

THE ROLE OF THE DIASPORA IN THE INTERNATIONALIZATION OF THE COLOMBIAN ECONOMY

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Executive Summary

We studied the geography as well as the demographic and soco-economic characteristics of 1.7 million members of the global Colombian diaspora (34% of the total estimated Colombian diaspora) using census and survey data from major host countries, and 3.5 million Twitter users located around the world presumed to be of Colombian origin. We also studied the locations and industries of Colombian senior managers and directors outside Colombia, using a global database of over 400 million companies. Moreover, we studied the migration journeys, the diaspora's attachment to Colombia, the level of diaspora engagement and interest in engaging, the intentions to return back home, the interest in diaspora government policy, and the overall sentiment of the diaspora towards Colombia, through a survey which received 11,500 responses from the diaspora in well over 100 countries in less than two months. We additionally interviewed 12 Colombian transnational entrepreneurs and professionals, to understand what attracts them professionally to Colombia, and what may stand in the way of more diaspora engagement and professional growth.

Findings from Mapping the Diaspora

The Colombian diaspora has a wealth of human and social capital that can be mobilized in the process of internationalization of the Colombian economy. Colombians in the U.S. hold the greatest promise in terms of breadth of engagement and potential impact of engagement. Several factors contribute to this. The Colombian community in the U.S is big (1.5 million), geographically concentrated (mainly in the states of Florida, New York, New Jersey, and California), and well embedded in the American economy. Colombians have found a place in the most competitive entrepreneurial circles of the Silicon Valley and elsewhere, and they have achieved senior positions in foreign companies and corporations. They are professionally engaged with Colombia in many different ways, including the building of a new entrepreneurial class, transfer of technology, creating remote work opportunities for Colombians, and setting up business operations there. A large second-generation of Colombians, better educated and better embedded than their parents, presents an opportunity for Colombia, but more incentives may be critical for their direct engagement.

Colombians in the European Union and the U.K. also hold a great promise for the internationalization process. The Colombian professional communities here are more dispersed. Colombians in Spain, although numerous (over a million), have a low rate of professional engagement with Colombia, as measured in our diaspora survey. Instead, Colombians in Switzerland, France, the U.K., Germany, Belgium, and Scandinavia, although representing smaller Colombian populations, drive engagement. This is in line with our findings that Colombians in senior managerial positions are more common in the U.K. (18% of all Colombian senior managers in the Orbis global dataset) and Switzerland (12%), than in Spain (4%). Colombians in the U.K. are well positioned for a high impact engagement, and many are already involved in Colombia through investments, business startup and academic engagement.

The Colombian diaspora is quickly evolving, and it is growing in ways that are hard to predict. For instance, the Colombian community in Chile grew from 4,000 people in at the turn of the 21st century to 120,000 in 2017. In Europe, many Colombians who first arrived in Spain, have migrated to the more professionalized E.U. countries and the U.K. Similarly, some Latin American countries are steppingstones for migration to Europe (e.g., Argentina, Chile, Venezuela, and Ecuador), and others for migration to the U.S. (e.g., Mexico).

Findings from the Diaspora Survey

Our diaspora survey indicated a high level of engagement, and an even greater desire to engage. Some 1,860 Colombians (18% of all participants in our survey) were already engaged in activities such as long-distance professional support, investing in Colombia, starting a business in Colombia, humanitarian support or mentoring youth. The degree of interest for more engagement was overwhelming, both among those who are already engaged, and among those that were not yet active in Colombia. Close to 60% of those not already engaged, expressed interest in becoming involved in activities that benefit the development of Colombia.

We found that professional engagement can be predicted, and this can guide policy in terms of narrowing down the groups that are most likely to contribute to the internationalization process. Other factors equal, attachment to family and friends in Colombia (as measured by the frequency of travel and the frequency of phone calls), past experience with entrepreneurship (as measured by history of business startup, business investment and teaching entrepreneurship), and one's educational attainment are important predictors of professional engagement.

Travel to Colombia drives engagement. We found that stimulating travel to Colombia will lead to more professional engagement. We tested this using the natural experiment of the COVID pandemic. Over 9% of the survey respondents made an *additional temporary* trip to Colombia because of the pandemic, unrelated to their involvement in Colombia. An extra temporary stay due to the COVID pandemic increased the probability to engage professionally by 3%, and the probability of business engagement by 4%.

We found 'negative' sorting and high business engagement among the returnees. We studied the factors that predict one's plans to return sooner rather than later to Colombia and we found that those in more advanced economies are less likely to think about returning, those better employed and better educated are also less likely to think about returning, other factors equal. This reflects complex complementarities between people's skills and experience, and the kind of employment opportunities advanced economies can offer.

However, those that actually return are twice as engaged as Colombians outside Colombia in business development, such as business startup and business investments. Their ventures may be small scale, but they can be extremely valuable for the communities they serve, and they have the potential of technology transfer. There are reasons to believe that the population of returnee migrants to Colombia during the COVID pandemic is substantial. In other countries such mass returns of diaspora have helped revitalize sectors such as agriculture and gastronomy.

Findings from Interviews with Colombian Transnational Entrepreneurs and Professionals

Drivers of transnational entrepreneurship in Colombia. In our interviews with transnational entrepreneurs, the most commonly mentioned reasons for setting up operations in Colombia were arbitrage opportunities because of *wage differentials* between Colombia and developed economies, opportunities to bridge *technology gaps*, and mobilizing established *networks* of potential business partners and employees in Colombia.

Wage differentials. All tech entrepreneurs employed domestic engineers and operations staff, while serving foreign markets. They cited the good quality-wage ratio of domestic engineers as key to their decision to operate in Colombia. For example, by employing Colombian software developers, American companies can save over 60 percent in annual salaries for this group of employees.

Technology gaps. In Colombia, sectors like finance and construction use old business models. Finance is not taking a full advantage of the digitized economy, and construction is very labor intensive. In both sectors Colombian transnational entrepreneurs have identified technological gaps that they try to close. In finance, they are bringing about the fintech revolution. In construction, they are trying to bring about novel technology, some aiming at higher production efficiency, some at less environmental footprint, with varying success.

Networks. Existing networks of Colombians, both in Colombia and among the diaspora are key to developing a business that employs Colombians. Colombians know other Colombians and hiring people they know, and trust, reduces their search costs. This is true for Colombian entrepreneurs with operations inside and outside Colombia.

Barriers to business engagement and growth. We identified a few overarching barriers, and several sector-specific ones. Among the overarching ones are the knowledge of foreign languages, scarcity of managers with international experience, difficulty to open and close and business, and tax regulation.

Foreign languages. The lack of a workforce that is proficient in English and other foreign languages was viewed as a constraint for scaling up and internationalizing by most entrepreneurs and academics we spoke to. Indeed, Colombia has a very low English proficiency in a global comparison. Based on test results of 2.2 million adults in 100 countries and regions in 2020, EF¹ ranked Colombia 77th out of 100, right next to Mongolia, Afghanistan, Angola, and Algeria.

Middle-level and C-suite managers. Interviewees from mature companies emphasized the scarcity of managers that have the proper training and experience to help companies expand their businesses abroad. Such managers need international experience, knowledge of foreign languages, and cultural sensitivity, all of which is best gained abroad. To overcome the constraint, companies hire foreigners for these positions. Some have first tried to hire Colombians and failed, and others do not even look inside Colombia.

Opening and closing a business. Transnational entrepreneurs pointed out that opening, and even more, closing a business is very difficult in Colombia – they have experienced this firsthand. Startup firms hire accountants and/or lawyers to complete the process. Indeed, according to the 2020 Doing Business Indicators, opening a business in Colombia requires 7 procedures that take up a total of 10 days to be completed.² In comparison, the most effective countries require a single procedure that takes half a day to complete. This has serious implications for Colombia's tax base and its national statistics. Because of this constraint, the practice of registering a Colombian business outside Colombia is common among entrepreneurs. A large business accelerator even coaches their start-up firms to register their businesses elsewhere.

Tax regulation. Entrepreneurs often mentioned that it is difficult for small companies to understand and comply with tax regulation in Colombia. Taxes are unnecessarily complicated and compliance with procedures is difficult. These claims are supported by existing evaluations of the Colombian tax system.³

¹ The world's largest ranking of countries and regions by English skills. https://www.ef.com/wwen/epi/#

² https://www.doingbusiness.org/content/dam/doingBusiness/country/c/colombia/COL.pdf

³ For instance, according to the World Bank's Doing Business Indicators, it takes a representative company 256 hours per year (about 33 8-hour working days) to properly deal with tax matters. In countries with best organized tax administrations this number is about 6 8-hour days.

Sector-specific issues. Lack of venture capital in Colombia is a challenge for the expansion of the tech sector. Successful tech entrepreneurs thrived because they located their business development teams near VC hubs abroad, while locating their operations in Colombia. In construction, where great technological gaps attract the interest of diaspora companies, foreign companies that are innovative and capital-intensive stumble upon nepotism and corruption that favor local firms. A complex set of regulations (tax system, labor regulation, bankruptcy law) stands in the way of more private equity investments, and in academia, entrenched ideas about hierarchies and renumeration make it difficult for universities to let foreign faculty and researchers take positions that do not comply with existing roles.

Policy Recommendations

Colombia's current pattern of migration is resulting in a net brain drain that will most likely continue in foreseeable future. In the meanwhile, our research shows, the best way to tap into the wealth of the diaspora is to engage them while abroad. As discussed in section *Diaspora Policy in Colombia*, our top policy recommendation is the creation of an **international business and technology network of impactful Colombians**. The members of such a network would commit time to interact, mentor, and help connect local businesses and other local actors with resources available among the diaspora and their foreign partners. This comes with benefits to the diaspora businesses as well, as it creates better access to the Colombian economy for them, and it serves their desire to help the development of the home country. We propose a number of other policies, among which are ensuring public recognition of diaspora achievements, encouraging more travel by the diaspora to Colombia, tandem language programs, and relaxing some of the general constraints to doing business in Colombia.

1. Diasporas as Agents of Change in their Countries of Origin

Currently, about ten percent of the Colombian population, or five million Colombians mainly reside outside Colombia. As they live and work abroad, they develop perspectives that are different from those of the Colombians that never migrated. Some are learning to use more advanced technology at the job in a foreign firm, some are learning cutting edge skills in a foreign university, some are immersing in a new language and a new cultural experience through relationships with non-Colombian partners, and some are even working on groundbreaking inventions and innovations involving international teams in the world's leading research hubs. While living abroad, many nurture affections for their families, friends, and the place they may still call home. They find meaning in getting involved at home, in making a positive impact and in being the change for good in Colombia.

How much wealth is there among the Colombian diaspora in terms of professional, managerial, and entrepreneurial experiences, qualifications, professional networks, access to venture capital, knowledge of foreign languages, educational qualifications, and the like? How does the geographic distribution of this wealth look like? Is the Colombian diaspora interested in helping its home countries develop, by sharing their knowhow, networks, and skills? How can the Colombians in Colombia best tap into this wealth? What is the best course of government action in this regard? These are the questions that the project "The Diaspora's Potential for the Internationalization of Colombia" tries to answer.

The background for our work is a large academic literature that studies the economic activities of migrants in their host countries, as well as the impact of these migrants on their home countries. In the U.S., immigrants are almost twice as likely to become entrepreneurs as native-born U.S. citizens (Vandor and Franke, 2016). In fact, 40% of the Fortune 500 companies were founded by migrants or their children (Anderson, 2011). One of the reasons for such behaviour is the fact that more entrepreneurial people are more likely to take the initiative to emigrate, but also the fact that the networks through which locals find jobs in the economy are unavailable to the newcomers. In the case of regulated occupations such as doctors, lawyers, and civil engineers, some are forced into entrepreneurship because they are unable to practice their professions in a foreign country.

This spirit of entrepreneurship and innovation does not only benefit the host countries of such immigrants. Several countries with large diasporas have managed to leverage the diaspora's potential in their development. The origins and growth of the IT industry in Taiwan, China, India, and Israel can be traced back to professional connections between domestic engineers and diaspora engineers and entrepreneurs in the Silicon Valley that developed during the last three to four decades (Smart and Hsu 2004; Saxenian 2006; Pandey et al. 2006, p. 71). The recent modernization of agriculture in Albania, and the growth in exports of agricultural products can be traced back to return migrants from Greece and Italy who brought about advanced technological knowhow in the sector (Hausmann and Nedelkoska 2018), and some of the manufacturing diversification of rural China can be traced back to Chinese migrants who acquired production skills in the urban parts of China (Murphy 1999; Demurger and Xu 2011).

The reasons why some diasporas are more involved in the home country are complex and much of the dynamics of engagement is beyond the control of governments. However, governments can and

⁴ The Colombian Ministry of Foreign Affairs (MoFA) estimated the population of Colombians abroad at 4.7 million (https://www.cancilleria.gov.co/en/colombia-nos-une-colombia-unites-us-internal-working-group). We updated this estimate to 5 million, given that MoFA's estimate is at least one year old, and that we observed expansion of the Colombian diaspora in countries that traditionally do not have a large Colombian population.

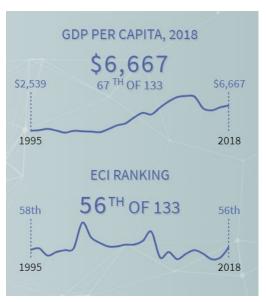
do play a big role in steering such engagement. This role has the character of *planned luck* or *managed serendipity*, i.e., preparing to take an advantage of an opportunity that may occur in the future.

2. The Need for Internationalization

Colombia's economic growth in the last two decades was neither sustainable, nor equally shared. It was largely driven by the extraction and export of oil, which is why it spectacularly collapsed in 2014, following the drop in the US dollar prices of commodities.

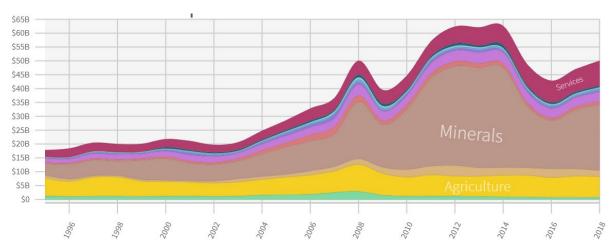
Figure 1. Colombia's GDP p.c. 1995-2018 and Colombia's

The structural weakness of the Colombian economy can be traced back to the lack of product and service diversification, and in particular diversification into more sophisticated types of products and services. For example, Colombia's economic complexity index (Figure 1), which measures the degree of sophistication of a country's export basket, shows that in spite of the country's growth in the GDP p.c. between 1995 and 2018, the level of sophistication and of its exports was stagnant, and even slightly declined in terms of rank (from 58th in 1995 to 56th in 2018 among 133 larger economies). A breakdown of Colombia's export basket shows how its' economic growth mirrors the expansion and collapse of the oil exports (Figure 2).



Source: Atlas of Economic Complexity, https://atlas.cid.harvard.edu/countries/49

Figure 2. Colombia's exports over time in constant USD, by groups of products and services.



Source: Atlas of Economic Complexity, What did Colombia export between 1996 and 2018?

The future of Colombia's growth does not need to be limited by its past. Many countries have managed to diversify their economies by employing different strategies: FDI in Panama and Vietnam, betting on conglomerates and joint ventures in South Korea, Business Process Outsourcing in India,

China, and the Philippines, and the diaspora's new argonauts⁵ in India, Taiwan, Israel, and China. In this work we will demonstrate that Colombia is well positioned to mobilize its large diaspora for its development.

3. Research Approach

Our research approach was threefold:

- 1. We used existing micro-data from national and global databases to map the geography and the characteristics of the Colombian diaspora. Using data from the U.S., Canada, Mexico, and Chile, we mapped the geography, qualifications, professions, and industries of some 1.7 million Colombians abroad, or 34% of the Colombian diaspora. Using a global dataset of senior managers, we mapped the locations and industries of 560 managers of Colombian nationality affiliated with 1,620 companies outside Colombia.
- 2. We used Twitter data representing 3.5 million users self-identifying with Colombia/as Colombian to complement the official statistics, to map the Colombian diaspora across a wider geography, and to better understand the diaspora's origin and attachment to Colombia.
- 3. We conducted a survey of 11,500 Colombians in over 100 countries that allows us to study the diaspora's attachment to Colombia, its level and type of engagement, and interest in policies targeting the diaspora, among other things. We also conducted 12 interviews with transnational entrepreneurs and professionals of Colombian origin in order to understand what attracts them to do business with Colombia and what may be standing in the way of more growth.

With an objective to suggest viable policies for better involvement of the diaspora in the process of internationalization of the Colombian economy, our findings are analyzed in the context of Colombia's existing diaspora policies, and as much as possible, in the context of the Colombia's history of diaspora policies

4. Mapping of the Colombian Diaspora

The mapping of a diaspora is not a trivial task. National statistics often undercount the foreign populations in their countries for at least three reasons. First, not all countries ask about the place of birth of a person, and naturalized individuals are blended with the native population in national statistics. Second, even fewer countries ask about the ancestry of a person, making it impossible to track the second and the third-generation diaspora. Finally, irregular migrants, which sometimes constitute non-negligible shares of foreign-born communities, are more difficult to survey. It is even harder to say something about the distribution of firms run by Colombians outside Colombia. Information about the ethnicity and the nationality of managers and business owners is seldom available in national firm-level data.

4.1. Colombians in the USA, Mexico, Chile, and Canada

To map the Colombian diaspora, we analyzed micro-data from recent and publicly available national surveys and censuses of the population in major host countries. We gained access to four such databases for the U.S., Chile, Canada, and Mexico. Estimated 1.7 million Colombians live in these four countries, and this constitutes 34% of the overall Colombian diaspora. For the U.S., we used the

⁵ A term coined by AnnaLee Saxenian to refer to the US-educated but foreign-born entrepreneurs that have been embarking on risky foreign adventures, typically in their countries of origin and in the tech sector, since the 1980s.

2018 American Community Survey (ACS, U.S. Census Bureau, 2019), for Canada, the 2016 Census of the Population (Statistics Canada, 2019), for Mexico the 2015 Intercensal Survey (INEGI, 2018), and for Chile the 2017 Socio-economic Survey (CASEN, Ministry of Social Development and Family, 2021).

We identified 1.48 million first- and second-generation Colombians in the U.S. and 98,000 in Canada. We identified 120,000 Colombians in Chile, and 18,000 in Mexico. In the latter two countries we cannot distinguish between generations, but we know that in Chile the migration prior to 2005 is negligible, and hence the vast majority of immigrants are first generation Colombians.

4.1.1. Colombians in the U.S.

Outside Colombia, the U.S. hosts the largest Colombian population. Our estimate is that close to 1.48 million first- and second-generation Colombians reside there. These include 826,000 Colombians that were born in Colombia, and 653,000 people who were not born in Colombia, but who have Colombian ancestry or identify as Hispanic-Colombians (Table 1). We refer to the first group as first-generation Colombians, and to the second group as second-generation Colombians.

Table 1. Defining the Colombians in the U.S.

By birth	Born in Colombia	825,787
Dy origin	Of Colombian ancestry*	475,065
By origin	Identifies as Hispanic-Colombian**	177,955
	Total (Broad definition of Colombian Americans)	1,478,807

^{*} Not born in Colombia

Compared to many other diasporas, the Colombian diaspora seems culturally, racially, and language-wise highly homogenous. Among all Colombians 15 years of age or older, 74% identify as White⁶. In terms of ethnicity, 84% identify as Colombian Hispanic; 4% as not Hispanic. In terms of main spoken language, 83% report Spanish, and another 17% report English. The diaspora here is also well embedded in the host country, at least judging by its fluency in the official language and the rate of naturalization. 81% of all Colombians are fluent in English. This is the case with 75% of those born in Colombia (first-generation), and 95% of those not born in Colombia, but of Colombian origin (second-generation). Moreover, 63% of the first-generation and 95% of the second-generation Colombians are U.S. citizens.

There are four factors that make the U.S. a particularly important source of diaspora human and social capital for Colombia. First is the size of the Colombian population there. Second is the wealth of experiences and skills within the diaspora. Third is its high geographic concentration (in places such as Florida, New York, and New Jersey, Figure 3). High geographic concentration facilitates tight interactions within the diaspora and the building of ethnic professional communities (Kerr and Mandorff, 2021). Fourth is the entrepreneurial spirit of Colombians in the U.S.

Education and professions. Of all Colombians in the U.S. 25 years old or older, 35% had at least a bachelor's degree. A huge population of 424,500 Colombians was acquiring education at the moment of the survey. Close to half of these were acquiring post-graduate or professional degrees, and another 22% were enrolled in undergraduate studies.

^{**} Not born in Colombia, and does not report Colombian ancestry Source: ACS 2018, own calculations.

⁶ The second largest racial category is "Other, not elsewhere specified" (20%). South American Indians account for only 0.15%. 1.6% identify as Black. Most of the remaining 4% identify as mixed races.

In 2018 there were over 90,000 Colombians in the U.S. with tertiary degrees in business, over 45,000 with degrees in engineering, over 25,000 with medical degrees, close to 21,000 in biology and life sciences, and over 8,000 in computer and information sciences, among others (Table 2). Moreover, in 2018, there were 72,000 Colombians in managerial occupations, 36,000 in business and finance, 19,000 in computer and mathematical occupations, 12,000 in architecture and engineering, and close to 39,000 working as healthcare professionals (Table 3).

Table 2. Top 20 most common fields of study among Colombians with tertiary degrees in the U.S.

	Colombian						
	by birth or	Colombian				Ratio (Columbian	Ratio (Columbian
	origin	by birth or	Colombian	Colombian	American-	by birth to	by origin to
Field of study	(number)	origin (%)	by birth (%)	by origin (%)	born (%)	American-born)	American-born)
Business	90,681	25.2%	26.5%	22.1%	20.2%	1.31	1.09
Engineering	45,329	12.6%	14.2%	8.9%	6.3%	2.26	1.43
Education Administration and Teaching	26,628	7.4%	8.0%	5.9%	13.2%	0.61	0.45
Social Sciences	25,763	7.2%	5.9%	10.1%	7.4%	0.79	1.36
Medical and Health Sciences and Service	25,193	7.0%	7.5%	5.8%	7.6%	0.99	0.77
Biology and Life Sciences	20,802	5.8%	5.3%	6.9%	4.7%	1.13	1.46
Psychology	17,535	4.9%	5.0%	4.6%	5.2%	0.95	0.87
Fine Arts	16,236	4.5%	4.3%	4.9%	4.3%	1.00	1.14
Communications	16,201	4.5%	3.6%	6.5%	4.3%	0.85	1.53
Architecture	8,711	2.4%	2.9%	1.3%	0.6%	4.61	2.12
Computer and Information Sciences	8,202	2.3%	2.2%	2.4%	2.6%	0.85	0.92
Physical Sciences	6,344	1.8%	1.9%	1.5%	2.7%	0.69	0.55
English Language, Literature, and Compo	5,752	1.6%	0.8%	3.5%	3.3%	0.24	1.06
Criminal Justice and Fire Protection	5,391	1.5%	1.3%	2.0%	2.0%	0.63	1.00
Liberal Arts and Humanities	5,228	1.5%	1.1%	2.2%	1.4%	0.79	1.61
Linguistics and Foreign Languages	5,036	1.4%	1.5%	1.1%	0.9%	1.60	1.19
Public Affairs, Policy, and Social Work	4,709	1.3%	1.4%	1.1%	1.5%	0.93	0.70
Physical Fitness, Parks, Recreation, an	4,097	1.1%	0.8%	1.9%	1.2%	0.67	1.63
Mathematics and Statistics	3,372	0.9%	1.0%	0.8%	1.4%	0.70	0.57
History	2,998	0.8%	0.6%	1.5%	2.3%	0.24	0.63

Note: The table is showing the largest 20 fields of study among the Colombians with a college degree. The values in the last two columns indicate over- or under-specialization by the Colombians in comparison to American-born residents. Values over 1 correspond with over-specialization, and values under 1 with underspecialization.

Table 3. Professions practiced by Colombians in the U.S.

	Numbers		Shares			Rati	os of Colombian	s to
Occupation	Colombians	Colombians	Colombian-	Colombian by	Second to first	American-	Foreign-born	Other
			born	origin only	generation	born		Hispanics
					ratio			
Management Occupations	72,104	9.1%	8.1%	11.1%	1.38	0.83	1.05	1.40
Business and Financial Operations Occup	36,474	4.6%	4.0%	5.8%	1.46	0.88	1.14	1.64
Computer and Mathematical Occupations	19,080	2.4%	2.2%	2.8%	1.26	0.84	0.53	1.73
Architecture and Engineering Occupation	12,432	1.6%	1.4%	1.9%	1.32	0.86	0.72	1.54
Life, Physical, and Social Science Occu	5,158	0.7%	0.6%	0.8%	1.34	1.08	0.67	2.64
Community and Social Service Occupation	15,487	2.0%	2.0%	1.9%	0.99	0.93	1.50	1.35
Legal Occupations	5,703	0.7%	0.5%	1.1%	2.14	0.58	1.29	1.24
Educational Instruction and Library Occ	40,657	5.1%	5.4%	4.6%	0.87	0.81	1.22	1.35
Arts, Design, Entertainment, Sports, an	18,237	2.3%	2.2%	2.4%	1.10	1.10	1.41	1.71
Healthcare Practitioners and Technical	38,990	4.9%	4.3%	6.2%	1.44	0.78	0.88	1.56
Healthcare Support Occupations	19,480	2.5%	2.8%	1.7%	0.61	1.11	0.89	0.99
Protective Service Occupations	15,657	2.0%	1.5%	2.9%	1.88	0.84	1.73	1.02
Food Preparation and Serving Related Oc	55,426	7.0%	7.0%	7.0%	1.01	1.29	1.03	0.85
Building and Grounds Cleaning and Maint	61,217	7.7%	9.8%	3.5%	0.35	2.56	1.04	0.95
Personal Care and Service Occupations	35,533	4.5%	4.5%	4.4%	0.97	1.25	0.98	1.15
Sales and Related Occupations	81,371	10.3%	9.7%	11.5%	1.18	0.98	1.29	1.10
Office and Administrative Support Occup	97,683	12.3%	10.9%	15.3%	1.40	0.94	1.43	1.05
Farming, Fishing, and Forestry Occupati	1,263	0.2%	0.2%	0.1%	0.76	0.34	0.10	0.08
Construction and Extraction Occupations	43,515	5.5%	6.9%	2.7%	0.39	1.24	0.68	0.54
Installation, Maintenance, and Repair O	18,773	2.4%	2.3%	2.5%	1.08	0.76	0.91	0.69
Production Occupations	37,800	4.8%	5.5%	3.3%	0.60	0.90	0.68	0.65
Transportation and Material Moving Occu	59,350	7.5%	8.2%	6.0%	0.73	1.17	0.99	0.86

Note: The values are sorted by the 1-digit SOC code of the occupational classification. Occupations requiring more education are found towards the top of the list. The values in the last four columns indicate over- or under-specialization. Values over 1 correspond with over-specialization, and values under 1 with under-specialization.

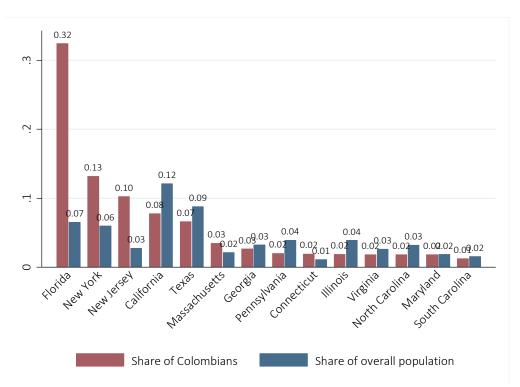


Figure 3. Geographic concentrations of Colombians by U.S. state.

Self-employment. Like other immigrants, Colombians are much more active on the labor market than is the American-born population, and the rate of participation among Colombian women is very high, even when compared with other immigrants (Table 4). The rate of self-employment is very high too (Table 5). Close to 8% of all working Colombians are self-employed in non-incorporated businesses, and another 5% is self-employed in incorporated businesses. These rates are 41% and 34% higher than those of self-employed American-born citizens; 4% and 13% higher than those of other foreign-born; and 23% and 203% higher than those of other Hispanics in the U.S. Most of the self-employed Colombians work in personal services (18%), Construction (16%), business services (13%) and transportation (9%), as shown in Table 6. Compared to other immigrants, and compared to other Hispanics, they are more likely to run businesses in the services sector and compared to the American-born they are overrepresented in transportation, wholesale, business services and personal services. While hosting 32% of all Colombians in the U.S., Florida hosts 37% of all non-incorporated self-employed businesses, and staggering 54% of all incorporated self-employed businesses run by Colombians (Figure 6).

Table 4. Participation rates and employment rates among Colombians in the U.S.

		American-	Foreign-	Other
	Colombians	born	born	Hispanic
Participation rate (all)	70.8%	62.7%	66.9%	67.7%
Participation rate (men)	78.4%	66.6%	77.2%	75.4%
Participation rate (women)	64.6%	58.8%	57.2%	59.8%

Unemployment rate (all)	4.5%	5.0%	4.1%	5.7%
Unemployment rate (men)	4.1%	5.3%	3.5%	5.2%
Unemployment rate (women)	4.8%	4.8%	4.9%	6.3%

Table 5. Self-employment rates among the Colombians in the U.S.

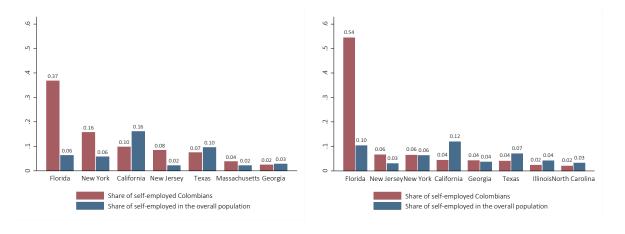
					Ratio o	f Colombia	ans to
		American-	Foreign-	Other	American-	Foreign-	Other
	Colombians	born	born	Hispanic	born	born	Hispanic
Self-employed, not incorporated	7.9%	5.6%	7.6%	6.4%	1.41	1.04	1.23
Self-employed, incorporated	4.7%	3.5%	4.2%	2.3%	1.34	1.13	2.03
Wage/salary, private	70.3%	67.3%	72.8%	75.7%	1.04	0.97	0.93
Wage/salary at non-profit	6.7%	8.4%	6.2%	4.9%	0.80	1.08	1.35
Federal govt employee	2.1%	3.2%	2.0%	2.2%	0.64	1.06	0.93
State govt employee	2.4%	4.7%	2.9%	2.7%	0.51	0.83	0.88
Local govt employee	5.8%	7.1%	4.3%	5.5%	0.81	1.35	1.05
Unpaid family worker	0.2%	0.2%	0.2%	0.2%	1.17	1.05	1.40

Table 6. Self-employment by economic sector among the Colombians in the U.S.

	Numbers	Numbers Shares					o of Colombi	ans to
			American- Foreign- Ot			American-	Other	
	Colombians	Colombians	born	born	Hispanic	born	born	Hispanic
Agriculture, forestry and fisheries	1,465	1%	8%	5%	9%	0.2	0.3	0.2
Construction	15,789	16%	15%	17%	24%	1.0	0.9	0.7
Manuf: Food, beverages and tobacco	2,547	3%	4%	3%	3%	0.6	0.9	1.0
Transportation, communications	8,969	9%	5%	10%	8%	1.7	0.9	1.2
Wholesale trade	3,407	3%	2%	2%	1%	1.7	1.8	2.4
Retail trade	8,232	8%	9%	13%	9%	0.9	0.7	0.9
Finance, insurance, real estate	5,689	6%	9%	5%	4%	0.6	1.1	1.3
Business services	12,709	13%	8%	9%	9%	1.6	1.5	1.5
Repair, auto and other	1,731	2%	3%	3%	4%	0.5	0.5	0.4
Personal services	17,909	18%	10%	14%	15%	1.9	1.3	1.2
Entertainment and recreation	1,396	1%	2%	1%	1%	0.7	1.3	1.3
Health services	5,682	6%	5%	5%	3%	1.1	1.1	2.2
Education, child care, social services	5,669	6%	5%	5%	5%	1.1	1.2	1.2
Professional services, incl. legal and	7,481	8%	13%	7%	6%	0.6	1.1	1.3

Note: The table is sorted by the code of the 1-digit NAICS industry classification, with the primary sector appearing first, the secondary second, and the tertiary sector last.

Figure 4. Geographic distributions of the self-employed Colombians in the U.S. Not incorporated (left), incorporated (right)



First vs. second generation. The social mobility of the second-generation Colombians in the American society is noteworthy. As seen in the column comparing the occupational specializations of the second and the first generation, (second to first generation ratio, Table 3) the second generation is far more likely than the first generation to hold jobs that pay well and require high level of human capital. More specifically, the second generation is significantly more represented among high-human-capital-occupations than the first one, i.e., the values are over 1 for occupations such as management, business and financial, computer and mathematical occupations, and they are below 1 for occupations such as farming, construction, or transportation occupations. The social mobility is even visible in the types of start-ups that Colombians start. Among the first generation, 45% of the self-employed have at least some college education, while among the second generation, it jumps to 66%.

4.1.2. Colombians in Chile

In the 2017 Chilean Socio-economic Survey, we identified close to 120,000 individuals of Colombian origin or nationality⁷ 15 years of age or older. The migration from Colombia to Chile is a relatively new phenomenon, with the vast majority of Colombians having arrived after 2015. Most of them live in the metropolitan region of Santiago, and a notable minority lives in Antofagasta.

Several characteristics of the Colombian diaspora in Chile suggest that it is less likely as a group to impact the development in Colombia than the larger diaspora in the U.S. Aside from its much smaller size, the migration is recent, it is dominated by medium and low skilled people, and much of it was spurred by high crime rates, violence and poverty in Buenaventura, Valle del Cauca (Connectas, 2015). Many of the Colombians here are focused on finding a place for themselves in a new society and are not looking fondly on the place they left behind. In stark contrast to the U.S., where 35% of the Colombians 25 years old or older have a college degree or higher, in Chile it is 12%. The typical Colombian in Chile has a secondary education (58%), or a vocational training⁸ (19%). In our own survey of the Colombian diaspora (See section Diaspora Survey), we found that 9% of the 420 surveyed Colombians in Chile were professionally involved in Colombia (against the global average of 13%).

Table 7. Specializations of Colombians with tertiary degrees in Chile.

	Numbers Shares				Ratios of Colombians to				
			-	Other		Other			
Economic sector	Colombians	Colombians	Chileans	LatAm	Chileans	LatAm			
Health & Wellness	2,658	22%	14%	15%	1.55	1.47			
Business Administration & Law	2,438	20%	22%	27%	0.94	0.76			
Engineering, Industry & Construction	2,049	17%	21%	19%	0.81	0.88			
Agriculture, Forestry, Fisheries, & Veterenary	1,523	13%	3%	2%	4.66	6.18			
Natural Science, Mathematics, & Statistics	1,101	9%	2%	3%	5.88	3.11			
Social Science, Journalism, & Information	688	6%	6%	6%	1.01	0.97			
Education	384	3%	20%	9%	0.16	0.37			
ICT	329	3%	3%	10%	0.79	0.27			
Arts & Humanities	132	1%	4%	5%	0.28	0.21			
Services	73	1%	2%	1%	0.31	0.68			

Although professional engagement from Chile is less likely, it should not be ignored. There are significant communities of Colombian professionals in Chile that may grow in the future, given that

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⁷ Colombians are defined here as those that mention Colombia or Colombian in at least one of these two questions: What is your nationality (including dual nationality)? What country did your mother live in when you were born?

⁸ 1–3-year post-secondary certification.

Chile is currently one of the favored destinations for studying abroad among Colombians. For instance, already in 2017, we identified over 2,000 tertiary educated Colombians with engineering degrees, 2,400 with business administration degrees, over 1,500 with agricultural degrees, and over 1,000 with degrees in natural sciences, math, and statistics, among others (Table 7). Moreover, there is significant specialization of the Colombians in healthcare. For instance, over 9,000 Colombians have vocational education in the field of healthcare, and close to 2,500 Colombians have university degrees in this field. With such large numbers of people in a single sector and a single territory (Santiago), one can easily imagine a targeted program for Colombian healthcare professionals in Chile.

4.1.3. Colombians in Canada

The community of Colombians in Canada is about as large as the one in Chile. A third of them arrived in Canada as refugees, presumably as refugees of the armed conflict. While equally well educated as the Colombians in the U.S., they appear underemployed in terms of the occupations they practice there. They are also less likely to hold managerial positions, and they are less likely to be self-employed. This mix of characteristics may explain why, in spite of their high levels of education and in spite of living in an economically advanced country, they are under-involved in Colombia's development. Our diaspora survey suggests that their level of professional engagement with Colombia, and more specifically, their level of business development in Colombia is below average (See section Diaspora Survey).

According to the latest Canadian census data, in 2016 there were about 98,300 Colombians in Canada. Most of them live in the province of Ontario (41,500), Quebec (34,700), Alberta (13,000), and British Colombia (6,000). The majority of these are first generation Colombians (76,000 or 77%), and we are seeing the formation of a young, second generation diaspora (22,300 or 23%). The second generation is very young (71% are under 15). Large share of the first generation (close to 32,000) arrived in Canada as refugees, while another 24,100 were economic migrants without family ties, and another 10,600 joined family that was already in Canada.

Comparable to the educational attainment of Colombians in the U.S., 34% of all Colombians 15 year of age or older⁹ have at least a bachelor's degree (Table 8). This is much higher than the educational attainment of the non-immigrant population, where only 20% have a bachelor's degree or higher, but in line with that of other immigrants (33%). As we noted above, the second-generation Colombians is very young, which is why there are relatively few among them with tertiary degrees.

Table 8. Educational attainment of the Colombians in Canada.

	Numbers					Shares				Ratios of Colombians to	
	All			All			Other	Non-	Other	Non-	
	Colombians	1st gen	2nd gen	Colombians	1st gen	2nd gen	immigrants	immigrants	immigrants	immigrants	
No certificate	11,155	9,980	1,180	15%	15%	18%	17%	19%	0.9	0.8	
High school degree	18,635	16,680	1,950	25%	24%	30%	23%	28%	1.1	0.9	
Apprenticeship or trade certificate	4,800	4,375	420	6%	6%	6%	7%	11%	1.0	0.6	
College, technical college degree	11,490	10,105	1,390	15%	15%	21%	16%	21%	1.0	0.7	
University degree below bachelor level	3,340	3,160	185	4%	5%	3%	4%	2%	1.2	1.8	
Bachelor degree or higher	25,610	24,225	1,385	34%	35%	21%	33%	20%	1.0	1.8	

Similar to the pattern observed in the U.S., the labor market participation of Colombians is high (73% vs. 66% among the non-immigrant Canadian population and 62% among the other immigrants), but

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⁹ Note that in the U.S., 35% aged 25 or older have at least a bachelor's degree. This means that, in the Colombian population in Canada 25 aged or older, more than 34% will have at least a bachelor's degree. The nature of the Canadian data doesn't allow us to make the exact comparison among those 25 years of age or older.

different from the U.S., their unemployment rate is also higher (10% vs. 8% among non-immigrants and other immigrants). Among the working Colombians, 26% worked as personal and customer information workers, 17% as professionals, 11% were in technical and paraprofessional roles, and another 11% in administrative roles (Table 9). Interestingly, although the second generation is small and has little experience, they are already outperforming the first generation when it comes to managerial jobs, possibly signifying high intergenerational mobility. Colombians are however generally underrepresented among managerial positions compared to the non-immigrant population and compared to other immigrants, and they are overrepresented in administrative occupations, and in personal and customer information service occupations. Self-employment is not very common among the Colombians in Canada. Only 6% of all working Colombians are self-employed. The share of incorporated self-employed is only 2%, and the rate of unincorporated self-employed is 4%. To an extent this reflects an overall low rate of self-employment among Canadians (7% among the non-immigrants). Other immigrants, however, have somewhat higher rates of self-employment (9%).

Table 9. Occupational specializations of the Colombians in Canada.

	Numbers			Shares				Ratios of Co	olombians to
	All	All			Other	Non-	2nd to 1st	Other	Non-
	Colombians	Colombians	1st gen	2nd gen	immigrants	immigrants	gen ratio	immigrants	immigrants
Managers	3,950	7%	7%	7%	10%	11%	1.1	0.7	0.6
Professionals	9,740	17%	17%	15%	20%	17%	0.9	0.8	1.0
Technical and paraprofessional occupations	6,530	11%	11%	12%	9%	11%	1.1	1.3	1.1
Administrative occupations	6,215	11%	11%	13%	11%	13%	1.2	1.0	0.9
Sales occupations	5,795	10%	9%	17%	9%	10%	1.8	1.1	1.0
Personal and customer information service occupations	14,755	26%	26%	23%	21%	17%	0.9	1.2	1.5
Industrial, construction, and equipment operatives	3,175	6%	6%	4%	6%	8%	0.7	1.0	0.7
Transport and construction workers and laborers	3,210	6%	6%	5%	6%	7%	0.8	0.9	0.8
Natural resources, agriculture and related production occupations	655	1%	1%	1%	1%	3%	0.6	1.0	0.4
Occupations in manufacturing and utilities	3,225	6%	6%	2%	6%	4%	0.4	0.9	1.4

4.1.4. Colombians in Mexico

Using the 2015 Mexican Intercensal Survey, we identified over 18,000 Colombians in Mexico 15 years of age or older, 96% of whom were born in Colombia (first-generation). We have reasons to suspect that the actual population of Colombians in Mexico today is much larger. On the one hand, already in a subsample of Twitter users we identified close to 14,500 presumed Colombian users 10, and in our survey of the diaspora, the number of participants from Mexico is quite close to the number of participants from Chile 11.

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¹⁰ Even after correcting for overstatement in the number of Colombian users because of tourism to Mexico.

¹¹ We cannot rule out however, a higher response rate to our survey in Mexico.

Table 10. Employment of Colombians in Mexico by economic sector.

		Numbers			Shares		Ratios of Co	lombians to
			Other			Other		Other
			LatAm			LatAm		LatAm
Economic sector	Colombians	Mexicans	immigrants	Colombians	Mexicans	immigrants	Mexicans	immigrants
Retail	1,657	5,312,690	8,243	11%	9%	7%	1.19	1.5
Scientific and professional act.	1,202	1,167,057	5,500	8%	2%	5%	3.92	1.63
Health and social	1,056	1,361,015	3,760	7%	2%	3%	2.96	2.1
Education	879	2,422,340	6,031	6%	4%	5%	1.38	1.09
Manufacturing	842	5,456,477	7,250	6%	10%	6%	0.59	0.87
Communication Media	610	349,223	2,026	4%	1%	2%	6.65	2.25
Wholesale	608	1,002,323	2,205	4%	2%	2%	2.31	2.06
Construction	442	3,007,917	4,901	3%	5%	4%	0.56	0.67
Other non gov.	437	3,189,739	7,100	3%	6%	6%	0.52	0.46
Hotels and Restaurants	395	2,261,583	7,009	3%	4%	6%	0.67	0.42
Finance and Insurance	324	434,414	1,050	2%	1%	1%	2.84	2.31
Government and international org.	301	1,781,906	1,284	2%	3%	1%	0.64	1.75
Waste management	259	1,257,052	2,860	2%	2%	3%	0.78	0.68
Culture, sports and recreation	231	272,082	2,009	2%	0%	2%	3.23	0.86
Real Estate	194	204,866	874	1%	0%	1%	3.61	1.66
Transport and logistics	144	1,763,241	1,616	1%	3%	1%	0.31	0.67
Agriculture	108	3,548,807	6,620	1%	6%	6%	0.12	0.12

Note: The population included are working age adults, 25-65 years of age. The table is sorted by the number of Colombians in an economic sector, from the largest to the smallest sectors.

With this caveat in mind, based on the population of the Intercensal Survey, we found that the Colombians in Mexico are concentrated in the metro area of Mexico City. Among the young Colombians, there seems to be a focus on acquiring university education, while the working Colombians are greatly overrepresented in various professional activities and the majority are highly educated. In fact, the young Colombians in Mexico (age 20-29) are twice as likely to be students than other Mexicans, and they are twice as likely to be students than other immigrants. Moreover, over 50% of the adults aged 25-65, had a bachelor's degree, 13% had a master's degree and 5.5% had a doctoral degree. In terms of economic sectors, 11% worked in retail, 8% in scientific and professional activities, 7% in health and social services, while manufacturing and communications & media each accounted for 6% of the Colombian employment in Mexico (Table 8). With two thirds of these Colombians being in Mexico for over 10 years, there is a possibility that a rather young second-generation Colombians is being formed there.

4.2. Colombians on Twitter

We took a 1% random sample of all geo-tagged tweets for 2016 – 2019, and among these, we identified a population of likely Colombians. Twitter does not require one to register any information about their origin, nationality, or ethnicity. Therefore, there is no certain way of identifying who is Colombian on Twitter. We define potential Colombians as those that use #Colombia or the Colombian flag (co) in their profile description. This means that Colombians who chose not to mention their ethnical or national identity will not be in our data, and some non-Colombians with affinity towards Colombia will be counted in the population of presumed Colombians. We think that the second scenario is not very common, and we can think of our identified population as the lower bound of the Colombian population on Twitter. The host country is defined as the country from which these users tweet most frequently. Our sample has about 350,000 users and 4.8 million tweets, but it represents a population of 3.2 - 3.5 million actual users, and 480 million tweets. 12

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¹² This means that in the 1% random sample of tweets we can identify 350,000 Twitter users that identify with Colombia/being Colombian. If we would translate this number into the overall number of such accounts on Twitter (i.e., if we would have had access to the universe of Twitter accounts), we would see a population of 3.2-3.5 million user accounts. Note that we have access to 1% sample of all tweets, not of all Twitter accounts, and the distribution of tweets is very uneven - few accounts generate large share of the tweets.

The Twitter analysis revealed information that is unavailable in official data. Even after correcting for potential distortions due to tourism-related travel, we found large numbers of Colombian users in places like Argentina, Mexico, or Brazil, where official data shows only small populations of Colombian migrants. 13 Moreover, by analyzing the mentions of Colombian cities in one's profile description we can guess one's place of origin within Colombia. Such information is almost never available in official statistics. By tracing the geolocations of tweets, we can study the travel patterns of the presumed Colombians. Finally, to an extent, we can also study the self-described professions of the users. 14 The global patterns are described here, while the Appendix – Colombians on Twitter describes these patterns for the nine countries with largest populations of users affiliated with Colombia: Argentina, Brazil, Canada, Chile, Spain, United Kingdom, Mexico, USA, and Venezuela.

As expected, most of the identified users were in Colombia (182,900), and 167,100 are found outside Colombia. Among the latter, some 46,000 are in the U.S., 14,500 are in Mexico, 13,000 in Argentina, 11,000 in Venezuela, 10,500 in the U.K., 9,500 in Spain, 9,000 in Chile, 7,500 in Brazil, 2,800 in Canada, and 1,500 in Costa Rica (Figure 5). We estimate that 27% of the users outside Colombia come from Cali, 24% from Bogota, 15% from Medellin, 7.5% from Barranquilla, and 4% from Cartagena (Figure 7). It is important to compare these shares with the shares of people actually living in these places. For instance, only 5% of the Colombian population lives it Cali, meaning that Colombians outside Colombia are 5.4 times more likely to come from Cali than we would have expected judging by Cali's share in the overall population. Similarly, Colombians abroad are 1.4 times more likely to come from Bogota than expected; they are 3 times more likely to come from Medellin, 4 times more likely to come from Barranquilla, and twice more likely than expected to come from Cartagena.

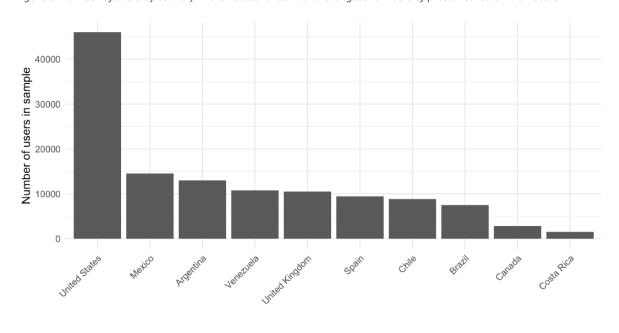


Figure 5. Number of users by country in the 10 countries with the largest numbers of presumed Colombian users.

¹⁴ There are caveats too. Twitter users are not a random sample of the Colombian diaspora. For instance, we found that 40% of those that mention their profession, describe themselves as writers or media/journalists. Another 17% are students. Moreover, the popularity of Twitter differs by country. To correct for these distortions, we always benchmark our findings against the distributions of the more general Twitter usage patterns in a specific country.

¹³ Official statistics such as United Nation's migrant stocks 1990-2019.

Figure 6. Distributions of tweets across the world

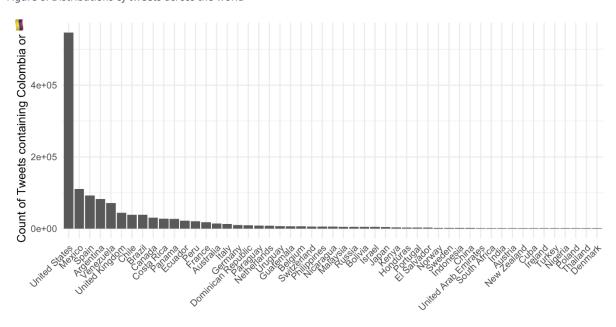
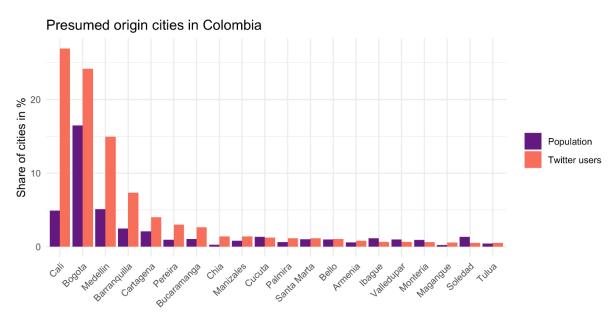


Figure 7. Presumed origin cities of the Twitter users outside Colombia.



In the period of observation (2016-2019), 23% of the Colombians living abroad visited (i.e., tweeted from) at least one other country. Among the countries visited, Colombia is by far the most common choice (Figure 8). More than 15,000 users visited Colombia at least once. More specifically, over 6,000 Colombians visited Colombia once, over 1,300 made two visits, and over 500 made three visits (Figure 9).

Figure 8. Countries visited when travelling abroad.

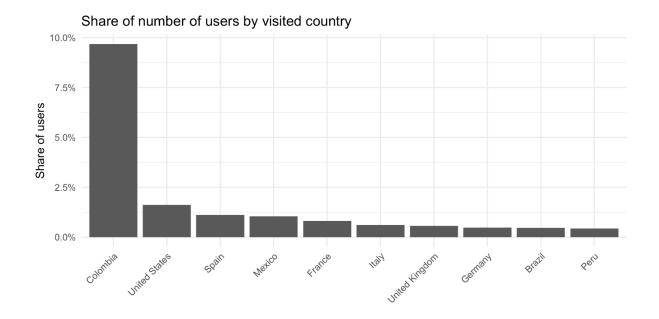
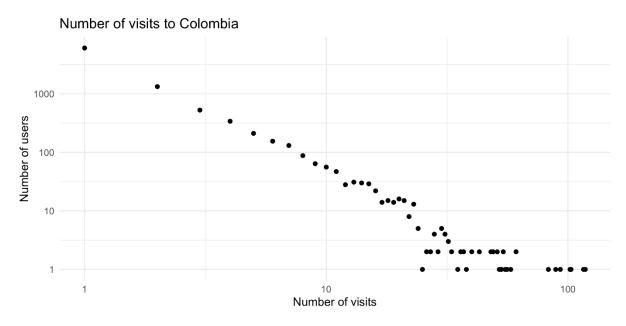


Figure 9. Number of visits to Colombia by Colombians residing abroad.



Finally, we could identify the self-described professions of the Colombian Twitter users. Because of the character of Twitter, and because of the character of our sample¹⁵, a large majority of users are

¹⁵ We have about 1% of all tweets, but media professionals have outsized role in posting content. As a result, the distribution of users is dominated by professions that tweet more.

journalists, writers, and other media professionals (35%). The other largest roles are students (18%), legal professionals (15%), business professionals (10%), and engineers (5%).

4.3. Colombian Directors and Managers across the World

Using a global database of more than 400 million companies (Orbis), we identified the locations of directors and senior managers of Colombian nationality. Among the medium and large-sized companies¹⁶, we identified 557¹⁷ directors and senior managers of Colombian nationality affiliated with at least one company outside Colombia and a total of 1,616 companies. The most common roles were Board of Directors member (51%), senior manager (19%), and a combination of these two roles (8%). In terms of company affiliations, 47% were affiliated with only one company, 20% with two, 11% with three, and the rest 22% are affiliated with four or more companies.

It is important to note that this is a lower bound of the number of Colombians holding such roles. Many Colombians in senior managerial positions abroad may not have the Colombian nationality anymore or may be second generation Colombians, and our dataset is not exhaustive of all senior managers around the world. Nevertheless, 557 senior managers in medium and large companies jointly have experience that should not be understated. A visible impact on business development in Colombia could be achieved even if a fraction of these would agree to continuously contribute by sharing their knowledge and experience. For instance, the GlobalScot network of influential Scots around the world was initiated by sending invitations to 450 residents and members of the Scottish diaspora (300 of which accepted to participate in the network, MacRae and Wight, 2006).

In terms of geography, outside Colombia, most companies are located in Latin America, North America, and Europe (Figure 10). Of the 1616 companies, 586 (36%) were located in Colombia, 190 (12%) in the U.K., 177 in Brazil (11%), 126 in Switzerland (8%), 109 in the U.S. (7%), 51 in Spain (3%), 35 in Chile (2%), 35 in the Netherlands, 34 in Panama, 29 in Canada, 26 in Peru, 24 in Mexico, and 24 in Italy (Figure 11).

Figure 10. Map of the locations of companies with at least one director or senior manager of Colombian nationality.

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¹⁶ To avoid including shell companies, we only focused on entities that have at least 15 employees, or have operating revenue of at least 1.6 million USD, or assets of at least 2.6 million USD.

¹⁷ The original data showed 660 directors and managers of Colombian Nationality. However, after checking the biographies of each one of these, we excluded 103 people that we thought were mistakenly classified having Colombian nationality.

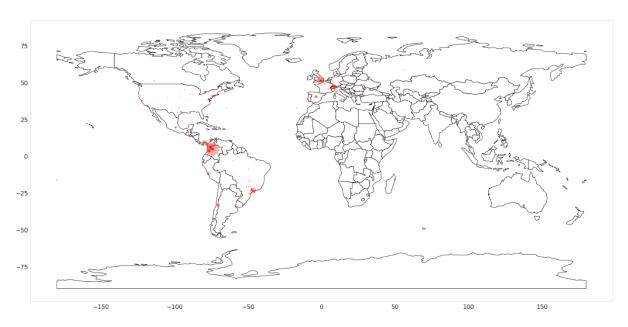
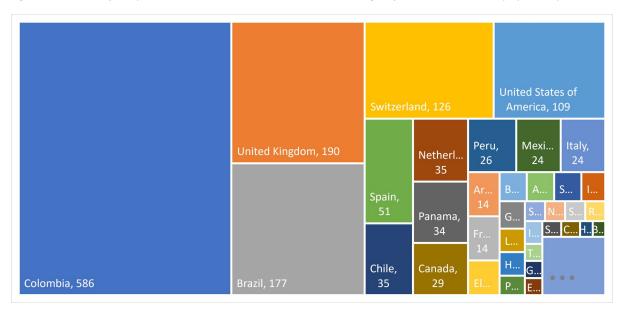


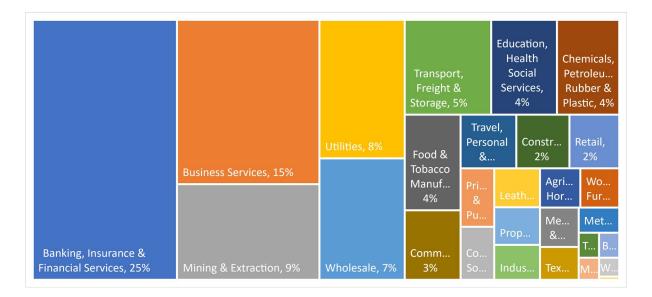
Figure 11. Number of companies with at least one director or senior manager of Colombian nationality by country.



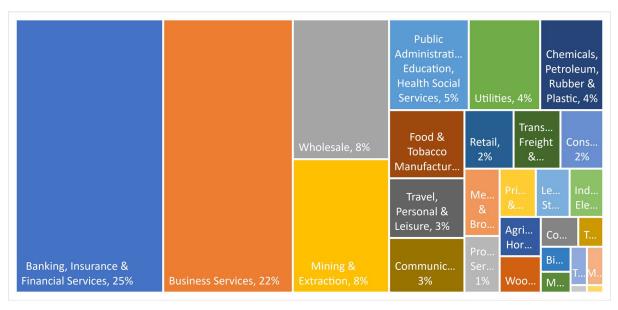
The most common sectors in which these companies operate are banking, insurance, and financial services (25%), business services (15%), mining and extraction (9%), utilities (8%), wholesale (7%), transportation (5%), and education & health (4%) (Figure 12.a.). Outside Colombia, the breakdown looks similar, although business services are now more pronounced in mix of industries: banking, insurance, and financial services (25%), business services (22%), wholesale (8%), mining and extraction (8%), education & health (5%), utilities (4%), and chemicals, petroleum, rubber, and plastic (4%) (Figure 12.b.).

Figure 12. Economic sectors of companies with at least one director or senior manager of Colombian nationality.

a. Industry breakdown including companies located in Colombia



b. Industry breakdown excluding companies located in Colombia



5. Interviews with Transnational Colombian Entrepreneurs and Professionals

In the period November 2020 - February 2021 we conducted 11 interviews with Colombian transnational entrepreneurs, investors, scholars, and professionals, and one interview with a Colombian professor who studies Colombian transnational entrepreneurs. Of the total of 12 individuals that we spoke to, four persons were mainly based in the USA, five in the UK, one in Canada, and one in Spain. They work in the tech sector, logistics, pharma, recruitment, private equity, fashion, construction and engineering, and academia. One was interviewed because of their social entrepreneurship engagements with Colombians from the diaspora. All interviewees, but two, were first generation Colombians. One interviewee was a spouse of a Colombian. The other was a second-generation Colombian, born in the UK, by a Colombian mother and a British father. Table 11 summarizes the main characteristics of the interviewed persons and their companies.

The interviews were not meant to reach a representative sample of the Colombian population abroad, but targeted the positive deviants in the diaspora, i.e., those that have achieved improbable success in specific economic sectors and have at the same time remained connected to Colombia and the Colombian diaspora. To diversify the geographic and industry background of the people we interview, we used multiple entry points for identifying potential interviewees. To obtain leads for the interviews, we arranged conversations with seven (out of 25) ProColombia offices located in places with high density of Colombians: UK (London), Canada (Toronto), USA (NYC, Miami, Atlanta, San Francisco), and Spain (Madrid). Most of them were able to recommend Colombians that we should interview.

Out of 20 leads, we approached 15. Of these, 12 agreed to speak with us, while four either did not respond to our invitations, or could not find time to speak with us during the period in which we were scheduling interviews. The non-response rate was high in Canada and Spain, where two out three invitations failed. Finding transnational entrepreneurs and professionals was easy in the USA and the UK. Their businesses and professions were in cutting-edge sectors, and when found in traditional sectors, their businesses were innovative. In Canada, all identified persons were in traditional sectors. In Spain, it was hard to identify Colombian transnational entrepreneurs outside the hospitality and gastronomy sectors.

Table 11. Characteristics of the interviewed persons.

	Pseudo- name	Gender	Age range	Sector	Country of residence	Level of company internationalization	Company size		Type of engagement	1st or 2nd generation	Studied abroad?
							Abroad	In Colombia		J	
1	Cristian	Male	30-40	Pharma	USA	Multinational	>5000	0	Mentor, Colombian diaspora	1st	No
2	Alejandro	Male	20-30	Robotics and logistics	USA	USA-Colombia	0-5	10-50	Company operations	1st	No
3	Ricardo	Male	50-60	Software development	UK	Multinational	100-200	300-400	Company operations	1st	No
4	Laura	Female	50-60	Social entrepreneurship	Canada	National	NA	NA	Social support, Colombian diaspora	1st	No
5	Felipe	Male	50-60	Private equity	UK	Multinational	>5000	0	Business investment	1st	Yes
6	Mateo	Male	20-30	Recruitment	UK	USA-Colombia	0	10-50	Company operations, recruitment for remote work	2nd	NA
7	Valeria	Female	50-60	Construction	USA	National	50-200	0	Business expansion	1st	Yes
8	Gabriel	Male	30-40	Tech sector	USA	Multinational	200-300	200-300	Start-up support, company operations, recruitment for remote work	1st	Yes, no degree
9	Andrés	Male	50-60	Tech sector	Spain	Multinational	>1000	0	Start-up support	Husband of a Colombian	NA
10	Sergio	Male	50-60	Academia	UK	NA	NA	NA	University internationalization	1st	Yes
11	Maria	Female	40-50	Fashion and academia	UK	NA	NA	NA	Research	1st	Yes
12	Marcela	Female	30-40	Academia	Colombia	NA	NA	NA	Research	1st	Yes

5.1. Main Findings

Migration journeys

Many of the persons we interviewed left in the 1990s, shortly after finishing their university studies. Most of them were driven by the desire for better and more secure life and career. The tech entrepreneurs left in the late 1990s or later and were driven by the desire to be part of the tech revolution that was happening in the USA.

Significant share pursued a degree (typically a master's degree) outside Colombia. This is again different in the tech sector. Here the typical first step was joining a start-up abroad. "[In the tech sector] university education does not teach you the stuff you need to know [to be successful]," remarked one of the entrepreneurs.

We identified three second-generation diaspora entrepreneurs in Colombia and interviewed one of them. Their journeys seemed more varied. Some have identified opportunities in long-standing family businesses in Colombia, and one entrepreneur made a leap of faith at the age of 23 to invest in fintech inspired by the level of diffusion of 3G and cell phones, and the talented youth he met in Colombia while on vacation there.

What drives them to Colombia?

Arbitrage opportunity because of wage differentials. All tech entrepreneurs employed domestic engineers and operations staff, while serving foreign markets. They cited the good quality-wage ratio of domestic engineers as key to their decision to operate in Colombia. As shown in Table 12, by employing Colombian software developers, American companies can save over 60 percent in annual salaries for this group of employees.

Table 12. Remote developer salary breakdown in the USA and Colombia.

	Front-end Developer	Back-end Developer	Data Scientist	App Developer	DevOps Engineer
United States	\$95,163 +64.2%	\$98,938 +62.3%	\$104,326 +68.7%	\$96,620 +79.2%	\$107,771 +63.6%
C olombia	\$57,948	\$60,970	\$61,857	\$53,908	\$65,887

Source: https://arc.dev/remote-developer-salary/united-states?compare=colombia

Technology gaps. Sectors like finance and construction operate in a very traditional way in Colombia. Finance is not taking a full advantage of the digitized economy, and construction is very labor intensive. In both sectors Colombian transnational entrepreneurs have identified technological gaps that they try to close. In finance, they are bringing about the fintech revolution. In construction, they are trying to bring about novel technology, some aiming at higher production efficiency, some at less environmental footprint, with varying success. One investor mentioned the early education and the medical sectors as ready for technological disruption. More effective models for these sectors are available outside Colombia, and there is business opportunity in importing those models in Colombia.

Networks. Existing networks of Colombians, both in Colombia and among the diaspora are key to developing a business that employs Colombians.

What attracts you to Colombia, as compared to other countries? Nothing in particular, but I have a large network of people here.

Conversation with a serial transnational entrepreneur

Colombians know other Colombians and hiring people they know, and trust, reduces their search costs. This is true for entrepreneurs with operations inside and outside Colombia. In the USA, qualification accreditation barriers have left many Colombians (and other Hispanics) unable to practice their profession. At least one company founded by Colombians found this advantageous for their own business. Once their business took off, they hired Colombian managers and engineers because those were the people that they knew and because these people were sitting idle in the USA. They knew the good schools in Colombia and were able to identify Colombian talent and quality that other companies in their area overlooked.

What makes them successful in Colombia?

For the tech sector entrepreneurs, so far talent has been abundant, but this is changing. The handful of excellent universities in Colombia are not producing numbers sufficient to meet the demand of the growing tech sector. Unlike the rest of the sectors, the tech sector is less constrained by the poor foreign language literacy of Colombians. The young software engineers all speak good English. This emerging middle class is humble and satisfied with the jobs that the new entrepreneurs have to offer.

Much of the developments in tech and fintech are recent. Most of the companies we interviewed were founded in the last five years. Their recent exports do not show up in the available international statistics of ICT exports. All of them said that the COVID pandemic drastically expanded the demand for their business, be that robotized food delivery in California, business process automation of large corporations, or matching Colombian remote workers with companies in America.

Public recognition and media exposure in Colombia can go a long way for these entrepreneurs. It is a win-win and a success-breads-success strategy. For one serial entrepreneur, public recognition by the Colombian government was an excellent PR that solidified and expanded their business in Colombia. In return, they were able to create more high-value-added jobs at home, as well as create a large accelerator for tech start-ups.

Colombia is a very unequal country, and while this is a socially undesirable state, business models are designed to specifically take advantage of this inequality. It is profitable to have a business model where the workforce comes from the lower strata and the market constitutes of the higher strata. Food delivery and remote work models take advantage of this inequality. 18

What makes it hard to thrive in Colombia?

We identified a few overarching barriers, and several sector-specific ones. Among the overarching ones are the knowledge of foreign languages, difficulty to open and close a business, and tax regulation.

¹⁸ From the perspective of a social planner, it would be beneficial if these such models result in inequality reduction, but redistributing wealth from the top to the bottom – something that might be worthwhile studying.

Overarching issues

Languages. Many entrepreneurs said that the lack of workforce that is proficient in English and other foreign languages limits their growth opportunities. Indeed, Colombia has a very low English proficiency in a global comparison. Based on test results of 2.2m adults in 100 countries and regions in 2020, EF¹⁹ ranked Colombia 77th out of 100, right next to Mongolia, Afghanistan, Angola, and Algeria. This is viewed as a constraint for scaling up and internationalizing by most entrepreneurs and academics we spoke to. This goes hand in hand with low cultural sensitivity and lack of international experience. "There are businesses in Colombia whose representatives wait for the arrival of deportees from the U.S. at major airports to offer them jobs requiring English skills" one of the entrepreneurs explained to exemplify the situation. We observed that only the most attractive employers saw no shortages of English-speaking candidates within Colombia. There is a catch though: one entrepreneur explained that as soon as software developers learn to speak good English, they leave Colombia. We do not see this as a threat. Short-term brain-drain in necessary for a long run brain-circulation.

Middle-level and C-suite managers. Interviewees from mature companies emphasized the scarcity of managers that have the proper training and experience to help companies expand their businesses abroad. For middle-level and C-suite positions they hire foreigners. Some have first tried to hire Colombians and failed, and others do not even look inside Colombia. Such managers need international experience, knowledge of foreign languages, and cultural sensitivity, all of which is best gained abroad.

Opening and closing a business. The transnational entrepreneurs we interviewed all operate in Colombia and in at least one other developed economy. They typically compare Colombia with the USA or the UK. Many of them pointed out that opening, and even more, closing a business is very difficult in Colombia. One entrepreneur has not yet managed to close a business that has been inactive since 2017. Another one never completed the registration despite their best efforts to do so. These observations are supported by existing analysis of Colombia's requirements to open a business. According to the 2020 Doing Business Indicators, opening a business in Colombia requires 7 procedures that take up a total of 10 days to be completed. ²⁰ In comparison, the most effective countries require a single procedure that takes half a day to complete. Some mentioned the need to hire an accountant and/or a lawyer to complete the process. This has serious implications for Colombia. We learned that, because of the complicated registration and de-registration process, the practice of registering a Colombian business outside Colombia is common among entrepreneurs. A large business accelerator even coaches their start-ups to register their businesses elsewhere.

Tax regulation. Entrepreneurs often mentioned that it is difficult for small companies to understand and comply with tax regulation in Colombia. Taxes are unnecessarily complicated and compliance with procedures is difficult. These claims are supported by existing evaluations of the Colombian tax system. For instance, according to the Doing Business Indicators, it takes a representative company 256 hours per year (about 33 8-hour working days) to properly deal with tax matters. In countries with best organized tax administrations this number is about 6 8-hour days.

Sector-specific issues

The tech sector. Access to capital in Colombia was mentioned by all tech entrepreneurs as a limiting factor. The tech sector entrepreneurs typically do not have assets that they can use as collateral to

¹⁹ The world's largest ranking of countries and regions by English skills. https://www.ef.com/wwen/epi/#

²⁰ https://www.doingbusiness.org/content/dam/doingBusiness/country/c/colombia/COL.pdf

secure a bank loan. Venture capital almost does not exist in Colombia. At least two of the entrepreneurs thrived because they located their business development teams near VC hubs abroad, while their operations were in Colombia.

Recruitment and remote workers. Stimulated by the global COVID pandemic, this sector is booming. They foresee tightening of the supply of young graduates (mainly software developers, marketing, sales professionals) in foreseeable future. One entrepreneur found it unfortunate that Colombia has such a talented but under-educated youth, when better supply of education for them could make them employable. Given their good understanding of the demand side, and the trainability skills such a programming, sales, and marketing, some think that they are well positioned to train the youth in-house. This is expensive, of course, and they find tax credits for training an attractive proposition.

Construction. The Colombian construction sector is very distant from the world technological frontier. The sector is however not ready to open for technologically more advanced construction companies that come from abroad. The Colombian-American entrepreneur that recently attempted to disrupt the sector failed to do so. Low-productivity local companies are favored to high-productivity foreign ones, even when this comes at a great cost to the end user (e.g., months to fix a road instead of days). Favoritism and corruption seem rampant in the sector, creating effective barriers for more productive outsider companies. Innovation may need to come from insiders in the sector, that have acquired experience abroad while maintaining their home networks, or from trust-based insider-outsider joint ventures. As an example, a couple of decades ago, a serial entrepreneur from Spain teamed up with his Colombian brothers in law to start, what became, a successful parking lot construction business in Colombia. One of the innovations that he helped bring about in Colombia was a more environmentally friendly construction technology.

Pharma. This is another sector that is very far from the world frontier. Colombians outside Colombia have reached the corporate ladders of companies that can impact this sector, but the foundations for cooperation are not there. Instead, they see Colombia as a place where pharma could pioneer and test the use of digital health innovations such as the use of Artificial Intelligence, telemedicine, and the use of drones for medical deliveries in areas that are underserved by hospitals and pharmacies.

If your company would ask you to expand in Colombia what would you say? They already did. There is no innovation [in pharmaceuticals] happening in Colombia. No innovative products we could consider buying. No research.

Conversation with a Lead of Investment Activities at a global pharmaceuticals company

Private equity. This is another underdeveloped sector that impacts the financing of whole branches of the real economy. Here as well, there are Colombians abroad that are well positioned to channel private equity towards Colombia. Our interviewee has over 25 years of experience in the sector and has covered all emerging markets during his career. He does not see an easy way to make Colombia more attractive to private equity. It is not a Colombian problem per se – most LATAM countries have lost the edge when compared to Asia. To become attractive to private equity, the country needs a massive de-regulation – tax system, labor regulation, bankruptcy law.²¹ We asked if the booming tech sector is becoming attractive to private equity. In a global comparison, private equity

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²¹ Even the successful domestic pension funds do not invest in local companies, they prefer investing internationally. They invested in the local market 25 years ago, and they are still feeling the consequences of those failed domestic investments.

companies see the Colombian tech sector as small with few companies to consider for investment. Instead, they are still focused on investing in more traditional sectors (retail, banking, and oil), although even here they find investing outside LATAM countries more attractive.

Private equity works in a free, unregulated, competitive environment, all of which is missing in Colombia.

Managing Partner at a leading Investment Management Company

Academia. Colombian academics abroad view even the most internationalized Colombian universities as underperforming in terms of internationalization. This holds both for faculty and for students. Even at elite universities, entrenched ideas about hierarchies and renumeration make it difficult for universities to let foreign faculty and researchers take positions that do not comply with existing roles. Paying much higher salaries to foreigners is viewed unfavorably among domestic faculty, even when foreign scholars bring their own funding. Paying premiums for foreign scholars from university budgets is even more controversial. The result is that internationally minded professors leave Colombia in search for more internationalized work environments.

The few foreign scholars that work in Colombia seem also to spend days each year dealing with visa renewals, which seems like an unnecessary nuisance, even if it may not be the key reason for the lack of internationalization.

Colombian universities have not organized to attract foreign students, not even from LATAM countries. Here Colombia is underperforming even in comparison to other LATAM countries. According to the latest UNESCO data²², in 2019 Colombia hosted less than 5,000 foreign university students or 0.1% of the total number of students studying abroad, while Argentina hosted close to 89,000, Brazil hosted over 67,000, and Chile hosted close to 17,000.

One thing that is changing for better are the numbers of Colombian students abroad. Currently, some 47,000 Colombian students study abroad, with major destinations being Argentina (11,000), USA (7,300) and Spain (6,100). Australia, France, and Germany are also popular locations for Colombian students (Figure 13).



Figure 13. Where do Colombian students study abroad?

Source: http://uis.unesco.org/en/uis-student-flow

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²² http://uis.unesco.org/en/uis-student-flow

5.2. Actionable Insights

The good news is that the Government of Colombia has an agency over the degree of diaspora engagement, and with that, the impact that the diaspora could have on the internationalization of the Colombian economy. There are numerous ways in which the government could ensure more engagement going forward. Here we discuss a few of them that we think make sense in the Colombian context: (a) a business and technology network, (b) a ministry of diaspora or an agency for diaspora, (c) internship and job programs with diaspora businesses, (d) revising the return incentives of major student loan programs, (e) language programs, and (f) recognition of diaspora entrepreneurs. We also reiterate the importance of simplifying the process of business registration and closure, as well as improving the conditions for the development of venture capital.

Create a Business and Technology Network of Impactful Colombians around the Globe. We heard more than once during our interviews that the knowledge, networks, and experience of the diaspora are underutilized because of lack of structured and stable programs for engagement. Business and technology networks would be a way to tap into the diaspora's pool of knowhow, social and financial capital, as well as their sincere desire to play a role in the development of their home. Such networks have played, and still play an extremely important role in business development and technology transfer in Taiwan (Mount Jade Science and Technology Association), India (The Indus Entrepreneurs) and in Scotland (GlobalScot), among others. Most of these were founded and championed by transnational business executives and attracted large membership over time. They connect companies, but also offer mentoring and funding for entrepreneurs, among other things. GlobalScot, for instance, was initiated in 2001 by the Government of Scotland with the aim to establish a global network of influential individuals with affiliation and affinity with Scotland, who would contribute towards Scotland's economic development. The first round of GlobalScot members were invited by Scotland's First Minister (an equivalent to a Prime Minister), who sent out 450 invitations. 300 of these (75 percent) accepted the invitation to become members, although the initial expectation was an acceptance rate of 10-15 percent. Analysis of the GlobalScot's success (MacRae and Wight, 2006) points out that sending the invites from the First Minister's office, was key to its success. Another important factor was the implicit recognition in the invitation that the member could shape the future development of Scotland. There is no reason why Colombia cannot repeat that same success with its own entrepreneurs and professionals in the diaspora. On daily basis, GlobalScot is managed by Scotland's national economic development agency (Scottish Enterprise) and their international support staff. Colombia's equivalent network could be managed by ProColombia's offices.

Institutionalized Channels for Continuous Exchange with the General Diaspora. Some countries have chosen more general and more political forms of engaging the diaspora. Sometimes these diaspora programs are led by the Ministry of Foreign Affairs, like in the case of the Global Irish program. Other times they constitute separate ministries of diaspora. Israel, Armenia, Georgia, Kosovo, Albania, and others have established such ministries. Business development is just a subset of a wider set of engagement areas that these encompass.

Create Opportunities for Working Abroad. To internationalize an economy, it is not sufficient to have the youth study abroad and return right after. Some of the most valuable skills such as managing, teamwork and customer relations, are learned at the job and university education is no substitute for these. No good managers were solely shaped by their master's programs. Internships and jobs abroad should therefore be an integral part of the international experience.

During our interviews, the CEO of a multinational tech company mentioned his internship in Germany as the steppingstone towards international business expansion. Quality expectations, international standards, cultural sensitivity all had to be learned while working abroad, he said. Drawing on this experience, he now regularly sends his teams to visit other company locations in other countries and meet international customers. He says that his employees find these trips transformational.

A CEO of a construction company in the USA with some 40 employees, hosts a beloved internship program, where every year two Colombian students are selected to spend a year learning how construction engineering is done in a technologically advanced company. Her perception was that the Colombians who gained experience through this program were significantly better-off careerwise than similar students who did not gain that experience. We believe that people with exactly this kind of experience are going to bring about the technological advancement in construction sector that domestic companies are unable to adopt.

A head of business operations at a new tech company headquartered in Silicon Valley with operations in Medellin compared Stanford software engineers with top Colombian engineers "They are like our engineers, but with the Tesla internship." We think that there are two types of policies that could make it easier for Colombians to gain foreign work experience: (a) changes in the return rules of student loan and scholarship programs, (b) the development of internship programs among diaspora entrepreneurs.

Abolish strong incentives to return right after graduation. Despite the importance of work experience abroad, one of the most popular programs for student loans (COLFUTURO) makes it costly to work abroad after graduation. Every year COLFUTURO issues about 2,000 loans (value of up to \$50,000) to Colombians that have ensured a placement in a reputable foreign university. Up to 80% of the loan can be forgiven to those that return to Colombia for at least three years after graduation. The loans, however, must be paid back in full and with high interest rates (up to 15%) for those that choose employment abroad. ²⁴

A quarter of our interviewees were either a recipient of COLFUTURO loan themselves or had a close family member (a sibling or a spouse) who was a recipient. While the recipients viewed the program favorably, all of them found that it limited their location choices after graduation. All mentioned that the loan forgiveness played a role in their decision to return.

"New skills cannot be just learned [in a classroom], they have to be practiced. The need to return limits one's opportunity to grow and practice."

A CEO whose spouse was a recipient of a COLFUTURO loan

Incentivize the development of internship programs among diaspora entrepreneurs. The internship program we encountered in the construction company in the U.S. was a positive deviant rather than a common occurrence. Internship programs with international students are costly and do not always pay off for the companies: they have high recruitment costs, including visa support, intensive training periods and short periods of return to that training. It is an altruistic act, and it this may be the reason why it does not emerge organically on a large scale. However, our survey of the diaspora (see subsection Engagement with Colombia) indicates that

²³ We should mention that these loans are issued in USD and must be paid back in USD, making it difficult for returning graduates to pay them back in periods of dollar appreciation.

²⁴ https://www.colfuturo.org/programas/credito-beca/informacion-general

there is great deal of interest among the established Colombians abroad to help young professionals develop skills. In sample of 10,000 Colombians living abroad, we identified several hundreds of Colombians abroad that mentor youth in Colombia or provide long-distance professional support to Colombians. The Colombian government could use its consulates, as well as ProColombia offices to start closer conversations with Colombian-run companies abroad and gauge their interest in experimenting with internship programs. This way the government can better understand what it would take for companies to offer such opportunities to young Colombians.

Give Recognition at Home. A serial entrepreneur explained how a prominent innovation award he earned in the U.S. caught the eye of the Colombian government, which then promoted his work in Colombia and engaged him in programs like INNpulsa Colombia. This helped him gain media attention in Colombia, growing his network and followers there. He cited exactly this network as the main reason why most of his companies operate out of Colombia. His platform for remote work matches some 500,000 job seekers mainly from Colombia with companies based mainly in the U.S. Each year, the company successfully connects thousands of Colombian jobseekers with jobs in software development, marketing, and sales. The government could use various ways to promote diaspora entrepreneurs and professionals in a similar, but more systematic, more routine way.

Most importantly, such recognition does not only benefit the entrepreneur and their employees, but it also creates role models for the new generation of entrepreneurs. If entrepreneurs are portrayed as heroes, more Colombians will aspire to become one.

Strengthen Foreign Languages Programs and Curricula. It is not clear from our analysis if the overall low level of foreign languages proficiency is a result of a low demand for, or a low supply of language courses. It is clear however that foreign language proficiency is key to important economic outcomes, such as the higher employability of individuals, and the scalability of domestic businesses abroad. It is hence important to stimulate the supply side regardless of the current demand. Young people, for instance, may not have perfect information about the value of knowing a foreign language, and their demand for languages may be below what is optimal for the economy. There are many ways to stimulate the supply side, with the public education system being the key player. For short to medium-term planning, it is important to quickly mobilize the youth that is returning to Colombia after studying in non-Spanish speaking countries. Improving the language curricula at secondary and tertiary level of education seems like a high return investment. There is a role for the diaspora that stays abroad too. Tandem language learning programs could be a great way to mobilize the diaspora's interest in mentoring Colombians²⁵.

Relax some General Constraints to Doing Business. A relatively straightforward change that can have a measurable impact immediately is the regulation of business registration and business closures. There are by now numerous countries that have reengineered their public services to the business community with the objective of simplifying and automating processes, and many successful examples are available. Finally, the tech sector is growing despite the lack of venture capital, and many suggested that it would have been growing faster if VC or other form of capital were available. "There is lots of mentoring available, but no capital", noted one entrepreneur. Another one suggested that state guarantees for promising tech start-ups could be an option that the government could consider. Yet another one noted that the sector is ripe for private equity

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²⁵ Our Diaspora Survey shows that the mentoring of young Colombian professionals is one of the most popular ways to engage with Colombia among the Colombians abroad.

investments, but our interview with a person from the private equity sector made us conclude that private equity finds the Colombian tech sector still too small to be interesting. While we do not see a quick solution to this issue, (it seems that the whole model of how business is done in Colombia needs to change) the capital constraint can be partially addressed if diaspora investors get better connected to local business, e.g., through a business and technology network.

6. Survey of Colombians around the World

Between January 19 and March 8, 2021, the Growth Lab at Harvard University disseminated an online survey to the Colombians around the world. The main objective of the survey was to learn about diaspora topics that cannot be studied through the analysis of secondary data or social media data, such as level of engagement with Colombia, their attachment to home, their intentions to return, their sentiments towards Colombia, as well as issues of cultural identity.

The survey was disseminated with the help of the Ministry of Foreign Affairs and its network of Colombian embassies and consulates around the world, represented by about 150 offices. Each consulate maintains a mailing list of people identifying as Colombians in the geographic areas that they cover.

Our best estimate is that there are around 5 million Colombians, first and second generation living outside Colombia today. This equals to 10% of the Colombian population. As of March 8, 2021, our survey had 10,850 participants, or a response rate of 0.2%. To the best of our knowledge, it is the largest single existing survey of a diaspora.

The survey is not representative, but its size ensures that we can study underrepresented populations in detail as well. For example, over 70% of the participants in the survey have tertiary education, but we also surveyed hundreds of people with low educational attainment. Another example is country representation. Colombians in the U.S. constitute 15.5% of our sample, while our best estimate is that at least third of all Colombians outside Colombia reside in the U.S. Still, with a sample size of 1,600 for the U.S., there is a lot that we can learn about the Colombian population there. Moreover, for countries with reliable national statistics of their foreign population like the U.S., we can reweight our survey samples to achieve representativeness.

6.1. Characteristics of the Surveyed Colombians

Colombians from well over 100 countries participated in the survey (Figure 14). In 17 countries, we received more than 100 responses. Those countries are Spain (2,502), United States (1,590), Canada (855), Germany (523), Chile (468), France (465), Mexico, (463), Argentina (364), Brazil (336), United Kingdom (312), Ecuador (263), Switzerland (226), Colombia (returnee migrants, 207), Australia (162), Peru (149), Italy (131), and Belgium (128).

In terms of demographics, 56% of the participants were women, and 50% of all participants were married (22% in a relationship, 21% single, 6% divorced, and 1% widowed). The median age was 38, and the average was 40.

The overwhelming majority were born in Colombia (95%), meaning that the second-generation Colombian diaspora accounts for a small fraction of our survey participants (Figure 15). Subsequently, most of the participants have spent long periods living in Colombia – 94% have lived in Colombia for more than ten years. This does not mean, however, that the participants are new in their residence countries. 36% have spent more than ten years there, while another 20% have spent between five and ten years (Figure 16).

Figure 14. Number of respondents by host country.

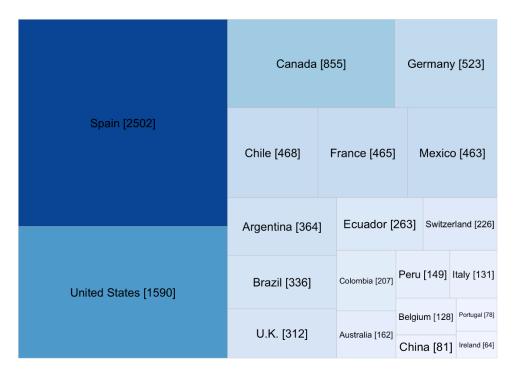


Figure 15. What are your relations to Colombia?

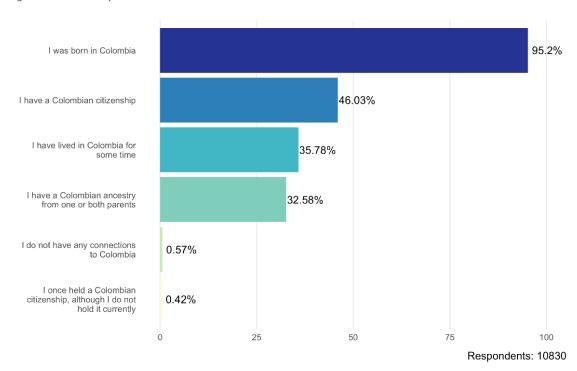
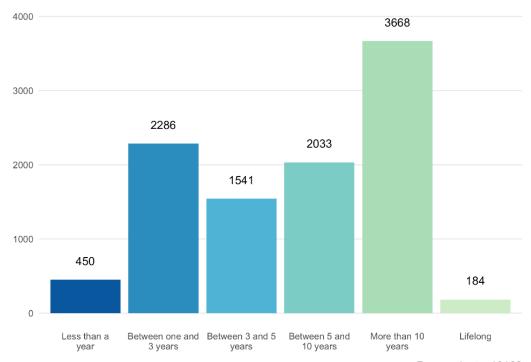


Figure 16. How long have you lived in your current country of residence?



Respondents: 10162

The reasons for leaving Colombia are multiple, typically a combination of insecurity, necessity, and opportunity. The left panel of Figure 17 lists the reasons for leaving, for those that made the decision themselves (roughly overlapping with the first-generation Colombians), while the right panel lists the reasons for leaving for those whose parents made that decision (roughly coinciding with the second generation). Participants could choose multiple reasons. Starting with the first generation, and with the most dramatic reasons for leaving, 28% cited conflict and insecurity as main reasons (i.e., chose at least one of these choices: armed conflict victim, rising crime rates or political instability). Another 14% that were not driven by conflict or insecurity, were driven out by necessity (i.e., because of few or no job opportunities in Colombia, or because of an insecure job contract such as Contrato de prestación de servicios). The other 62% that were neither driven out by conflict or insecurity, nor by necessity, were driven by a combination of opportunities, such as a better quality of life, better education opportunities, a career advancement, a unification with family members or a romantic partner abroad, and the like.

There are stark differences between the reasons for leaving of the first generation, and those of the parents of the second generation. The parents seemed more affected by conflict and necessity, while the newer generation seemed mainly driven by opportunity. For example, 7% of the first generation said that they were victims of the armed conflict, while 15% of the (parents of) the second generation were said to be such victims; 21% of the first generation said their decision was impacted by rising crime rates, while 31% of the second-generation's parents were said to be impacted by this. Similarly, 16% of the first generation cites unstable political situation among the reasons for leaving Colombia, while 23% of the second generation's parents were influenced by political instability. The first generation is much more driven by better educational opportunities (33% vs. 23%), career advancement (30% vs. 21%), and unification with family, friends, or a romantic partner abroad (24% vs. 16%) (Figure 17). What may drive these generational differences is the fact that the younger generations have more education, know more foreign languages, and are hence better positioned to benefit from emigration than their predecesors. As a result, we see more

opportunity-driven emigration among the newer generations, in accordance with patterns observed in Clemens (2020). Moreover, the earlier generations created the ground for family-based reunifications of the later generations. This may explain why a larger share of first-generation migrants cites family members, friends or a romantic partner as one of the main reasons for having left Colombia.²⁶

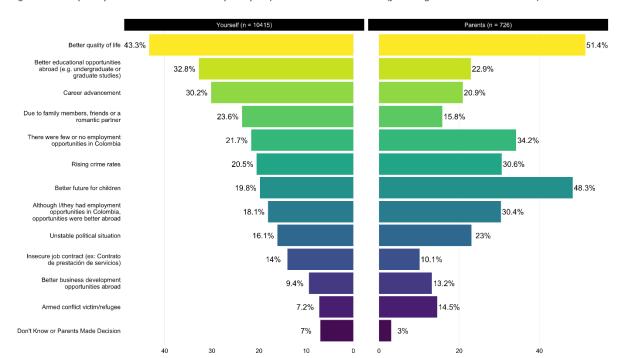


Figure 17. Why did you leave Colombia? Why did you parents leave Colombia (for 2^{nd} generation Colombians)?

6.2. Education, Languages and Work

Well educated and highly experienced Colombians participated in disproportionally higher numbers in our survey. Nevertheless, the share of unemployed, and those neither working nor studying is high, reflecting the global recession spurred by the COVID pandemic.

6.2.1. Education and Languages

In terms of educational attainment (Figure 18), 72% had at least a bachelor's degree (15% a bachelor's degree, 11% a specialization degree, 29% a master's degree, 7% a doctoral degree, and another 7% a professional degree such as MD or JD). Additional 28% have not completed tertiary education (2% had less than high school education, 6% had a high school degree, 11% had some college or technical studies but no degree, and 9% had a technical associate degree). There is a clear pattern, as shown in Figure 18, of leaving Colombia to advance one's education abroad. The pattern is most salient at the master's level. In our survey, almost 2,400 out of about 2,900 participants with a master's degree gained their degree outside Colombia. At the doctoral level, all but 54 out of 727 participants gained their degree abroad.

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²⁶ It is possible that the differences between the two generations are driven by differences in how people self-report these reasons when they they talk about themselves, and how they report when answering on behalf of others. For instance, assuming that the underlying reasons are similar for both generations, the survey participants may be more likely to remember (and report) that their parents' decision was affected by the conflict, than they are to likely to report conflict as a main reason for themselves. While this is possible, it is not clear why this would be the case (and not the other way around, i.e., remembering and reporting conflict more often in their own case, than in the case of their parents).

In terms of areas of study, the most common fields were business (20%), engineering and architecture (19%), medical studies (9%), political science, economics, or anthropology (9%), and natural sciences (6%) (Figure 19).

Some 22% were still in education²⁷ and most of these were pursuing a master's degree (541) or a doctoral degree (338), (Figure 20). The most popular areas of study among these were engineering and architecture (17%), business (16%), medicine and nursing (14%), languages (12%), and political science, economics, or anthropology (10%) (Figure 21).

Many Colombians who live abroad live in Spanish speaking countries, and they do not feel the need to speak a second language. Nevertheless, in addition to Spanish, another 67% (or about 6,700 participants) spoke English at a conversational level or better, 19% (or about 1,900) spoke French, 11% spoke Portuguese, 8% spoke German and 6% spoke Italian. This reflects a wealth of knowledge of foreign languages that the community abroad has, and even if only a fraction of it would be channeled to train the domestic population, it could make a significant impact at home.

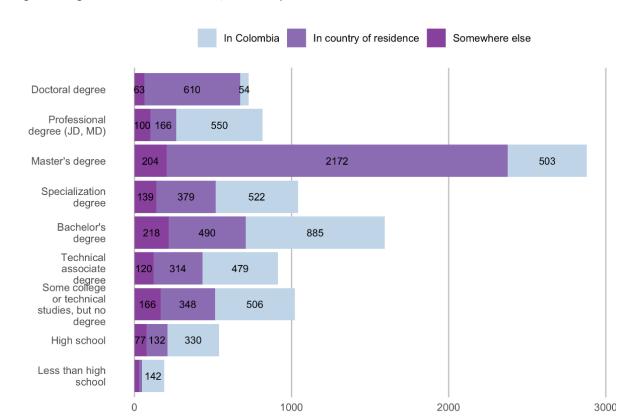


Figure 18. Highest educational attainment, and country in which the education was obtained.

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Unique Respondents: 10368

²⁷ This includes those that are working while studying, i.e., the category "schooling and working."

Figure 19. Field of study in the highest achieved level of education.

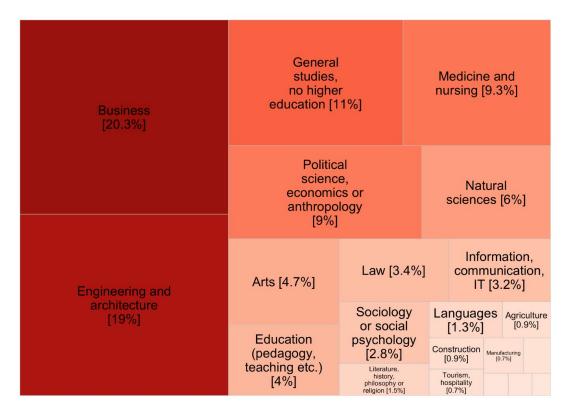


Figure 20. What education are you currently pursuing?

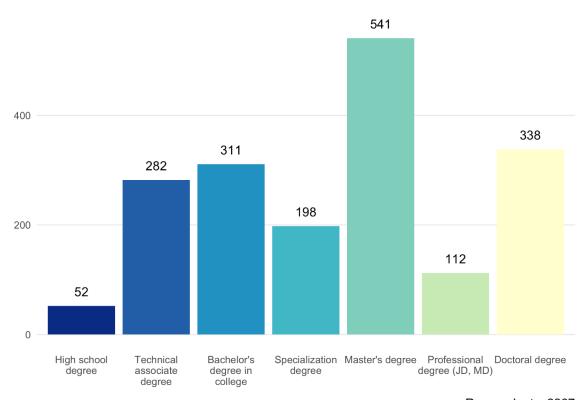


Figure 21. What is the area of the education you are currently pursuing?

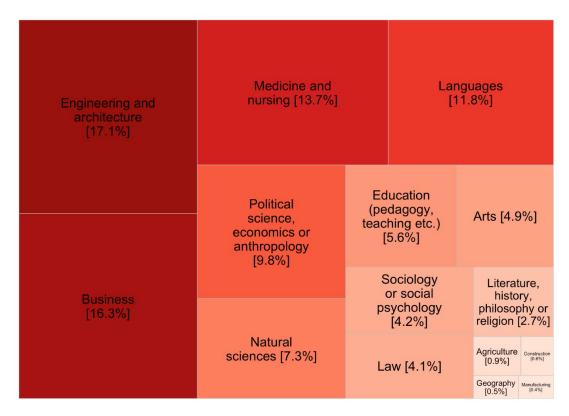
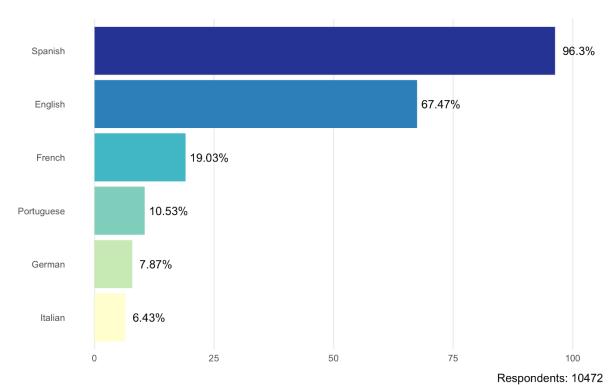


Figure 22. Languages spoken at a conversational level.



6.2.2. Work

In the current country of residence, 59% were working, 8% were in education, and 14% were studying and working, 8% were unemployed, 4% were neither schooling nor working. The high levels of unemployment and not studying/not working reflect our timing of the survey in the midst of the 2020-2021 COVID pandemic. Among those who worked, by far the largest group described their role in the main job as employees (5,907), followed by freelancers or self-employed (866), followed by business owners (495). There were only few trainees or interns (133) and even fewer unpaid workers (30).

Managers were the largest occupational category if gathered together (17%), followed by professionals (general, 13%), engineers (9%), medical professionals (6%), researchers (6%), teachers (5%), and IT professionals (5%) (Figure 23). Finally, in terms of economic sector, most people worked in healthcare (14%), professional, scientific, and technical services (12%), education (11%), ICT (9%), finance (7%), manufacturing (6%) and construction (5%) (Figure 24).

The majority of our survey participants had long work experiences. For one, they were older than the general population of Colombians abroad (remember that the median age was 38, and the average was 40). The typical survey participant had a total of nine years of work experience, of these five in Colombia and four in the country of residence²⁸.

Figure 23. Current occupation.

Manager Teacher. in private Researcher trainer, coach business that [5.6%] [5.1%] is not owned by you [5.1%] Clerical Information and worker (e.g., Managers Communications secretary (general) Technology administrative [4.8%] professional assistant, bank [4.8%] teller) [4.3%] Manager of **Business** own business or public Helper, Scientist (without administration cleaner, [3.3%] employees) professional labourer [4%] [3.3%] [3%] Engineering Personal Social and Manager in professional service (e.g. travel agent, hairdresser, Legal cultural public or non-governmental [8.6%] professionals, professional cook, waiter, housekeeper) [2.5%] including arts organization [1.5%] Administrator [1.5%] [2%] [3.9%] Chief Driver (e.g., car, truck, boat, mobile Food preparation executive. **Technicians** senior official (engineering) [1.5%] plant) [1.1%] [1.1%] or legislators Health/medical Manager of own [2.4%] professional business (with Salesperson Plant and machine operator, and/ [6.3%]employees) incl. cashiers [3.5%] professional [1%] [2.1%] [1.1%]

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²⁸ These are the median values. The means are: 7.1 years in Colombia, 6.7 years in the country of residence, and 1.1 year elsewhere, or a total of 14.9 years of experience.

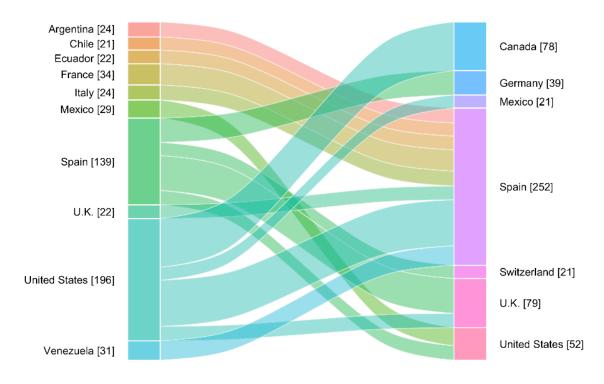
Figure 24. Current industry.

Healthcare [13.8%] Professional, Scientific and Technical Activities [12.1%]	Information and Communication [9.3%]			Financial and Insurance Activities [7%]			
	Manufacturing [6.3%]		Constr [4.9	0.01.01.	Transportati and Storag [4.3%]		age
	and Food A Service In Activities Or [3.6%]		omatic vities or national nizations .9%]	Arts [2.5%]		Social Service Activities [2.5%]	
Education [11%]	Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles [3.6%]	Hous	ork in eholds 5%]	Agriculture, Forestry and Fishing [2%]		Entertainment and recreation [1.9%]	
	Administrative and Support Service Activities [3.2%]	Public Administration and Defense [2.1%]		Electricity, Gas, Steam and Air Conditioning Supply [1.9%	[1.2%]		Mining and Quarrying [0.8%]

6.3. Migration Journeys

While most participants stayed in a single host country, about 5% first entered another country, and only then settled in the current country of residence. While those that have resided in more than one country seem to form a small share of the total stock of Colombian emigrants, such occurrences are important to document, as they can easily escalate. For example, hundreds of thousands Colombians left Spain as the 2009 economic crisis unfolded. Some returned to Colombia, but many moved to the more economically resilient European economies. Figure 25, shows the main steppingstone countries on the left, and the main destination countries on the right. Argentina, Chile, Ecuador, Italy, and Venezuela, all appear as steppingstone countries for Spain, while Spain itself is a steppingstone for Germany, Switzerland, and the U.K. Like Spain, the U.S. is both a steppingstone and a destination country. From the U.S., Colombians move to Canada, Spain, and the U.K. There are also significant flows between Mexico and the U.S., in both directions.





Respondents: 542

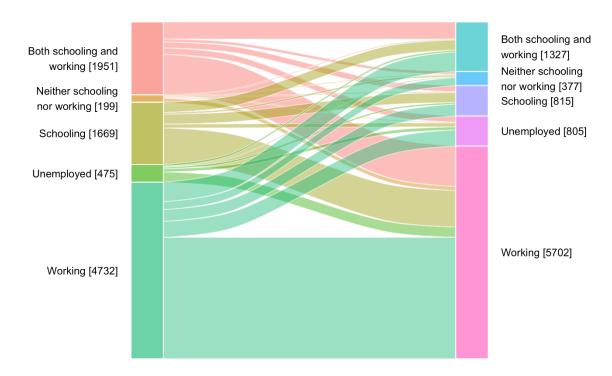
We asked those who lived in Colombia before moving to another country about the labor market status before they left. We also asked everyone about their current labor market status, as reported in the *Work* subsection. In terms of general levels of employment and schooling, while in Colombia, 53% were working, 18% were in education, and 21% were studying and working, 5% were unemployed, and 2% were neither studying, nor working. ²⁹ Since the majority of our respondents are first generation Colombians, we could observe their labor market transitions between the time they were still in Colombia and today. In terms of dynamics, the general tendency is a movement from schooling/studying while in Colombia, to working while abroad, which probably just reflects

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²⁹ As a reminder, in the current country of residence, 59% were working, 8% were in schooling, and 14% were studying and working; 8% were unemployed, 4% were neither schooling nor working.

people's lifecycle. 71% of those who were studying only while in Colombia are now working only or studying and working currently. 74% of those who used to work in Colombia, still work in the country of residence. Many are now also unemployed, or neither working nor studying, most likely because of the COVID pandemic: 13% of those who used to be employed in Colombia did not have work at the time of the survey.

Figure 26. Labor market status in Colombia and in country of residence.



6.4. Attachment to Colombia

76% or 7,826 of all participants had at least some of the closest family members in Colombia (either parents or siblings, or both), while almost everyone had at least some of their grandparents or cousins in Colombia (Figure 27). The participants reported that they call family, friends of colleagues in Colombia often. About half of them said that they call every day, while another 40% reported calling at least once a week, although not every day (Figure 28). Many also traveled often to Colombia (Figure 29). More than half of them visited at least once every two years, 45% traveled less frequently, and 18% have not been back since they left Colombia.

Another way to look at attachment is to ask whether people own property or pay into the pension system. As we will show in the Engagement with Colombia and the Intentions to Return sections, such investments may signal one's intentions to remain attached, and eventually return to Colombia. Of all participants, 28% owned property for personal reasons, another 32% did not own property themselves, but their parents or grandparents did. Another 24% did not own any property but expressed desire to purchase property in near future. Additionally, 18% said that they are paying into the pension system in Colombia.

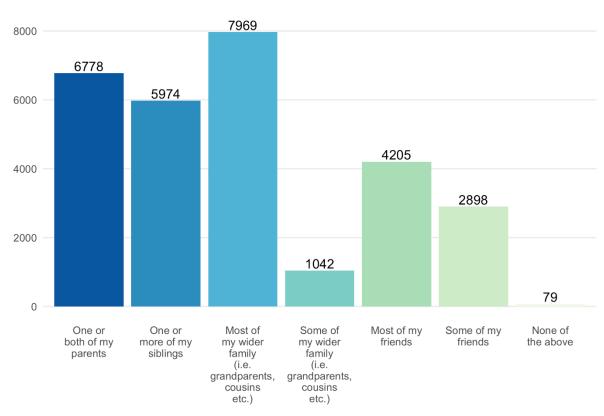


Figure 27. Who still resides in Colombia?

Figure 28. How often do you speak with family, friends and colleagues that currently reside in Colombia?

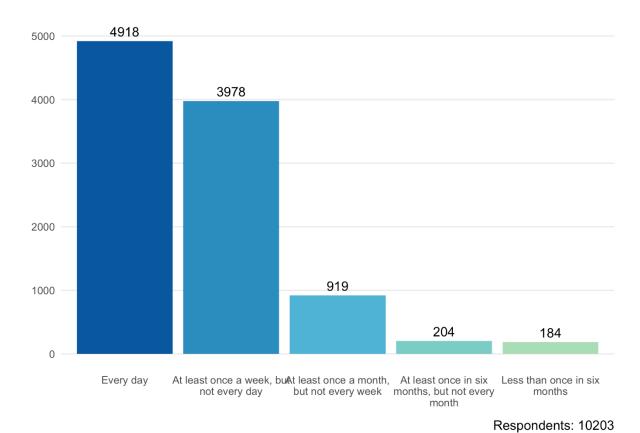
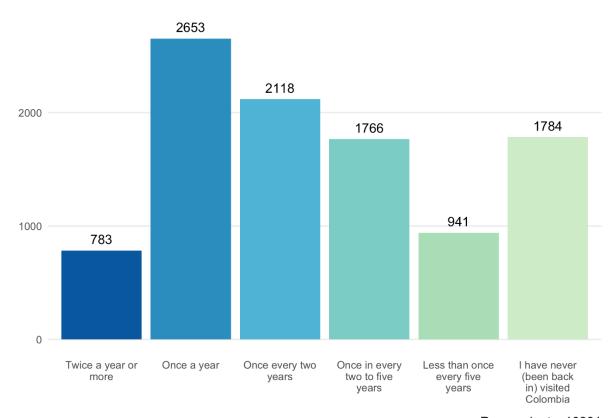


Figure 29. How often on average have you visited Colombia for personal or other reasons, while mainly residing abroad?



6.5. The COVID Pandemic, Return and Engagement

Our survey was conducted in the midst of the COVID pandemic. One of its many implications is that many (over 9% in our survey) made an additional trip to Colombia because of the pandemic, either to be closer to family, because of a job loss, or due to a combination of factors. Few of those who returned temporarily were still in Colombia at the time of the survey, and the majority returned to their more permanent country of residence. Most of those that returned reside in other Latin American countries (Mexico, Brazil, Argentina, Chile, Ecuador, and Peru), but also significant numbers returned from China, Italy, U.S., Belgium, France, Germany, Switzerland, Portugal, U.K., and Canada). Colombians from Mexico, Brazil, Argentina, Chile, and China were overrepresented among the returnees (Figure 30), i.e., the numbers of people returning from these countries were high compared to the numbers of Colombian participants from these countries.

Finally, we asked those who returned whether their return changed how they felt about: (a) engaging with Colombia, and (b) returning more permanently to Colombia. For most, the temporary return did not change their intentions to engage, or to return more permanently. In the case of engagement, 48% said that the return did not change their intention to engage, and another 17% said that they were not sure if their intentions have changed because of the return. In the case of their intention to return more permanently, these shares were 41% (no change) and 19% (not sure). However, among those whose intentions changed, they changed towards more engagement and more return rather than towards less. In the case of engagement, 26% said that the return made them more likely to engage, vs. 8% who said that it made them less likely to engage. In the case of their intention to return to Colombia more permanently, these shares were 24% (more likely) and 15% (less likely). One interpretation is that additional travel, even when for reasons unrelated to people's attitudes towards engagement and return, could lead to more engagement and more return. The next section (*Engagement with Colombia*) will test this hypothesis.

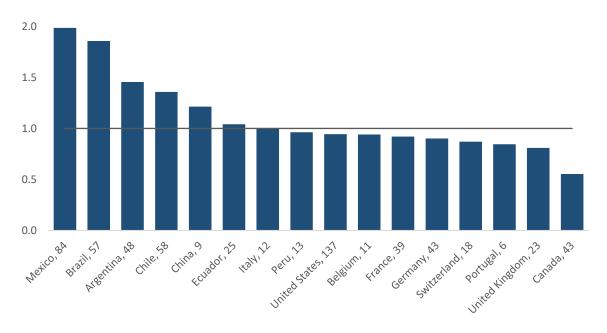
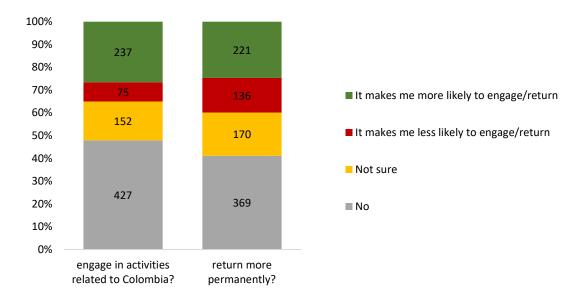


Figure 30. Temporary returnees to Colombia because of the COVID pandemic, by host country.

Note: Values over 1 mean that the share of Colombians residing in a host country, who returned to Colombia because of COVID is higher than the share of Colombians residing in that host country in our survey. For instance, 84 people or 8% of all COVID returnees returned from Mexico, although only 4% of all surveyed Colombians lived in Mexico at the time of the survey.

Figure 31. Has your temporary stay in Colombia due to the pandemic changed your intentions to ...?



6.6. Engagement with Colombia

One of the most important aspects of the survey from a policy perspective is the study of engagement. We surveyed the participation in the following forms of engagement:

- a) Starting a business in Colombia
- b) Investing in Colombia
- c) Funding or mentoring Colombian entrepreneurs overseas
- d) Funding or mentoring entrepreneurs in Colombia
- e) Pursuing a few months of professional exchange in Colombia
- f) Long distance professional support
- g) Mentoring youth in Colombia
- h) Pursuing an internship in Colombia
- i) Pursuing studies or coursework in Colombia
- j) Humanitarian financial support
- k) Political engagement
- I) Pursuing volunteer opportunities in Colombia

Of all surveyed Colombians, 1,860 or 18% of our sample, engaged in one or more ways with Colombia. The left panel of Figure 32 shows the current level of engagement, sorted by the popularity of the type of engagement, while the right panel shows how many of those already engaged would be interested in expanding their engagement in a certain way. The important message here is that the interest in engaging further by far overweighs the current level of engagement, even by those already engaged. The most popular types of engagement are professional long-distance support, and investing in Colombia, followed by business startup, humanitarian financial support, and mentoring youth. What is more, those that are not currently engaged show great enthusiasm for engagement. Figure 33 shows the interest in engaging among those that are not yet engaged. It shows that 4,845 respondents, or 60% of those who are not currently engaged would like to become engaged in the ways shown the same figure. Long distance professional support is by far the most popular type of desired engagement, followed by starting a business in Colombia, mentoring youth, investing, and volunteering in Colombia.

6.6.1. Professional Engagement and Business Development

We are particularly interested in certain types of engagement. We call the first four types of engagement listed above (types a to d) business development, while the first seven forms of engagement (types a to g), professional engagement. We encountered different levels of engagement in the countries that we surveyed. In general, the degree of professional engagement is higher in countries with higher level of development (Figure 34 and Figure 35). There are exceptions too: the Colombians in China are the most engaged population in our survey, professionally and in terms of business development. Colombian return migrants are also disproportionally engaged. This is not unusual. In fact, it is a known return migration phenomenon, observed in countries such as Albania, Turkey, and China (Hausmann and Nedelkoska, 2018; Dustmann and Kirchkamp, 2002; Murphy 1999; Demurger and Xu 2011). Scholars have shown that return migrants start businesses at higher rates than non-migrants, they transfer knowhow gained abroad, and bring about new technologies (Saxenian, 2006; Kerr and Kerr, 2020).

Figure 32. What types of activities are you currently involved with in Colombia? Would you be interested in expanding your engagement in Colombia in the following ways?

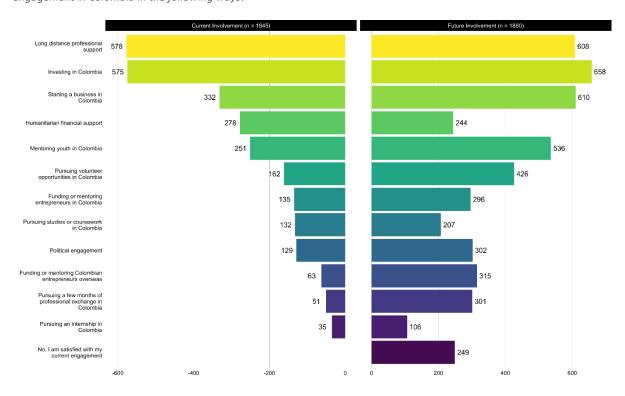


Figure 33. What types of activities would you like to be involved in (for those not already engaged)?

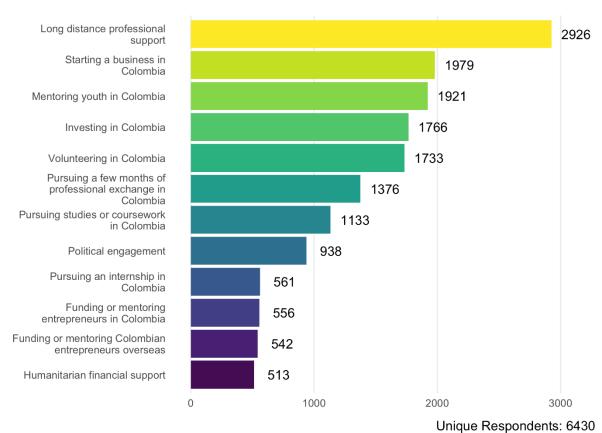
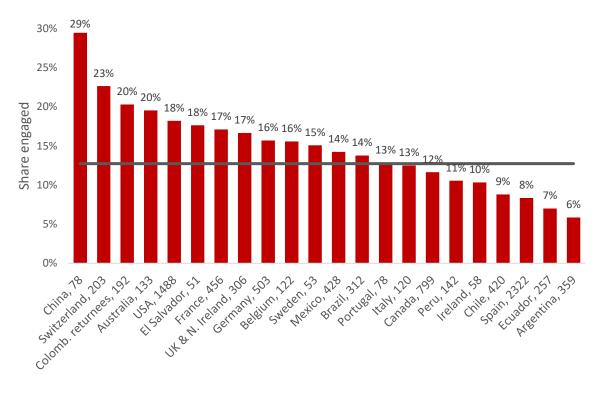
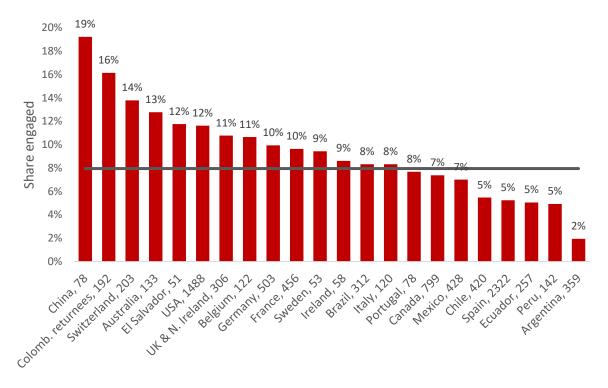


Figure 34. Level of professional engagement by host country.



Note: The figure only includes countries with 70 or more observations. The reference line on the y axes correspond with the average engagement across all territories of 13%.

Figure 35. Level of business development engagement by host country.

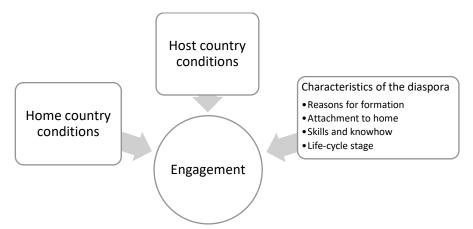


Note: The figure only includes countries with 70 or more observations. The reference line on the y axes correspond with the average engagement across all territories of 8%.

6.6.2. What Drives Engagement?

We next try to understand what drives engagement. We theorize that engagement depends on three broad set of factors: (a) conditions at home, (b) the host country conditions, and (c) the characteristics of the diaspora itself (Figure 36).

Figure 36. Illustration of factors of diaspora engagement



Since the survey answers were collected within a period of less than two months, the home country conditions are invariable, and we cannot study their impact. We can study the impact of host country conditions given the good coverage of the diaspora in many countries, but this would require additional data collection, which we have not done at this point.³⁰ Our survey is currently best designed to study the third set of factors – the characteristics of the diaspora.

We designed simple regression models, where we predict whether a person engages (a) professionally, and (b) in terms of business development more specifically, as a function of certain characteristics. We experimented with various predictors and with various model specifications, and here we show the ones that were the most predictive of engagement. We learned that engagement is not easy to predict, and business engagement is particularly difficult to predict. What we mean by this is that, although certain characteristics are predictive of engagement, (e.g., men are more likely to engage, or college graduates are more likely to engage), there are many cases of the contrary (e.g., women's engagement, or engagement by those less educated). The presented models in Figure 37 and Figure 38 explain 11% of the variance in professional engagement, and 7% of the variance in business development. Here we discuss the most important predictors of engagement.

• Attachment to home. The most predictive variables of engagement have to do with one's general attachment to home. Total years spent in Colombia, frequency of calling family in Colombia, frequency of travel to Colombia, and ownership of property in Colombia are all predictive of engagement. Among these, the most predictive ones are (a) the ownership of property for personal reasons, and (b) the frequency of travelling home. For instance, other factors equal, those that say that they travel home at least twice are year, are 16% more likely to be professionally engaged, and 10% more likely to engage in business development

shown here.

³⁰ We checked whether the level of income in the host country, as measured by GDP p.c., has impact on engagement. This variable is only marginally positively related with engagement after controlling for other factors. Factors such as country's immigration policies require collection of additional information. Overall, including country fixed effects (to control for country-specific factors) do not meaningfully impact the results

- than those who do not travel at all to Colombia. Those that own property in Colombia for personal reasons are 7% more likely to engage than those who do not own property, other factors equal.
- Skills and know-how. The next most important factor is one's experience with entrepreneurship; more specifically experience with (a) running a business, (b) investing in a business, and (c) teaching entrepreneurship. Other factors equal, those that have taught entrepreneurship are 20% more likely to be engaged professionally, and 14% more likely to be engaged in business development. Those that have run a business in the past are 4% more likely to engage professionally, and 2% more likely to engage in business development. Those that have invested in a business in the past are 3% more likely to engage professionally, and 2% more likely to engage in business development. Educational attainment is an important factor in determining professional engagement more broadly, but not in determining business engagement. Compared to those with less than high school education, those with a master's degree are 7% more likely to be professionally engaged, and those with a doctoral degree are 18% more likely to engage professionally. People with advanced degrees such as MD or JD are 4% more likely to engage professionally. In the case of our predictions of business engagement, higher levels of educational attainment do not increase the probability of engaging.
- COVID-driven return. More than a permanent return, the temporary return due to COVID is
 nudging people to engage. Even after we control for the usual frequency of travel and other
 measures of attachment to home, we find that a temporary return due to the COVID
 pandemic increased the probability to engage professionally by 3%, and the probability of
 business engagement by 4%.
- Other factors. Men are 4% (3%) more likely to engage professionally (in business development). Having left Colombia because of few work opportunities at home (of out necessity) reduced the chances of engagement by 2%. Those in schooling and working are 5% (3%) more likely to engage professionally (in business development) compared to those only working. Factors like age, having left because of the armed conflict, rising crime rates and political instability do not affect the probability of engagement.

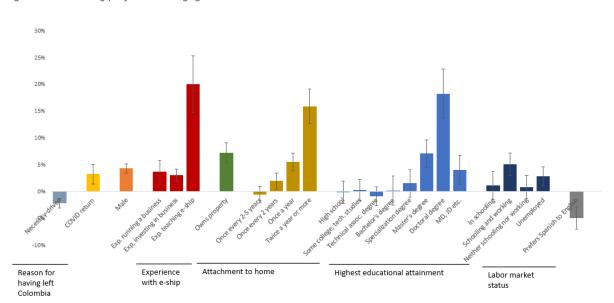
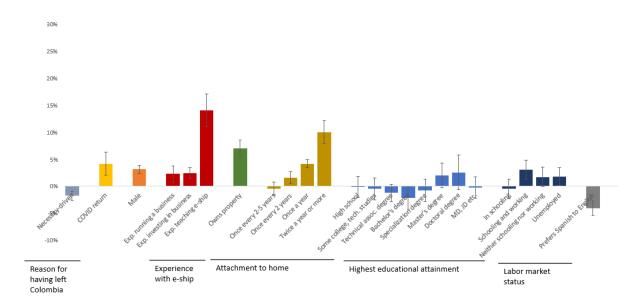


Figure 37. Predicting professional engagement

Figure 38. Predicting business development



Policy makers can use these findings to narrow down the circle of people that is likely to engage. As an example, a Colombian man with a master's degree and experience practicing and teaching entrepreneurship, and who often travels to Colombia and owns an apartment there would have an estimated probability of professional engagement of 61% ³¹. Someone with the same profile, but who has not taught entrepreneurship in the past, would have a 41% probability of being professionally engaged.

6.7. Intentions to Return

Most of the survey participants (47%) planned on staying outside Colombia lifelong. Another 30% planed on staying for longer than five years. Nevertheless, a significant share (23%) planed on returning after 5 or fewer years. More specifically, a small percentage (2%) already returned to Colombia, 6% planned on returning in less than two years, 7% planned to return in 2-3 years, and 8% in 4-5 years.

We modeled the intentions of returning to Colombia as a function of seven sets of factors: 32

- a) Attachment to home, as measured by how often they travel to Colombia, and how often they call their families in Colombia;
- b) *Investment in return*, as measured by whether they participate in the pensions system, and whether they own property in Colombia;
- c) The lifecycle phase, as measured by their age, labor market status, and their marital status;
- d) Level of skills, as measured by the highest level of educational achievement;
- e) The reasons for having left Colombia, i.e., whether they left because of the armed conflict, rising crime rates, or political instability (conflict and insecurity-driven), because of economic

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³¹ 4% (male) +7% (master's degree) +4% (experience running a business) +20 (experience teaching entrepreneurship) +16 (travel home at least twice a year) +7 (ownership of property) +3%(constant).

³² We also control for gender and whether the participant prefers Spanish to English language, as revealed by the language in which they filled out the survey.

- necessity (necessity-driven), or because they were being driven by better educational and career opportunities abroad (opportunity-driven)33;
- f) Characteristics of the host country, as measured by the level of GDP p.c. in the host country;
- g) An additional temporary return to Colombia among 9% of the respondents induced by the COVID pandemic.

Figure 39. Predicting the intention to return.

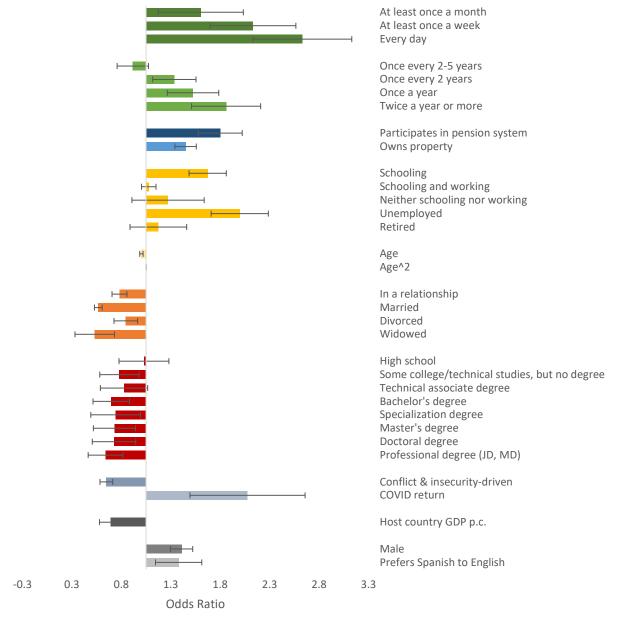


Figure 39 shows the results of an ordered logit model where the intention to return in a certain period³⁴ is modeled as a function of the seven sets of factors. Odds ratios greater than one mean

³³ The only significant predictor for this category is *conflict and insecurity-driven*, so this is the only variable included in the model presented here.

³⁴ The values were: (1) never, (2) in over five years, (3) in four to five years, (4) in three to four years, (5) in less than two years, (6) has returned to Colombia.

that a variable is positively correlated with the intention to return sooner rather than later, other factors equal.

The results show that all considered factors are important predictors of the intention to return. Attachment to home seems to be the greatest predictor of the intention to return. People who visit home more often, and talk to family more often, are more likely to want to return, other factors equal. Those that actively invest in assets that would facilitate their eventual return (a pension, personal property in Colombia), are also significantly more likely to want to return. In terms of the stage in one's life cycle, those that are studying abroad are significantly more likely to plan to return to Colombia, than those working abroad, probably reflecting the fact that their intention is not a permanent emigration, but studies abroad. Single people are more likely to plan to return (even after controlling for age and labor market status), than those who are in a relationship, married, divorced, or widowed.

There is a very strong negative sorting in terms of educational achievement and income, when it comes to who intends to return home: those living in richer countries are less likely to think of returning, those who are currently unemployed in the host country are more likely to want to return, and higher educational attainment correlates with less willingness to return.

Importantly, having left Colombia because of the armed conflict, rising crime, or political instability significantly reduces the willingness to return. Interestingly, the COVID pandemic seems to be nudging people to return home more permanently. Like our predictions of engagement, an additional temporary trip home because of the COVID pandemic seems to nudge people to think about returning sooner rather than later. A trip home doubles the odds of wanting to return sooner, rather than later.

What does this mean for policy? It suggests that return plans are predictable and that they heavily depend on how attached one is to home, as well as family and work commitments abroad. When Colombians go to study abroad, they plan on returning after the end of their studies. Those that take jobs abroad, or find partners there, become less likely to return. Those that are committed to returning may purchase property and/or pay into the pensions system. This attachment is measurable as we demonstrated, as are commitments abroad. It suggests that the government could better predict return by measuring such characteristics of their population abroad.³⁵

Another important policy insight is that Colombia's migration pattern at this point is clearly a net brain drain - more educated Colombians plan to stay abroad longer, and so do Colombians that reside in richer economies. In conjunction with our findings that educational attainment increases the chances of engagement, the best way to tap into the knowhow, experience, and networks of the Colombians in highly educated high-income places is through programs that engage them while abroad.

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³⁵ These findings should be checked against actual return, which may differ from planned return – return plans can be changed by factors such as immigration policy and economic shocks in the host country. As we demonstrated, unexpected event such as the COVID pandemic is nudging people to think more about returning.

6.8. Policies

Anticipating that Colombians abroad are interested in engagement and in return, we wanted to know which potential government programs would be of interest to them. We asked two types of questions regarding policies: (a) policies that could benefit them or their families personally, and (b) policies that could benefit their companies, universities, and organizations. There was a lot of interest overall, with most respondents being interested in at least one of the suggested policies. Regarding the first type of policies, the interest depended on whether they were working or studying, so we show those two categories separately. Among the working Colombians abroad, the most popular types of policies are: (a) support of returnee migrants to purchase homes, (b) start up grants for returnee migrants looking to start a business, (c) professional exchange programs and (d) programs for health-care support for returning migrants (Figure 40). Among the Colombians who are studying, the most popular types of programs are: (a) professional exchange programs, (b) support for returnee migrants to purchase homes, (c) start up grants for returnees, and (d) facilitated internship programs outside Colombia (Figure 41).

We also looked closer at two groups of people: returnee migrants to Colombia and those who temporarily returned to Colombia because of the COVID pandemic. Startup grants for returnees who are looking to start a business was the top preferred policy among the returnees in Colombia. Among those who temporarily returned because of the pandemic, support for returnee migrants to purchase homes and start up grants were equally popular. The government could look into the issue of return and business startup, possibly by organizing focus groups with people who returned to Colombia. During our work in Albania, we witnessed how a mass return migration revitalized parts of the agricultural sector, and the hospitality sector.

Figure 40. Please consider the following potential policies the government of Colombia could implement. Which do you believe are more relevant for the benefit of you/your family? (Working sample)

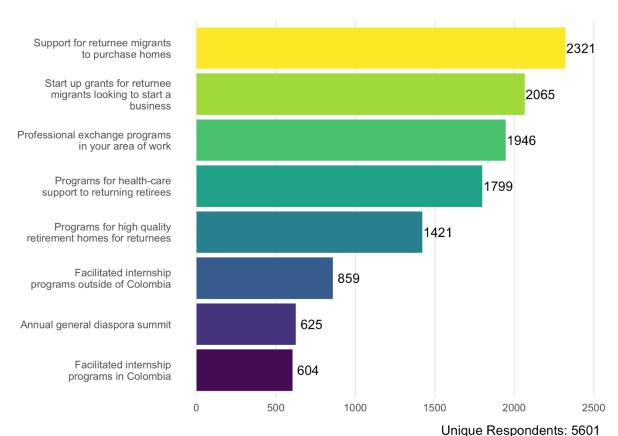


Figure 41. Please consider the following potential policies the government of Colombia could implement. Which do you believe are more relevant for the benefit of you/your family? (Studying sample)

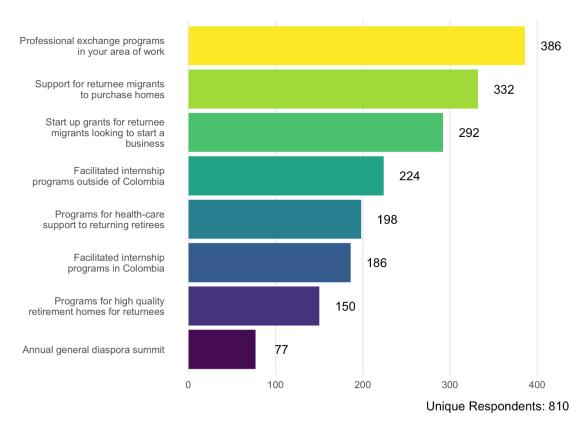
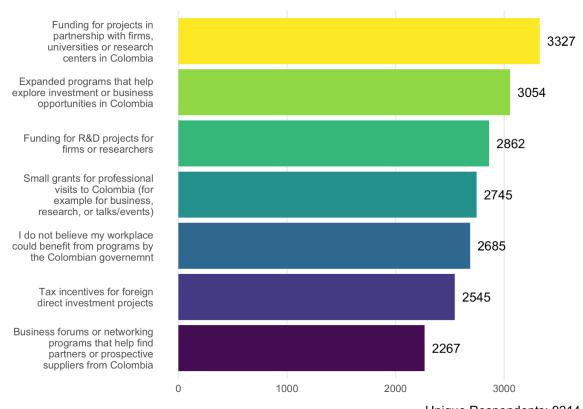


Figure 42. Please consider the following potential policies the government of Colombia could implement. Which do you believe are more relevant for the benefit of your business or the company/university/research center you work for?



Most respondents were interested in policies that could benefit their organization (company, university, research center). While all proposed ideas resonated with the participants, the most popular ones were: (a) funding for projects in partnership with organizations in Colombia, (b) programs that help explore investment and business opportunities in Colombia, (c) funding for R&D projects for firms and researchers, and (d) small grants for professional visits to Colombia (Figure 42).

Finally, we let the respondents speak freely about what they think that relevant government policies should look like. The most common answers had to do with the respondents' frustration with the situation of security and corruption. Overwhelming number of respondents reiterated that, in their view, the best the government could do to improve their lives, is to ensure peace, lower the crime rates, and to reduce its tolerance for preferential treatment of connected and wealthy compatriots. Many respondents also wished for a public unemployment benefits system. Those thinking about retiring in Colombia re-emphasized the need for better healthcare and housing support. There was an outcry for significantly more funding for science, more scholarships for studying abroad or student loans with better financing conditions, as well as expanding the number of faculty positions in Colombian universities to accommodate returning scholars. We saw significant interest in support for exports and imports by Colombian entrepreneurs, confirming the relevance of ProColombia's mission.

Some of the most insightful answers were quite practical:

- A professional network of Colombians abroad. We find this to be a powerful idea and one
 that we discussed in more length subsection Actionable Insights and section Diaspora Policy
 in Colombia. Such network, if organized adequately, can enable access to knowhow,
 connections, markets, and capital for local businesses and other local organizations. In fact,
 we think that this could be the number one priority when it comes to policies of engaging
 the professional diaspora in the process of internationalization.
- Double taxation treaties (in more countries). Colombia has double taxation treaties with many countries around the world³⁷, but these do not seem to include some of the major destination countries for Colombians: U.S., Argentina, Australia, Germany, and the Scandinavian countries.
- Treaties that enable transfer of pensions from/to Colombia (in more countries). Here as well, some treaties exist (Uruguay, Argentina, Chile, Ecuador, and Spain), but treaties with major host countries such as Canada, U.S., U.K., yet need to be negotiated.
- Recognition of foreign degrees in Colombia, and of Colombian degrees abroad.

Moreover, some also proposed ideas around immigration policy:

- Path to naturalization of non-Colombian partners.
- Abolishing the possibility of renouncing Colombian citizenship.

Singapore is a good example of a country with immigration policy that is not only friendly to the person, but to the family. Singapore has understood that migration decisions are seldom made by a

³⁶ Living abroad does not always translate in higher standard of living. Income is higher, but so are life expenses. Sometimes they find themselves worse off abroad, but the lack of a safety net in Colombia keeps them from returning.

³⁷ https://home.kpmg/xx/en/home/insights/2014/04/colombia-thinking-beyond-borders.html#:~:text=In%20addition%20to%20Colombia's%20domestic,%2C%20Switzerland%2C%20Mexico%2C%20Canada%2C

single person only, and that people plan the move of entire families. In Singapore, spouses and children of citizens or holders of Singapore permanent residence are eligible to apply for permanent residency. Spouses and children of citizens are additionally eligible to apply for Singapore citizenship (Frasheri et al. 2017). Hong Kong is another example of a country with immigration policy that allows for better integration of families. Although Hong Kong does not offer a clear pathway to permanent residency or a citizenship of spouses and children, spouses are free to take employment in Hong Kong (Frasheri et al. 2017). By enabling the foreign partners of Colombians to work in Colombia, and by giving them a path to permanent residency and naturalization, the government would prepare the ground for more internationalization at home.

6.9. Sentiment

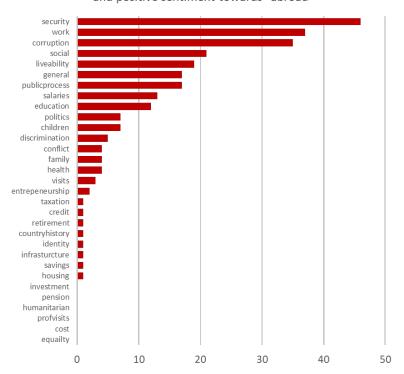
At the very end of the survey, we left space for the participants to share thoughts about the aspects of their experience living in Colombia or living abroad, and their intentions to return or maintain involvement. More than half of the participants left comments (over 5,000 comments). Here we analyzed the sentiment in a random 5% sample of those comments (260 comments). Several topics emerged from the open comments, among which, security, work and salaries, corruption, social issues in Colombia, identity, and family were most prominent. The participants most often expressed negative sentiments towards Colombia (and positive towards the host country) when it came to the security situation in Colombia, various aspects of working in Colombia, the degree of corruption, and various social issues and issues of equality in Colombia (Figure 43, first panel). Their positive sentiments towards Colombia (and negative towards living abroad) focused on topics of identity, family and discrimination while living abroad.

Figure 43. Sentiment analysis of the open comments left by the survey participants at the end of the survey³⁸

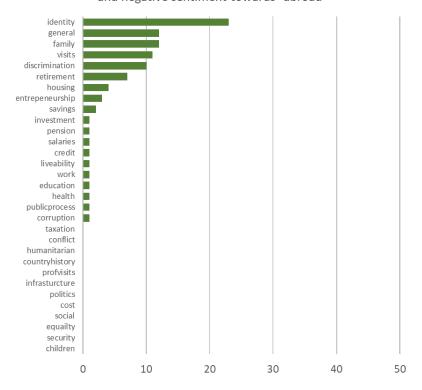
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³⁸ general: includes statements too general to attribute them to a specific theme (e.g., "I would return to Colombia", "I would not return to Colombia" or "In Colombia there are no opportunities"). *Social*: represents statements expressing negative sentiment towards the social inequality and classicism in Colombia. Some people expressed discontent with a Colombian culture of taking advantage of the established systems and thinking that rules do not apply to them, others spoke about the "social problems" or "social degradation" or "social injustice" in Colombia. *Visits:* reflects people mentioning that they pay short visits to Colombia, mainly for personal reasons to visit their families. *Publicprocess:* includes statements about the services provided by the consulates in their host countries, and statements about the government institutions in Colombia.

Negative sentiment towards "Colombia" and "returning", and positive sentiment towards "abroad"



Positive sentiment towards "Colombia" and "returning", and negative sentiment towards "abroad"



Lastly, we asked people what it means to them to have Colombian identity? The answers are mainly heartwarming, as captured in this world cloud.

Figure 44. What does it mean to you to have Colombian identity?



7. Diaspora Policy in Colombia

Brain drain characterizes Colombia's emigration pattern. This pattern will continue in foreseeable future, as more Colombians acquire education and languages that increase their employability in more advanced economies. We showed that, other factors equal, Colombians in richer countries are less likely to consider returning. Better educated and better employed Colombians living abroad are also less likely to consider returning, other factors equal, but they are more likely to professionally engage with Colombia. Hence, the best way to tap into the wealth of the diaspora is to engage them while abroad.

Diaspora policy has the character of *managed serendipity*. Investments in the diaspora today will probably lead to great future opportunities for Colombia, but it is uncertain when, and in which form. The key is to have mechanisms that help nurture the relationships with the diaspora, both by providing them services that keep them connected to Colombia, and by offering channels for engagement that benefit the development of Colombia. Our thinking is focused on the means that could help channel some of the talent, experience, social and financial capital of the diaspora towards the Colombians in Colombia in a way that is a win-win for the locals and the diaspora.

On top of our policy recommendations list is the creation of an international business and technology network of impactful Colombians. The members of such a network would commit time to interact, mentor, and help connect local businesses and other local actors with resources available among the diaspora and their foreign partners. This comes with benefits to the diaspora businesses as well, as it creates better access to the Colombian economy for them, and it serves their desire to help the development of the home country. Such networks have been essential for the development of the tech sector in Taiwan, Israel, India, and China, as well as for the creation of business hubs in Ireland and Scotland. One model that Colombia could consider is GlobalScot. The roots of such a network already exist in Colombia. Previous programs such as Red Caldas, and existing programs under the umbrella of Colombia Nos Une (Knowledge Diasporas Incubators for Latin America CIDESAL, Redes Colombia) have set the seed for it, but our impression is that this network needs a more powerful organization and better support to be effective. This network needs to have more intentional organization, and make sure to capitalize on the support of prominent Colombians, and describe that available support in detail. It should avoid becoming a platform that merely lists existing associations and businesses. Similar to GlobalScot, to increase its effectiveness through continuous engagement of the diaspora, the government could use existing infrastructure and personnel, such as the international offices of ProColombia.

Public recognition of achievements by the diaspora can go a long way.³⁹ Domestic media coverage, and events that recognize and give awards for the achievements of the diaspora can help with brand recognition, and most importantly, they can help grow the networks of diaspora businesses at home. Such recognition does not only benefit the entrepreneurs and their employees, but it creates role models for the new generation of entrepreneurs. If entrepreneurs

software development, marketing, and sales.

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³⁹ A serial entrepreneur explained how a prominent innovation award he earned in the U.S. caught the eye of the Colombian government, which then promoted his work in Colombia and engaged him in programs like INNpulsa Colombia. This helped him gain media attention in Colombia, growing his network and followers there. He cited exactly this network as the main reason why his companies operate in Colombia. His platform for remote work matches some 500,000 job seekers mainly from Colombia with companies based mainly in the U.S. Each year, the company successfully connects thousands of Colombian jobseekers with jobs in

are portrayed as heroes, more Colombians will aspire to become one. The government should consider developing routines for identifying, promoting, and awarding diaspora achievements.

Leverage the diaspora's knowledge of foreign languages. In contrast with the typical Colombian in Colombia, the diaspora is fluent in many foreign languages. Even in our small sample of the Colombians living abroad, we found 6,700 Colombians that spoke English at a conversational level or better. Many Colombians spoke French, Portuguese, Italian, and German. At the same time, one of the most favored ways of engaging with Colombia among the diaspora is mentoring of youth. This suggests that a <u>tandem language learning</u> program between the diaspora and the locals may be a project worthwhile considering.

Encourage travel to Colombia. Our finding that travel drives professional engagement suggests that programs such as conferences, grants for professional travel, and travel budgets for universities to attract visits of foreign faculty could increase the engagement for those categories of people.

Create opportunities for working abroad. To internationalize an economy, it is not sufficient to have the youth study abroad and return right after. Some of the most valuable skills such as managing, teamwork and customer relations, are learned at the job and university education is no substitute for these. No good managers were solely shaped by their master's programs. Internships and jobs abroad should therefore be an integral part of the international experience. Several of the transnational entrepreneurs we interviewed were either shaped by their internships and entry-level jobs outside Colombia, or they enable such experiences for young Colombians. ⁴⁰ At the same time, as discussed in subsection 5.1, in our interviews with transnational Colombian entreprenurs, lack of middle and upper-level managers with international experience was identified as a constraint for internationalization among Colombian businesses.

Abolish strong incentives to return right after graduation. Despite the importance of work experience abroad, one of the most popular programs for student loans (COLFUTURO) makes it costly to work abroad after graduation. Every year COLFUTURO issues about 2,000 loans (value of up to \$50,000 per loan) to Colombians that have ensured a placement in a reputable foreign university. Up to 80% of the loan can be forgiven to those that return to Colombia for at least three years after graduation. ⁴¹ The loans, however, must be paid back in full and with high interest rates (up to 15%) for those that choose employment abroad. ⁴²

Incentivize the development of internship programs among diaspora entrepreneurs. Few diaspora companies have internship programs that employ young Colombians. These programs are costly and do not always pay off for the companies: they have high recruitment costs, including visa support, intensive training periods and short periods of return to that training. It is an altruistic act, and this

⁴⁰ The CEO of a multinational tech company mentioned his internship in Germany as the steppingstone towards international business expansion. Quality expectations, international standards, cultural sensitivity all had to be learned while working abroad, he said. Drawing on this experience, he now regularly sends his teams to visit other company locations in other countries and meet international customers. He says that his employees find these trips transformational. A CEO of a construction company in the USA with some 40 employees, hosts a beloved internship program, where every year two Colombian students are selected to spend a year learning how construction engineering is done in a technologically advanced company. A head of business operations at a new tech company headquartered in Silicon Valley with operations in Medellin compared Stanford software engineers with top Colombian engineers "They are like our engineers, but with the Tesla internship."

⁴¹ We should mention that these loans are issued in USD and must be paid back in USD, making it difficult for returning graduates to pay them back in periods of dollar appreciation.

⁴² https://www.colfuturo.org/programas/credito-beca/informacion-general

may be the reason why it does not emerge organically on a larger scale. However, our survey of the diaspora indicates that there is great deal of interest among the established Colombians abroad to help young professionals develop skills. In our survey we identified several hundreds of Colombians abroad that mentor youth in Colombia or provide long-distance professional support to Colombians, and many more that would like to get involved in mentoring. The Colombian government could use its consulates, as well as ProColombia offices to start closer conversations with Colombian-run companies abroad and gauge their interest in experimenting with internship programs. In this way the government can better understand what it would take for companies to offer such opportunities to young Colombians.

Relax some general constraints to doing business. A relatively straightforward change that can have a measurable impact immediately is the regulation of business registration and business closures. There are numerous countries that have recently reengineered their public services to the business community with the objective of simplifying and automating processes, and many successful examples are available.

The tech sector is growing despite the lack of venture capital, and many suggested that it would have been growing faster if VC or other form of capital were available. While we do not see a quick solution to this issue, (it seems that the whole model of how business is done in Colombia needs to change) the capital constraint can be partially addressed if diaspora investors get better connected to local business, e.g., through a business and technology network.

Reassess startup grant programs for returning migrants. The COVID pandemic is making Colombians abroad reassess their location decisions. We found that a temporary return caused by the COVID pandemic doubled the odds of considering returning to Colombia more permanently sooner, rather than later. We surveyed only a small group of recent returnees from Colombia, but we think that the actual population of returnees is probably large. These are particularly interested in business startup grants for returning migrants, based on findings from our survey. While Colombia has programs that support startups (e.g., Fondo Emprender, iNNpulsa Colombia), it would be important to understand how they apply to the needs of return migrants, and whether the increase in the population of returnees creates a need for reassessing the scale of the available funding. Focus groups with return migrants could help understand their needs and assess their match with available funding programs.

Plan for luck. The number of Colombians residing abroad will most likely grow significantly in the next ten to twenty years. As more Colombians seek education abroad, learn foreign languages, and follow the established networks of family and friends in foreign countries, more will find it attractive to stay abroad. At the same time, it is hard to tell how, where and at what pace these communities will grow. Local shocks such as changes in immigration policies of host countries, or global shocks such as the COVID pandemic, will sometimes counteract the general pattern, and force people to think more about their future in Colombia. Allowing people to freely move between Colombia and foreign countries by streamlining processes and regulation that facilitates this movement, is key to making luck work for Colombians and Colombia. Here are a few directions worth considering.

Monitor the evolution and the pulse of your diaspora. With help of its network of consulates and embassies, the government could effectively track the population developments of its diaspora and gather accurate and up-to-date statistics of its evolution. In addition to registry data, an annual survey of the diaspora could explore their interests, sentiments, level of engagement with Colombia, and intentions to return.

Negotiate more double taxation treaties. Colombia has double taxation treaties with many countries around the world, but these do not seem to include some of the major destination countries for Colombians: U.S., Argentina, Australia, Germany, and the Scandinavian countries.

Negotiate more treaties to allow for the transfer of pensions and other benefits. Encouraging Colombians to pay into the existing pension systems in Colombia is one approach, but to our understanding, the numbers of Colombians participating from abroad is meager. A more effective way may be to negotiate more treaties that enable transfer of pensions from/to Colombia. Some treaties exist (Uruguay, Argentina, Chile, Ecuador, and Spain), but treaties with major host countries such as Canada, U.S., U.K., yet need to be negotiated.

Ensure mutual recognition of qualifications between Colombia and host countries. Our understanding is that a working group at Colombia Nos Une is collaborating with the Colombian Ministry of Education to expand the mutual recognition of degrees. We hope that this effort is well supported and successful.

Create paths for naturalization or permanent residency for foreign spouses of Colombians. Making it possible for foreign spouses to acquire residency status similar to that of Colombians is important for making return less costly. If paths to naturalization or permanent residency for foreign spouses do not exist yet in Colombia, the immigration systems of Singapore and Hong Kong can be taken as examples. These countries have immigration policies that are not only friendly to the person, but to the family. They have understood that migration decisions are seldom made by a single person only, and that people plan the move of entire families. By enabling the foreign partners of Colombians to work and live in Colombia, the government would prepare the ground for more internationalization at home in the long run.

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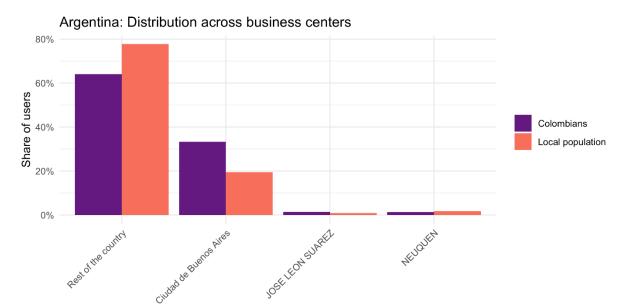
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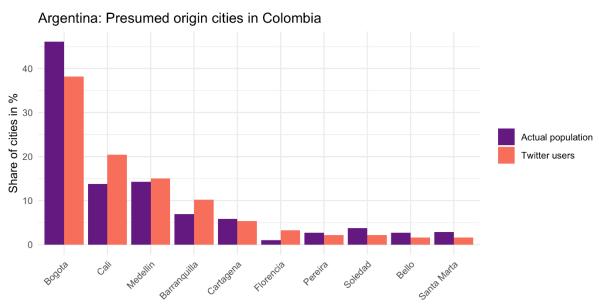
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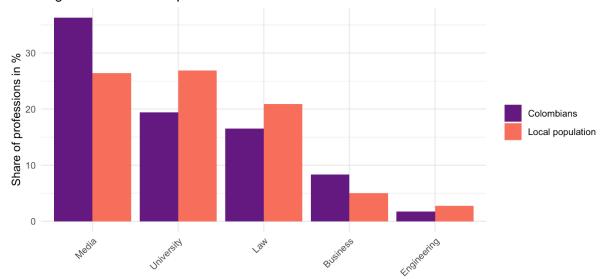
Appendix – Colombians on Twitter

Argentina

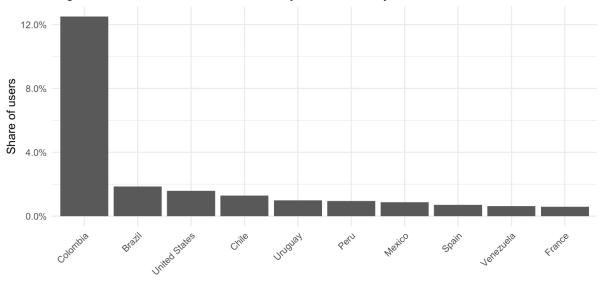




Argentina: Presumed professions of users

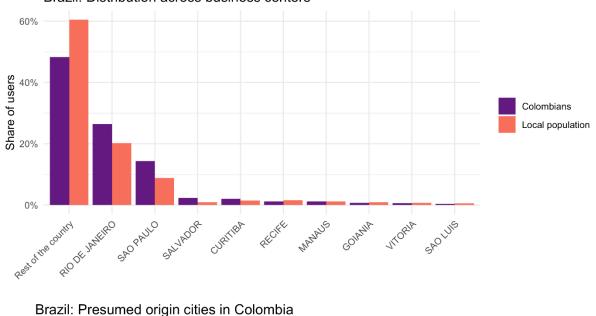


Argentina: Share of number of users by visited country

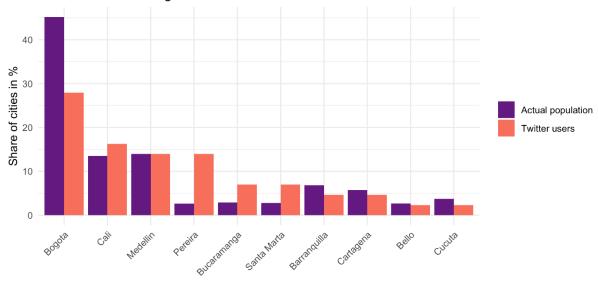


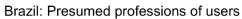
Brazil

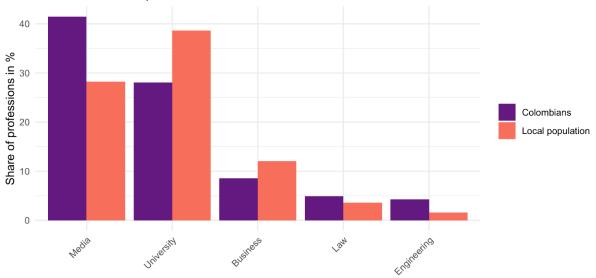
Brazil: Distribution across business centers



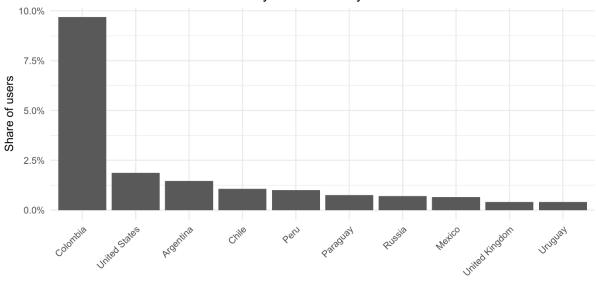
Brazil: Presumed origin cities in Colombia





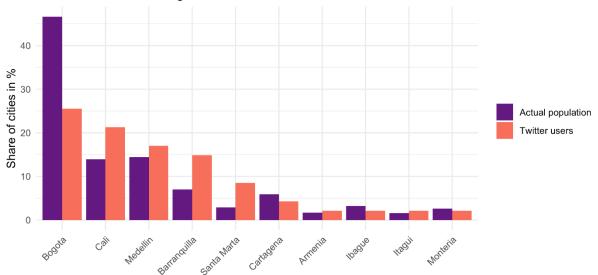


Brazil: Share of number of users by visited country

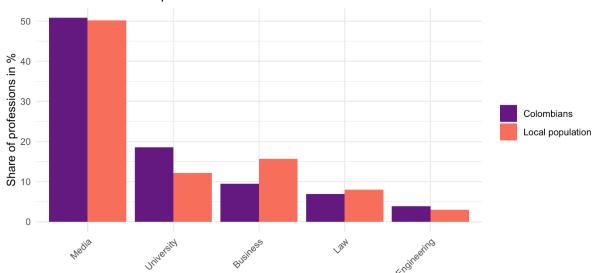


Canada

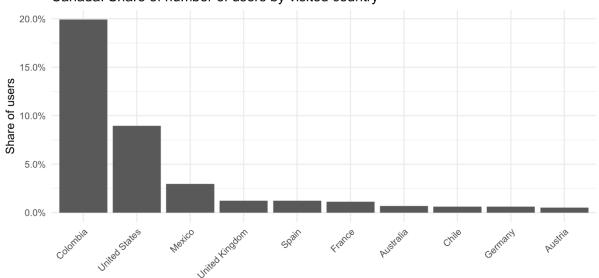




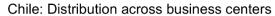
Canada: Presumed professions of users

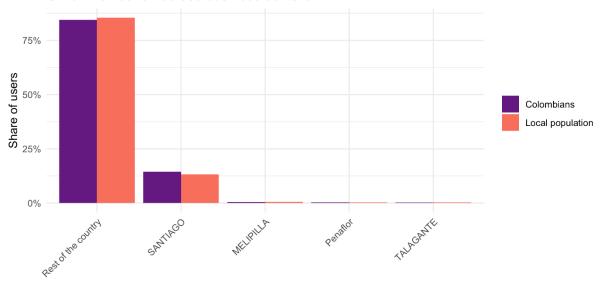


Canada: Share of number of users by visited country

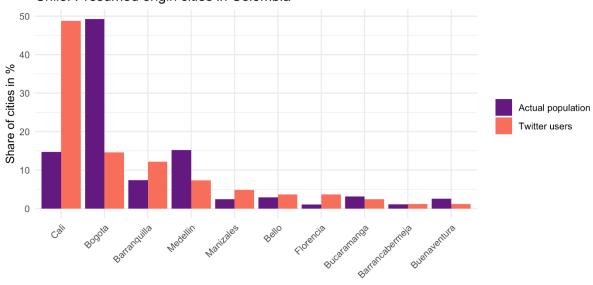


Chile

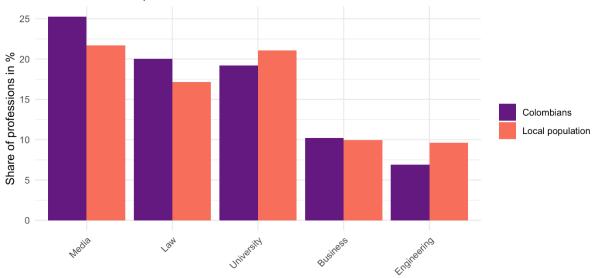




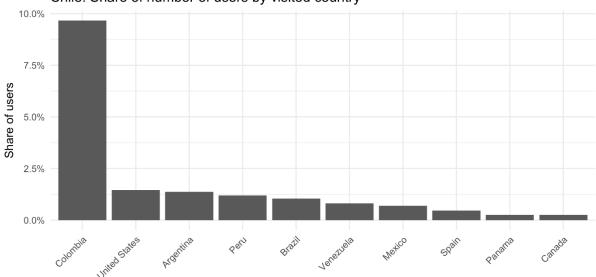






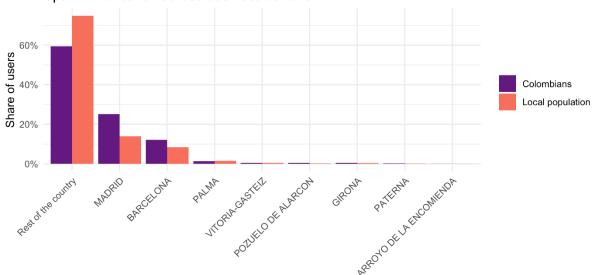


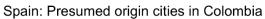
Chile: Share of number of users by visited country

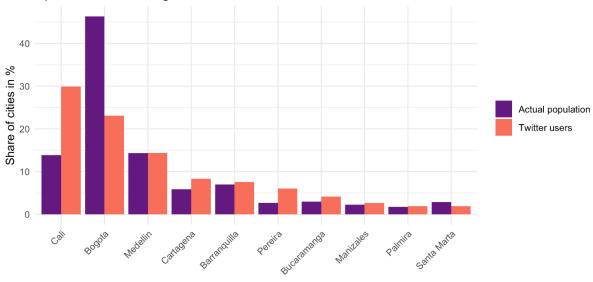


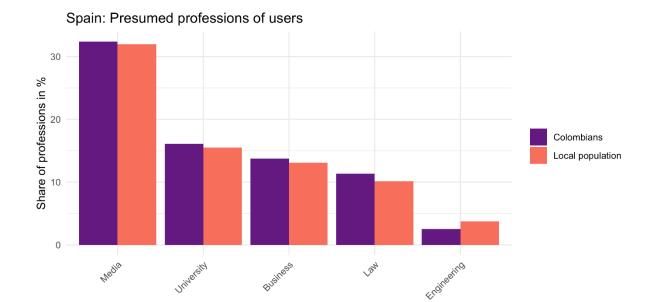
Spain

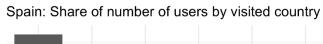
Spain: Distribution across business centers

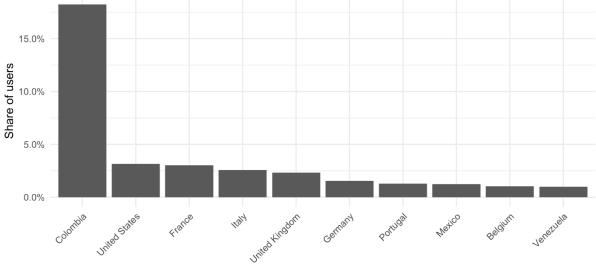






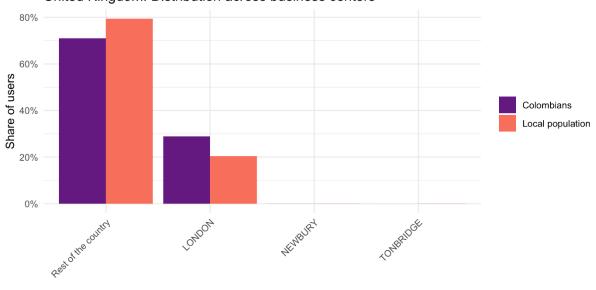


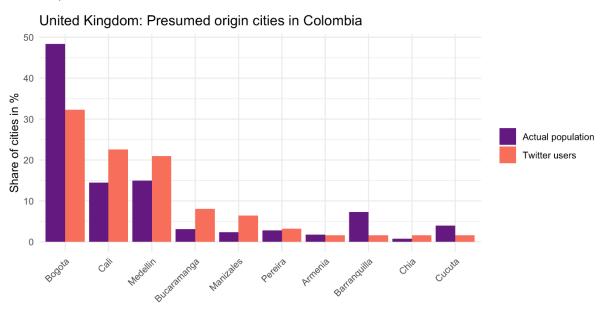


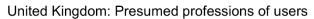


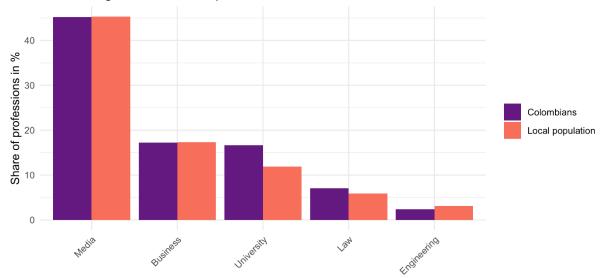
United Kingdom



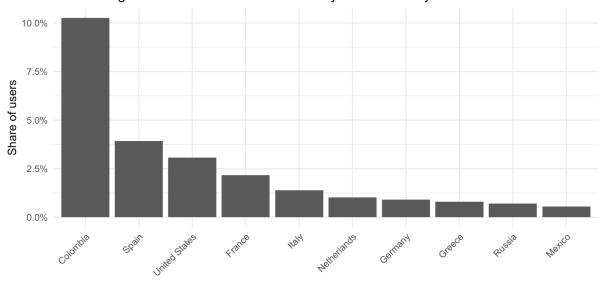


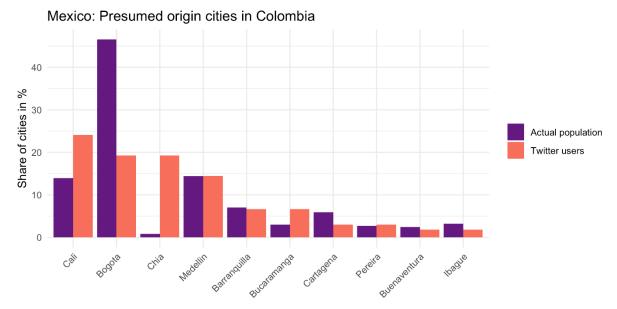




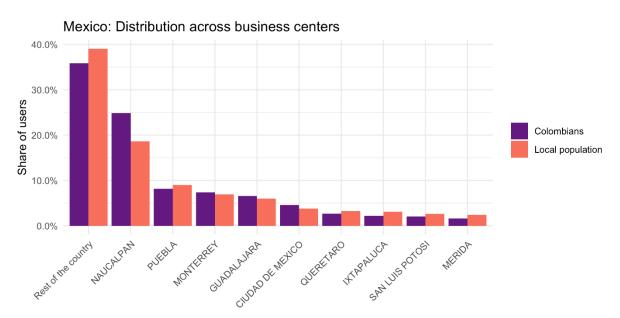


United Kingdom: Share of number of users by visited country

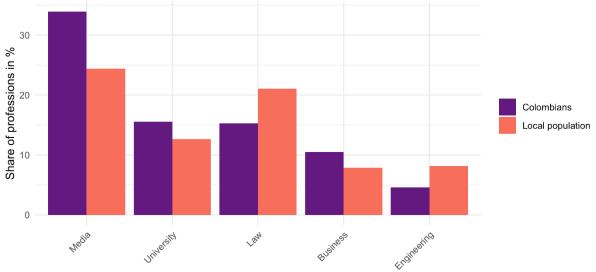


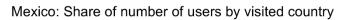


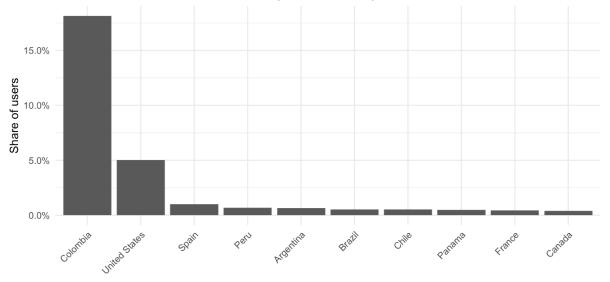
Mexico



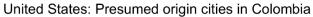


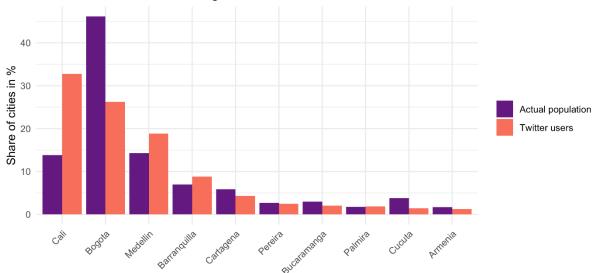




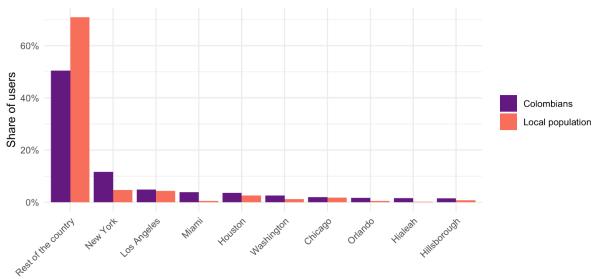


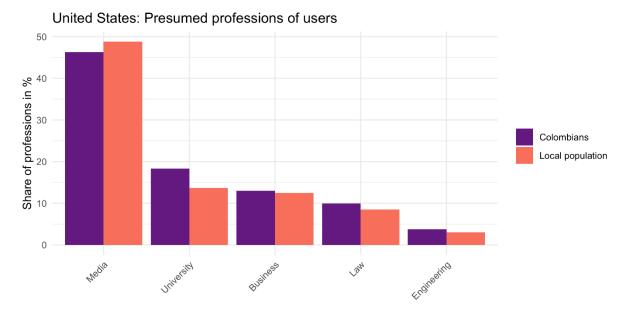
USA

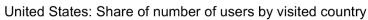


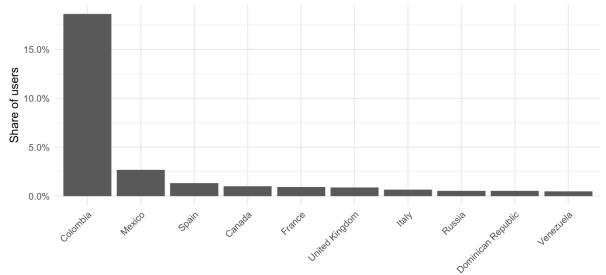


United States: Distribution across business centers



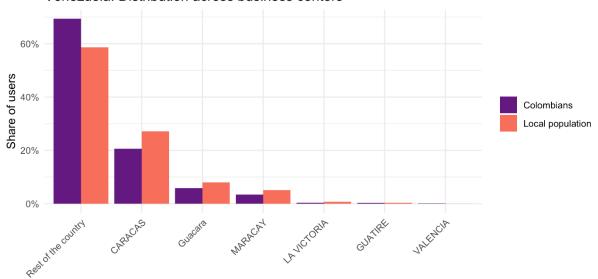






Venezuela

Venezuela: Distribution across business centers



Venezuela: Presumed origin cities in Colombia

