needs to adopt a more coherent policy agenda to do more to integrate migration into development strategies, improve co-ordination mechanisms and strengthen international co-operation. This would enhance the contribution of migration to development in the country.

This project is co-funded by
the European Union

OECDpublishing
www.oecd.org/publishing