

MAPPING THE CONTEMPORARY PATTERNS IN INTRA-REGIONAL MIGRATION - A COMPARATIVE ANALYSIS OF SELECTED PACIFIC ISLAND COUNTRIES & CARIBBEAN ISLAND NATIONS

KHUSHBU RAI*
*School of Economics,
the University of the South Pacific, Fiji*

Abstract

With a rooted history of intra-regional migration, the contemporary patterns of mobility in the Pacific Island Countries and the Caribbean Island Nations are rather contrasting. The study first presents an overarching reasoning for the movement of the early migrants. Next, using the most recent migrant stock database and country census, the paper scrutinizes the intensity and the distribution of migrants intra-regionally. The data validates that alongside regional alliances and network, income differentials between countries within the region heavily influences intra-regional mobility. Despite numerous regional mobility arrangements, in practice there exist cross border conflicts amongst member countries which appear to create administrative bureaucracy and strategical procedural delays. The paper drives that with the help of bilateral schemes and existing coordinated pacts with metropolitan powers, the regions could tackle issues of unemployment, skill shortages in the labor markets as well as adopt mitigation and climate adaptation plans for environmentally displaced migrants.

Keywords: migrants, regional, cross border conflicts, mobility schemes, income differentials

JEL Classification: J6, J61, N9, O5

Introduction

Regional cooperation has been at the heart of many studies done on the Pacific and Caribbean regions. Although the World Trade Organization advocates for regional integration assisting small states/island countries towards development, certain unique features of such countries weigh heavily against their progress. A review of literature based on the Pacific and the Caribbean countries indicated that parallels could be drawn between the regions' smallness, remoteness, institutional weakness, restraining infrastructure, limiting resources, and production homogeneity. These were sufficient to justify a comparison between the Pacific Island Countries (PICs) and the Caribbean Island Nations (CINs). However, some historical and geographical differences were found that provide the Caribbean region with market advantages over the Pacific. In order of importance: (i) the Caribbean countries had

*Email: khushbu.rai@usp.ac.fj

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an earlier and a lengthier era of colonialism which is believed to have head started resource mobility, infrastructure development, and pro-growth institutions and (ii) Pacific islands are geographically more isolated than the Caribbean island states not only within the region but also in terms of distance from the nearest metropolitan markets.

Nonetheless, the dynamism of PIC and CIN mobility has given form to the regions' socioeconomic and political landscape as we witness them today. Let it be established that labor mobility is distinct from migrant mobility. However, due to the nature of data available for the countries under scrutiny, the variables in this study are used as a proxy. The analyses are made, keeping in mind this limitation.

Mobility of migrants is encouraged through either existing bilateral and regional agreements or national immigration laws for both the regions. To visualize the current trend in the intra-regional mobility better, it is essential to first have an overview of the movement from the yester years. From the early nineteenth century, the Caribbean countries had a high propensity to migrate. Come the 1980s, much of the movement correlated to the economic activity boom of the region. For instance, immigrants from lesser developed Caribbean countries flowed into work on oil reserves of the richer colonies of Netherland and the United States, particularly in Aruba and US Virgin Islands. Trinidad and Tobago also attracted a lot of immigrants from within the region due to its thriving energy industry. The flourishing tourism industry intensified the demand for labor in the US Virgin Islands, Bahamas, and the Cayman Islands in the better part of the 1990s (Schiller *et al.*, 1995). Under the mechanisms of CARICOM and later CSME (CARICOM Single Market and Economy), the Caribbean region has a reasonable exchange of skilled personnel. In Watson and Leander's (2007) report, movements of lower skilled persons (such as domestic workers, security guards, and construction workers) have also been acknowledged. More recently, a 2013 research released by the International Organization for Migration (IOM) designates Barbados as a dominant destination for regional migrants, especially from Guyana, Trinidad and Tobago and member states of the Organization of the Eastern Caribbean States (OECS) because of a well-functioning social service system and a robust economy. Trinidad and Tobago continue to act as a magnet in drawing intra-migrants with its booming manufacturing and energy sector while St. Vincent and the Grenadines together with Jamaica has a dynamic health sector policy of training nurses and regionally exporting them (Lewis, 2011). Consistent to this statement, one of the interesting conclusions derived by McElroy and Medek (2012) is that Caribbean regions are dynamically developing immigrant societies importing migrants to service the labor-intensive demands of tourism, offshore banking, and in some cases export manufacturing.

On the other spectrum, also with a deep history of mobility, the Pacific region witnessed population movement by the nineteenth century. In Fiji, Solomon Islanders, Chinese traders, and Indian indentured laborers were brought in; Solomon Islanders were also moved to Samoa to work on farms. Many migrants from Kiribati and Tuvalu were taken to French Polynesia to work on phosphate mines, and some islanders were displaced into New Caledonia to work on nickel mines. Despite the growing colonial influence, most of the people moved between islands highly unregulated. This trend slowly declined by the

twentieth century. Since the decolonization, the three sub-regions have maintained a strong but intermittent relation with the United States, New Zealand, Australia and to a certain extent with France granting the Islanders rights to work and reside in these metropolitans. Traditionally, there has been a large disparity within the region where islands such as New Caledonia, Palau, Northern Mariana Islands, Nauru, Guam, American Samoa, Niue and Tokelau have sizable immigrant population while countries like Fiji, Palau, Federated States of Micronesia, Cook Islands, Samoa, Tonga, Tuvalu and Wallis, and Futuna have large Pacific diasporas (Burson and Bedford, 2014). The line of argument on mobility is stressed further as the level of unemployment in PICs steadily rise, especially for the large youth population. Bilateral mobility schemes have done next to nothing majorly because of institutional and legal constraints placed by host countries. It becomes necessary, therefore, to discuss issues that deal with the political economy of mobility. While this may not be central to the study's research question and approach, they became important when discussing the intensity and concentration of people movement, which follows as a result. The added facet influencing movement is also the accelerating environmental vulnerabilities of small island countries and the pressing issue of forced migration.

Against this backdrop, the study is structured as follows; first, mobility provisions in the regional agreements for Pacific and Caribbean countries are consolidated to indicate the collection of background work that already exists in support of regional mobility. This section intuitively also highlights the regional tensions obstructing progress. The next section brings forth the most recently updated database to trace the intensity and distributional patterns of intra-regional migrants. It is in this section that the tabulated data matrices are articulated to present/support various findings. Finally, the key discussions are concluded, and some policy opportunities suggested.

Mobility Provisions in the Caribbean and Pacific Regional Agreements

The movement of labor and/or migrants within the Pacific and the Caribbean regions has been designed with various approaches in different agreements. Some agreements cover for permanent migrations while some cover for entry to labor markets in the Member country only on a temporary basis. Others allow temporary mobility for service suppliers, (particularly excluding permanent migration) with provisions for trade-or-investment-related activities. Further, there also exists some that cover the mobility of workers at all levels of skills while others that confine the movement to higher skilled laborers (OECD Trade Committee, 2002). Initially, there was no provision for labor migrations under the World Trade Agreements; subsequently when GATT (General Agreement on Tariffs and Trade) was upgraded to GATS (General Agreement on Trade of Services) movement of natural persons as service suppliers got provided for under Mode 4. There have been on-going negotiations regarding labor mobility in the trade agreements of the regions. It is seen that under such agreements, no one size fits all.

In the Caribbean region, the earliest clause of movement was witnessed under the CARICOM Single Market, and Economy (CSME) established in 1989. The CSME had free movement of labor intra-region as its cornerstone. The arrangements under Caribbean Community (CARICOM);

Provides for free movement of university graduates, other professionals and skilled persons, and selected occupations; as well as freedom of travel and exercise of a profession (i.e., elimination of passport requirements, facilitation of entry at immigration points, elimination of work permit requirements for CARICOM nationals. Exceptions cover activities involving the exercise of governmental authority and measures to protect public morals, human, animal or plant life or national security; maintain public order and safety; or secure compliance with the laws of a member state (OECD Trade Committee, 2002).

The CARICOM agreement provides market access for certain groups, including those beyond the scope of Mode 4 as well as allows movement of labor with certain skill set. The agreement has abolished the use of work permits for nationals from member countries and enacted legislation to allow free movement of university graduates, media workers, athletes, artists, musicians and certain categories of high-level staffs that provide a service or establish a business. So far, 11 Caribbean countries have already signed into the agreement to foster free mobility of goods, services, capital, and labor, to a wide extent. It is important to mention that under CSME, while there is provision to exploit the pool of skillful laborers in the Caribbean Community, the agreement does not aid movement for non-economic purposes.

For the Eastern Caribbean Economic Union, commonly known as the Organization of the Eastern Caribbean States (OECS), free mobility of people is one of its key features. The Free Movement of Persons allows citizens of OECS member countries to move, reside, and work in another member country without the requirement of any work permits or skill certification. The OECS arrangement allows free mobility for all citizens regardless of skill-type.

Moreover, the Caribbean region also had provisions for movement of natural persons under the CARIFORUM-Economic Partnership Agreement (EPA). The agreement which came to an end in December 2007, allowed certain categories of workers in the Caribbean region to access the European market. While the agreement did not have an explicit clause on the labor movement, the CARIFORUM – EU EPA arrangement opened trade in services and investment and eased the process of starting up business within the Caribbean region.

In the Pacific, the earliest arrangement of facilitating movement was under the Compact of Free Association for Micronesian countries. Under this agreement, countries having strong links with their former Colonial powers are given fairly free admission to their labor markets. In practice, citizens from the Federated States of Micronesia, Marshall Islands, and Palau are given access to work and reside in the United States. Similarly, nationals of Cook Islands, Niue and Tokelau have been allowed access to New Zealand passport and as a result to New Zealand (and to some extent Australia's) labor market. However, the same cannot be said for the countries in the Melanesian group. Discussions are in the pipeline for upgrading the Melanesian Spearhead Group Trade in Goods Agreement (MSGTA) to MSG Plus – allowing trade in services, labor mobility and extending current membership from the four members (Fiji, Papua New Guinea, Solomon Islands, and Vanuatu) to other interested Pacific countries.

Nonetheless, the Pacific Islands Forum (established in 1971) does grant privileged rights of entry to members traveling to other Pacific Island Countries for a maximum period of three months¹. Although as per the Immigration laws, there is generally a free movement amongst the Pacific region, there are inconsistencies. Burson and Bedford (2014) present that visa-free or visa-on-arrival privileges are given to the nationals of the Melanesian Spearhead Group (MSG) Member countries. Instead of purchasing a visa on arrival, the citizen from the Member State gets a special MSG stamp on their passport. Another special treatment given within the Pacific region is to the nationals of countries that fall under the Compact of Free Association (COFA) with the United States and New Zealand. According to the review, Cook Islanders are granted visa-free entry into Fiji, Tonga, and Vanuatu if they own a New Zealand passport on the assumption of them being New Zealand citizens. The anomaly noticed in the literature was with Guam and Northern Mariana Islands which are not part of the COFA pact, but have privileged access as US citizens.

Moving further, the MSG Skills Movement Scheme (SMS) which was endorsed in 2012 allows mobility of skilled professionals like medical staff, engineers, accountants, teachers, pilots and traders to fill in the gap in skills shortages in member countries. This temporary scheme under MSG has been capped at 400 per member country and provides employment based on contracts or job offers. The dearth of data for the MSG SMS makes the analysis for intra-Melanesian movement difficult, but it is the first meaningful intra-regional labor mobility agreement for the sub-group. Voigt-Graf (2015) blogs that while some data is available for PNG; the figures have been lumped all together and categorized as mobility from Pacific Island countries. For instance, in the last quarter of 2013, 214 Pacific Islanders moved to PNG as temporary entrants. Although it is challenging to say how many entrants were from the Melanesian countries, it resembles very low mobility between intra-Pacific islands.

Furthermore, the implementation of the MSG SMS in 2012 pledged 450 trained teachers and nurses from Fiji to meet critical shortages of these professionals in Vanuatu. “The Vanuatu Chamber of Commerce disapproved the scheme on the grounds that it will be a disincentive for Vanuatu youths to specialize in these areas and will lead to greater unemployment” (Jayaraman, 2016, p. 116). The MSG SMS has been received with much hostility and some of the reasons given for its poor administration are; (i) lack of awareness and publicity of the scheme amongst stakeholders, (ii) outdated information regarding supply and demand of workers by occupation and industry, and (iii) the continuing preference of some countries to hire laborers from more developed countries and/or Asian countries (Voigt-Graf, 2015).

With the hampered flow of workers amongst the island nations, PICs look outward to the metropolitan neighbors for any chance of labor movement. With that came an extension of a previous trade agreement (PACER) in the form of PACER Plus. The Pacific Agreement on Closer Economic Relations Plus (PACER Plus) is the most recent of the several trade agreements in the Pacific region; and was initially introduced out of concerns regarding poor performance by PICs in attaining Millennium Developments Goals (Jayaraman,

¹ If the Islander is travelling by air from one Island country to the next, he/she may require a visa to transit into the host country.

2016). One can also infer that the increase in accessibility by the European exporters and investors of the Pacific markets got the regional hegemons – Australia and New Zealand anxious to increase their involvement within the region (Morgan, 2012). It was to work as a platform to promote reciprocal trade liberalization between the Pacific Island Countries and Australia & New Zealand. As such, the PACER Plus agreement has received much deliberation.

Both Australia and New Zealand have refrained from any official and binding clause for access to the ANZ labor markets specifically under PACER Plus. Given these turn of events, there is little incentive for the island nations to remain at the negotiating table (Morgan, 2012). Recently the discussions on the PACER Plus forefront concluded after a decade long planning. Twelve member countries² are Party to the agreement, and the signing of the agreement was concluded on the 16th of June, 2017. In the meantime, Australia has removed the cap on the seasonal worker program, and New Zealand has increased the limit on Recognized Seasonal Employer (RSE) scheme by a thousand (Office of Chief Trade Advisor, 2016). The progress of these undertakings can only be gauged in the coming years.

Data Synthesis

The analysis to follow involves the most recently available migrant stock for the Pacific and Caribbean region from the United Nations, Department of Economic and Social Affairs, Population Division 2017. Some missing data has also been updated using country census statistics. The database used compiles total migrant stock at mid-year by country of origin and destination for the year 2017. Also, a matrix is created for each region. For the Pacific matrix, the countries are clustered into the three sub-regions: Melanesia, Micronesia, and Polynesia. As for the Caribbean matrix, all the countries under study are island nations except Guyana, which is situated on the South American mainland. Guyana nonetheless forms a significant addition to the analysis since the Guyanese are dominant intra-regional migrants within the Caribbean. A note of caution to the readers – these data do not account for the sizeable flows of irregular migrants since they elude official records. Fully cognizant of the fact that much of the movements from these regions happen extra-regionally, this study nonetheless is evidence of pertinent intra-regional migration.

(a) The Mobility Intensity Analysis

With reference to the data for 2017, total migrant stock into the Pacific region was 307,950 (refer Appendix 1). Of this total, only 22.24 percent of the migrants were Pacific Islanders while 77.76 percent were from the rest of the world. For the same period, a total number of migrants living within the Caribbean region was 1,399,747; of which 53.28 percent of the migrants were from within the region itself while 46.72 percent coming from the rest of the world (refer Appendix 2).

² PACER Plus members- New Zealand, Australia, Cook Islands, Federated States of Micronesia, Nauru, Kiribati, Niue, Palau, Republic of Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu.

Table 1: The Pacific Intra-regional Migrant Stock 2017

Pacific Island Countries	GDP per capita (\$US constant 2010)	Total Native Population	Migrant Stock		Migrant Rate	
			Inward	Outward	Inward	Outward
Melanesian						
Fiji	9,323.20	878,394	3,775	2,604	0.43%	0.30%
New Caledonia	38,800	208,710	13,461	4,176	6.45%	2.00%
Papua New Guinea	1,783.69	7,593,539	452	682	0.01%	0.01%
Solomon Islands	2,200.93	581,006	1,007	1,107	0.17%	0.19%
Vanuatu	2,987.92	261,465	699	5,893	0.27%	2.25%
Micronesian						
Guam	30,496.03	93,796	14,905	1,005	15.89%	1.07%
Kiribati	1,994.77	109,270	2,338	2,371	2.14%	2.17%
Marshall Islands	3,910.92	49,709	635	377	1.28%	0.76%
Micronesia (Federated States of)	3,496.72	101,704	549	12,676	0.54%	12.46%
Nauru	13,064.55	9,297	1,495	1,529	16.08%	16.45%
Northern Mariana Islands	14,652.82	33,422	2,464	2,590	7.37%	7.75%
Palau	15,317.17	15,627	884	2,334	5.66%	14.94%
Polynesian						
American Samoa	9,868.70	32,322	17,487	1,594	54.10%	4.93%
Cook Islands	14,939	16,681	325	45	1.95%	0.27%
French Polynesia	26,100	252,706	2,444	552	0.97%	0.22%
Niue	15,066	1,053	256	24	24.31%	2.28%
Samoa	5,934.87	188,299	2,070	16,690	1.10%	8.86%
Tokelau	6,275	763	239	124	31.32%	16.25%
Tonga	5,534.83	100,439	912	2,904	0.91%	2.89%
Tuvalu	3,926.17	9,775	94	1,179	0.96%	12.06%
Wallis and Futuna Islands	3,800	12,815	2,008	8,043	15.67%	62.76%

Source: Author's calculation from the UN Department of Economics and Social Affairs, International Migrant Stock, 2017. **Note:** Total migrant stock at mid-year by country; Migrant rate is migrant stock as a ratio of the native population.

Table 2: The Caribbean Intra-regional Migrant Stock 2017

Caribbean Island Nations	GDP per capita (\$US constant 2010)	Total Native Population	Migrant stock		Migrant Rate	
			Inward	Outward	Inward	Outward
Anguilla	21,800	9,530	3,152	1,568	33.07%	16.45%
Antigua and Barbuda	23,062.28	63,735	22,943	7,744	36.00%	12.15%
Aruba	36,015	67,775	10,692	4,591	15.78%	6.77%
Bahamas	23,001.01	328,713	41,257	1,148	12.55%	0.35%
Barbados	16,405.76	249,740	15,616	4,805	6.25%	1.92%
British Virgin Islands	42,300	30,117	13,858	4,094	46.01%	13.59%
Cayman Islands	49,902	36,241	11,435	27	31.55%	0.07%
Cuba	22,377.05	11,376,226	1,480	23,724	0.01%	0.21%
Curaçao	20,993	120,368	13,459	8,402	11.18%	6.98%
Dominica	10,864.54	65,960	3,658	20,852	5.55%	31.61%
Dominican Republic	14,237.06	10,112,827	348,090	89,275	3.44%	0.88%
Grenada	13,558.55	99,768	4,290	10,497	4.30%	10.52%
Guadeloupe	21,780	307,232	30,910	7,908	10.06%	2.57%
Guyana	7,521.73	751,701	2,300	34,444	0.31%	4.58%
Haiti	1,757.44	10,671,538	10,947	407,445	0.10%	3.82%
Jamaica	8,872.91	2,770,168	6,468	32,903	0.23%	1.19%
Martinique	14,400	334,694	9,791	10,323	2.93%	3.08%
Montserrat	8,500	3,774	861	3,091	22.81%	81.90%
Puerto Rico	25,967.57	3,199,210	71,484	14,412	2.23%	0.45%
Saint Kitts and Nevis	25,088.16	48,129	3,582	11,876	7.44%	24.68%
Saint Lucia	10,944.33	172,228	5,482	11,878	3.18%	6.90%
Saint Vincent and the Grenadines	11,139.64	104,885	2,799	15,291	2.67%	14.58%
Sint Maarten (Dutch part)	36,327	38,824	22,166	1,882	57.09%	4.85%
Trinidad and Tobago	33,308.52	1,310,205	27,986	12,527	2.14%	0.96%
Turks and Caicos Islands	29,100	22,651	8,133	1,651	35.91%	7.29%
United States Virgin Islands	36,350.82	46,853	38,307	3,098	81.76%	6.61%

Source: Author's calculation from the UN Department of Economics and Social Affairs, International Migrant Stock, 2017.

Note: Total migrant stock at mid-year by country; Migrant rate is migrant stock as a ratio of the native population.

As far as intra-regional movement is concerned, the largest of the Pacific Countries in terms of population size as well as land mass— Papua New Guinea, Solomon Islands, and Vanuatu have records of extremely low rates of immigration and emigration. The top five destination countries within the region that have the largest share of Pacific migrants in their populations are (Table 1): American Samoa (54.10%), Tokelau (31.32%), Niue (24.31%), Nauru (16.08%) and Guam (15.89%). The common links amongst these top host

countries are that they are either an unincorporated territory of the United States (American Samoa, Guam, and Nauru) or fall under the free association with New Zealand (Tokelau and Niue). Correspondingly, countries with higher outward migrants intra-regionally are Wallis and Futuna, Nauru, Tokelau, Palau and Federated States of Micronesia. Once again, parallels are drawn amongst the Alliances. The majority number of people from Wallis and Futuna migrate to New Caledonia (99.58%) and the rest to French Polynesia – both of which are French Territories. In the same way, total migrants from Palau primarily migrated into Guam (63.62%), Northern Mariana Islands (24.29%) and Federated States of Micronesia (12.08%). Alike, from the Federated States of Micronesia into Guam (86.06%), Northern Mariana Islands (8.84%), Palau (3.19%) and Marshall Islands (1.91%). These countries become natural source and destinations since they all are part of the Compact of Free Association (COFA) with the United States as well as geographic proximity. Under COFA, there is intensive migration amongst these countries as the United States provides funding to host countries to accommodate other associated countries under membership (International Organization of Migration, 2016).

There are exceptions to this, including peculiarities in the data which require historical analysis for an explanation. For example, in 2017- 99.5% of intra-regional migrants from Nauru went to Kiribati. The most likely explanation is that these migrants formed a pool of returnees (judging from the significant percentage of migrants in Nauru from Kiribati in yesteryears too – a legacy of the phosphate mining boom). Applying a similar rationale and considering previous years' data, many Tokelauans who lived in Samoa in 2017 (83.87% of all outward migrants from Tokelau) likely returned migrants also.

In the Caribbean countries, the highest concentration of immigrants is United States Virgin Islands with 81.76%, Sint Maarten with 57.09%, the British Virgin Islands with 46.01%, Antigua & Barbuda with 36.00% and Turks and Caicos Islands with 35.91% (refer Table 2). Similar to the Pacific, these destination countries are primarily foreign territories. The Caribbean countries representing the top five origins of intra-regional migrants are Montserrat (81.90%), Dominica (31.61%), St. Kitts and Nevis (24.68%), Anguilla (16.45%) and Saint Vincent and the Grenadines (14.58%).

Some noteworthy mentions from the Caribbean region are (i) the past practice between Haiti & Dominican Republic and (ii) the representation of Guyana amongst all other island nations. First, although Haiti and the Dominican Republic are poles apart in terms of living standards and economic performances; the two countries coexist on a single island. This being the only land-border in this research skews the results largely. Referring to data, it is evident that there is considerable outward movement from Haiti, 82.64 percent of which migrate into the Dominican Republic. However, this as a ratio of Haiti's population gets represented as a mere 3.15 percent. Simultaneously, the Dominican Republic receives the largest number of inward migrants from Haiti (96.73% of the region's total) but is denoted against its native population size as 3.33%. These figures are only based on data, i.e., does not capture the impact of border trespassing migrants between Haiti and the Dominican Republic. Furthermore, with regards to Guyana, while being located on the mainland, it ranks third amongst all Caribbean countries to experience heavy outward movement.

Historically Guyana has had racial, economic and political problems which provided the push to Guyanese nationals to move. Seemingly the trend of movement continues to-date.

(b) The Mobility Distribution Analysis

Another notable observation made from the earlier data analysis is that unlike the Pacific region, the distribution of migrants in the Caribbean region is not limited to just a few origins or destination countries. To evaluate and compare the distribution patterns, the concentration index has been calculated. The Concentration Index assesses how broadly or narrowly the migration routes are spread across the region for each country. The index ranges from zero to one, whereby a higher value represents people movement concentrated into limited destination countries, and a lower value demonstrates migrants’ geographically dispersed to a wide range of destination countries.

$$\text{Concentration Index} = \sqrt{\sum_d \left(\frac{\sum_s X_{sd}}{\sum_s R} \right)^2}$$

Where *s* is the set of countries in the source, *d* is the destination, *R* is the set of total countries within the region, and *x* is the bilateral migrant stock from the source to the destination.

Given the calculations, the below Box Plot is deduced for further interpretations.

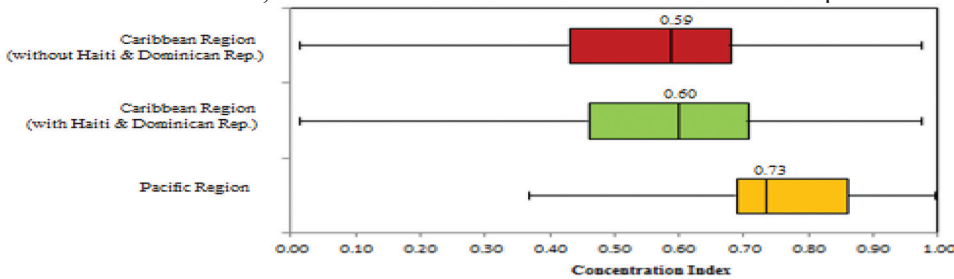


Figure 1: Geographical Migrant Concentration: Pacific vs. Caribbean, 2017

Source: Author’s calculation from UN Department of Economic and Social Affairs, Population Division dataset

The countries in the Caribbean region have many routes of migration and are geographically more dispersed compared to the Pacific countries. The analysis without Haiti and Dominican Republic (exclusion of land border) reiterate the wider distribution of migratory routes for the Caribbean countries relative to the countries in the Pacific. In the comparison between the concentration indices of the two regions, it has been taken into account that for the Caribbean region, the indices are calculated out of 26 possible destinations and for the Pacific region – out of 21 possible destinations. Although the indices are unstandardized, they account for only a marginal difference. The overall interpretation still stands.

In the Caribbean, Guyana with an index of as low as 0.01 has the highest number of destination routes (20 out of 26) while the Turks and Caicos Islands has the most limited migrant geographical dispersion index of 0.97 (3 out of 26). In the Pacific region, Fiji has the lowermost index of 0.37 with 13 out of 20 destination countries while Wallis and

Futuna Islands has the highest concentration rate with only 2 destination countries. The median score of distribution for the Caribbean is 0.60 and a relatively higher 0.73 for the Pacific. Additionally, the Box Plot confers that approximately 20 out of 27 Caribbean countries (75%) have a market concentration rate below 0.69. These sending countries are: Anguilla, Antigua and Barbuda, Aruba, Bahamas, Barbados, British Virgin Islands, Cuba, Curacao, Dominica, Dominican Republic, Guyana, Jamaica, Montserrat, Puerto Rico, St. Kitts and Nevis, St. Lucia, Saint Vincent and the Grenadines, Sint Maarten, Trinidad and Tobago and United States Virgin Islands. Conversely the same percentage of Pacific Countries (75%: 16 out of 21) score over and above 0.69 inclining towards limited number of destination markets for: Papua New Guinea, Solomon Islands, Vanuatu, Guam, Marshall Islands, Federates States of Micronesia, Nauru, Northern Mariana Islands, Palau, American Samoa, Cook Islands, French Polynesia, Niue, Samoa, Tokelau and Wallis and Futuna Islands.

Overall the Caribbean countries migrant routes are skewed leftward where the top three quartiles have maximum 20 and minimum 3 other regional countries to migrate to. Whereas the Pacific countries are rightward skewed having maximum 13 and minimum 2 other Pacific Island Countries to move, reside and work in. In sum, the Caribbean region comparatively has a wider distribution of migrant destination countries.

4. Migration vis-à-vis Income Differentials

The early harvest of findings displays one more pattern in the Pacific set of data that emerges quite starkly³. Ostensibly, the notion of intra-regional migration stems from an individual's aspirations to improve living standards. However, it is hardly that the poorest from countries with depressed income per capita can migrate. Owing to their financial and/or resource constraints, many are neither able to afford movements out of the source country nor secure a place in the host country. Understandably, migration is a risky and costly encounter which requires one to have sufficient start-up capital, access to information, and social networks. Therefore, the few who do migrate from underdeveloped countries are of the elite class. While emigration increases steadily with continuous growth in GDP per capita, once the countries move into the higher-income categories, the migrants naturally become unwilling to move from their countries of origin. Mapping the above concept using the Pacific region's data, exhibits a similar trend;

Therefore, it is detected that alongside regional alliances and network, income differentials between countries within the region heavily influences intra-regional mobility. As seen in Figure 2, the inward migrant trend increases as the income in destination countries gradually improve (red dashed shadow); and the outward migrant movements follow an inverted U curve for the various levels of income per capita within the region (blue dashed shadow). Substantial inward migration is mostly for countries with higher GDP per capita and conversely large outward migration from countries with lower income per capita.

³ The same could not be exactly replicated for the Caribbean dataset as the pattern appears to be undermined due to methodological constraints. Analysis is provided in Appendix 3

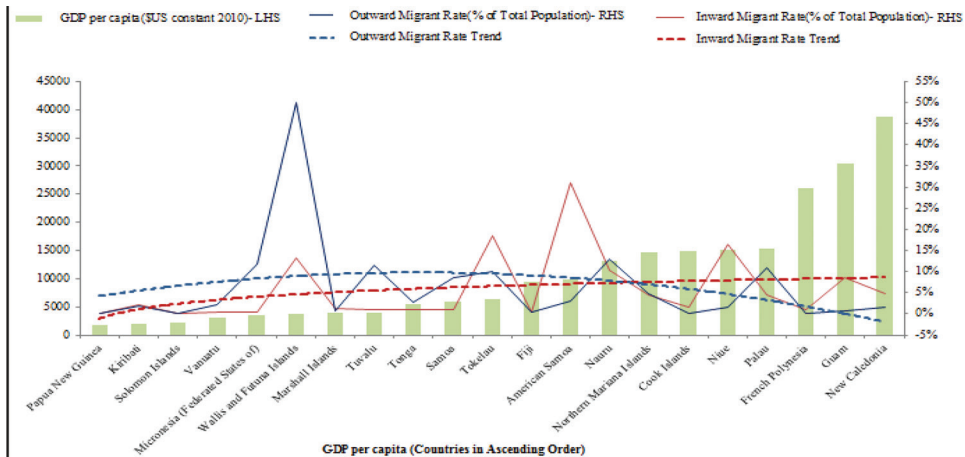


Figure 2: Migrant Rate Trend for Pacific Countries, 2017

Source: Author's calculation from the UN Department of Economic and Social Affairs, International Migrant Stock, 2017

While it is difficult to replicate theory exactly to map available data due to various methodological stretches, the trends in the graph follow through the theoretical arguments. There are caveats nonetheless. Take, for example, (i) comparability of the countries with varying sizes and geographical locations. For instance, comparing Montserrat and Jamaica with very different landmasses undermines the resemblance (Appendix 4). Similarly comparing Kiribati (an isolated island) to Wallis and Futuna (situated amid the region) given their unlike geographical locations is a challenge. (ii) Comparability of countries with different political status – whereby some countries are with arrangements of privileged access amongst a cluster (like New Caledonia, Vanuatu, French Polynesia, and Wallis and Futuna) and some without.

5. Conclusion and Policy Opportunities

In a nutshell, the intensity and distributional analysis of migrant patterns exhibit a clear contrast for the two regions. The intra-regional migrant rates (both inward and outward) are prominently higher within the Caribbean, as well as have a more dispersed geographical concentration of this mobility. The study also draws upon the impact of income differentials influencing the migrant patterns. Reasons for the different rates of mobility and concentration of markets are multifaceted; few of the plausible arguments are presented below.

Several factors have been discussed that encourage intra-regional movements - mobility provisions and bilateral schemes in regional agreements being one of the prime catalysts. Based on the recent regional migration trends, most if not all countries with the greatest migrant movements in the Pacific are either from the Compact of Free Association with the United States and New Zealand or fall within the French territory. Similarly, the highest migrant rates in the Caribbean are amongst countries with free access arrangements and /or having a history of being former colonies and territories dependents on the United Kingdom, the United States or the network of the Dutch territory. Data patterns validate

that regional network and alliances have facilitated the mobility to a large extent. These coalitions are potential grounds for tackling unemployment and skill shortage issues in the Pacific and the Caribbean. Bilateral schemes and maturing alliances enabling intra-regional migration of labor are far better utilization of human capital in comparison to outsourcing workers and professionals from outside the regions. Given the proliferating efforts on technical and vocational education and training in the region, there will be more skill creation than job opportunities. Channels of movement established intraregional can assure that these workers do not get exploited.

The overall trend in the study indicates that the intensity of Pacific migrants intra-regionally is low as well as the distribution of movement being geographically concentrated in comparison to the Caribbean countries. It is understood that geographical proximity, the arrangement of various schemes, and possibilities of better opportunities extra-regionally act as disincentives for intra-regional mobility. Remarkably, the larger Melanesian countries (Papua New Guinea and the Solomon Islands) have considerably lower migrant rates when compared to the microstates of Micronesia. Despite the existence of the MSG SMS, the one truly meaningful mobility arrangement in the region, limited progress has been observed. The Vanuatu Chamber of Commerce conflict is one of the documented signals of underlying regional tensions which challenge the objectives of regional diplomacy.

In the wake of climate change, administrative and procedural bureaucracy hampering mobility will become a pressing issue; particularly for countries such as Solomon Islands, Kiribati, Tuvalu and Marshall Islands which are on the brink of obliteration. Migration is becoming inevitable. The income differential analysis in this study displays some potential emerging markets within the respective regions, which plausibly can support migrants given their level of income growth. The special relation with metropolitan powers can ease migration with the same territories to accommodate climate migrants. Apart from the level of economic growth hinted by the differential analysis, vulnerable countries may as well take refuge of the aforementioned coordinated clusters and the years invested in the regional negotiations.

References

- Bedford, C. and Bedford, D.** (2013) the RSE Work Policy and Worker Productivity in the Horticulture and Viticulture Sector: A Progress Report. Unpublished Report. University of Waikato
- Bedford, R., Burson, B., and Bedford, C.** (2014). Compendium of Legislation and Institutional Arrangements for Labor Migration in Pacific Island Countries. International Labor Organization, United Nations Economic and Social Commission for Asia and the Pacific and European Union.
- Caribbean Community Regional Census Office** (1994), Commonwealth Caribbean Population and Housing Census, 1991, Port of Spain, Trinidad.
- CARICOM** (1973). Treaty Establishing the Caribbean Community, Chaguaramas.
- CARICOM** (2001). Revised Treaty of Chaguaramas Establishing the Caribbean Community Including the Single Market and Economy, p. 52-64.
- CARICOM** (2005). The History of CARICOM. Available from: <http://www.CARICOM.org/archives/CARICOM-history.htm>. [Accessed: 13 March 2015]
- Guyana Chronicle** (2005). It's Hard to Sell CARICOM when Guyanese are Treated Better in US, Guyana Chronicle Online, 24 September, <http://www.guyanachronicle.com>. {Accessed: 13 March 2015}

- International Organization for Migration.** (2016) Innovative Approaches on Migration Governance. [Online] Geneva, Switzerland: IOM. Available from: <http://publications.iom.int/> . [Accessed: 17 January 2017].
- Jayaraman, T.K** (2016) Regional integration in the Pacific. In: Fanta, E., Shaw, T.M., and Tang, V.T. (eds.). *Comparative Regionalism for Development in the 21st Century: Insights from the Global South*. Routledge, Taylor & Francis Group, USA.
- Lewis, P.** (2003). Is the Goal of Regional Integration Still Relevant Among Small States? The Case of the OECS and CARICOM, Cynthia Barrow-Giles and Don Marshall, eds.,
- Lewis, P.** (2011) Training Nurses for Export: A Viable Development Strategy? *Social and Economic Studies*, 60(2):p. 67-104.
- Morgan, W.** (2012). Labor Mobility through PACER Plus? An unlikely prospect [Online] 2nd April 2012. Available from: DevPolicy Blog, Development Policy Centre <http://devpolicy.org/labour-mobility-through-pacer-plus-an-unlikely-prospect20120402/> [Accessed: 2nd September 2016].
- Office of Chief Trade Advisor** (2016). Pacific Island Countries to Redouble Efforts to Conclude the PACER Plus Negotiations in 2016. [Online] 1st June 2017, Available from: <http://www.octapic.org/pacific-island-countries-to-redouble-efforts-to-conclude-the-pacer-plus-negotiations-in-2016/> [Accessed:13 March 2015]
- Organization for Economic Co-operation and Development** (2002). Labor Mobility in Regional Trade Agreement. Trade Committee, OECD Publications, Paris.
- Schiller, N., Basch, L. and Blanck, C.** (1995) From Immigrant to Transmigrate: Theorizing Transnational Migration. *Anthropological Quarterly* (68):p.48-63.
- Small States Digest** (2015). Regionalism among Small States – Challenges and Prospects: The Case of the Caribbean Community (CARICOM). The Commonwealth. Issue 1
- Voigt-Graf, C.** (2015) Melanesians on the Move. [Online] 2nd February 2015. Available from: DevPolicy Blog, Development Policy Centre <http://devpolicy.org/melanesians-on-the-move-20150202/> [Accessed: 12th September 2016].
- Watson, N., Lenderson, D and Allbrook, M.** (2007) Pilot Study to Assess the Likely Impact of the Free Movement of Labor in the CSME on the OECS Labor Market. Caribbean Regional Negotiating Machinery.

Appendix 1

Total Migrant Stock at Mid-Year by country of origin and destination, 2017

Country of Destination	Country of origin																									
	Total	Regional Aggregate	Total Inward	Fiji	New Caledonia	PNG	Solomon Is.	Vanuatu	Guam	Kiribati	Marshall Is.	FSM	Nauru	N.Mariana Is	Palau	A.Samoa	Cook Is	F.Polynesia	Niue	Samoa	Tokelau	Tonga	Tuvalu	Wallis and Futuna Is.	Rest of the World (Inward)	
Melanesia	118,078	19,394	417	287	617	1,064	5,423	..	1,043	..	..	..	..	..	..	..	33	382	..	299	..	1,404	415	8,010	98,684	
Fiji	13,911	3,775	..	..	..	711	186	..	784	..	..	..	..	..	..	..	33	..	..	299	..	1,347	415	..	10,136	
New Caledonia	66,001	13,461	..	..	..	..	5,069	..	..	..	..	..	..	..	..	..	..	382	..	..	..	..	..	8,010	52,540	
Papua New Guinea	32,389	452	88	..	..	232	104	..	..	..	..	..	..	..	..	..	..	..	..	..	..	28	..	..	31,937	
Solomon Islands	2,532	1,007	100	32	552	64	..	..	259	..	..	..	..	..	..	..	..	..	..	..	..	29	..	..	1,525	
Vanuatu	3,245	699	229	255	65	121	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2,546	
Micronesia	117,601	23,270	819	..	..	32	..	1,005	1,284	377	12,676	1,522	2,590	2,334	23	..	..	..	..	21	..	18	569	..	94,331	
Guam	78,027	14,905	..	..	..	..	..	..	..	239	10,909	..	2,272	1,485	..	..	..	..	..	..	..	..	..	..	63,122	
Kiribati	3,022	2,338	514	..	..	..	..	..	..	..	..	1,522	..	..	..	..	..	..	..	..	..	..	302	..	684	
Marshall Islands	3,292	635	118	..	..	..	..	..	275	..	242	..	..	..	..	..	..	..	..	..	..	..	..	..	2,657	
Micronesia (Federated States of)	2,785	549	..	..	..	..	..	38	..	92	..	..	75	282	23	..	..	..	..	21	..	18	..	..	2,236	
Nauru	3,710	1,495	187	..	..	32	..	..	1,009	..	..	..	..	..	..	..	..	..	..	..	..	..	267	..	2,215	
Northern Mariana Islands	21,777	2,464	..	..	..	..	..	730	..	46	1,121	..	..	567	..	..	..	..	..	..	..	..	..	..	19,313	
Palau	4,988	884	..	..	..	..	..	237	..	..	404	..	243	..	..	..	..	..	..	..	..	..	..	..	4,104	
Polynesia	72,271	25,835	1,368	3,889	65	11	470	..	44	..	..	7	..	..	1,571	..	12	170	24	16,370	124	1,482	195	33	46,436	
American Samoa	23,561	17,487	332	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15,845	20	1,290	..	..	6,074	
Cook Islands	4,213	325	154	..	19	..	..	..	..	..	..	..	..	..	..	..	..	124	18	10	..	..	..	..	3,888	
French Polynesia	30,687	2,444	30	2,167	..	..	214	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	28,243	
Niue	553	256	44	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	19	..	117	76	..	297	
Samoa	4,879	2,070	135	..	46	11	16	..	14	..	..	7	..	..	1,571	..	12	..	6	..	75	73	..	..	2,809	
Tokelau	504	239	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	193	..	..	46	..	265	
Tonga	4,952	912	625	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	287	..	..	..	..	4,040	
Tuvalu	143	94	48	..	..	..	..	..	30	..	..	..	..	..	..	..	..	..	..	16	..	..	..	..	49	
Wallis and Futuna Islands	2,779	2,008	..	1,722	..	..	240	..	..	..	..	..	..	..	..	..	..	46	..	..	..	..	..	..	771	
Total Outward																										
					</																					

Country of Destination	Country of origin																																		
	Total	Regional Aggregate	Total Inward	Anguilla	Antigua and Barbuda	Aruba	Bahamas	Barbados	Bonaire, Sint Eustatius and Saba	British Virgin Is	Cayman Islands	Cuba	Curacao	Dominica	Dominican Republic	Grenada	Guadeloupe	Guyana	Haiti	Jamaica	Martinique	Montserrat	Puerto Rico	St Kitts and Nevis	St Lucia	St Vincent and the Grenadines	Sint Maarten	Trinidad and Tobago	Turks and Caicos Is.	US Virgin Is	Rest of the World				
Guyana	99,350	30,910											4,410	955				189			9,526				416							68,440			
Haiti	40,533	10,947										2,555		5,110																		29,586			
Jamaica	23,332	6,468		154			666	536				1,803		137		206									96	330	225		2,315			16,864			
Martinique	61,579	9,791											420	137		5,446										2,025						51,788			
Montserrat	1,364	861		117									282	24					245						120		29		44			503			
Puerto Rico	273,494	71,484							54			12,988		1,160	56,446				48	156	41							169		422	202,010				
Saint Kitts and Nevis	7,587	3,582		411		24	97			247			203			58			792		143				103	171		271		624	4,005				
Saint Lucia	12,889	5,482	37	119	17	13	785							231	48	160	44		1,992		188	479	31	16	44		439		787		20	7,407			
Saint Vincent and the Grenadines	4,595	2,799		58			348						151	86		434			243		125				39	237		111	967			1,796			
Sint Maarten (Dutch part)	28,260	22,166	396	552	1,331		75			935		857	1,475	1,547	3,671		2,123	1,870	2,843	2,447	77		26	1,078	504	72		215		72	6,094				
Trinidad and Tobago	50,214	27,986					1,073					76				8,079			9,895		1,506					885	6,472					22,228			
Turks and Caicos Islands	24,534	16,948				12									1,896					15,040												7,586			
United States Virgin Islands	56,745	38,307	972	4,588	501		368			2,465			5,510	4,642	590					644	373		780	4,068	7,103	3,426	518	1,759			18,438				
Total Outward									1,568	7,744	4,591	1,148	4,805	281	4,094	27	23,724	8,402	20,852	89,275	10,497	7,908	34,444	407,445	32,903	10,323	3,091	14,412	11,876	11,878	15,291	1,882	12,527	1,651	3,098

Source: Author's compilation of UN Department of Economic and Social Affairs, Population Division dataset

Appendix 4

Pacific Island Countries	Concentration Index	Caribbean Island Nations	Concentration Index
Melanesian		Anguilla	0.67
Fiji	0.37	Antigua and Barbuda	0.62
New Caledonia	0.66	Aruba	0.52
Papua New Guinea	0.69	Bahamas	0.60
Solomon Islands	0.69	Barbados	0.33
Vanuatu	0.86	British Virgin Islands	0.65
Micronesian		Cayman Islands	0.86
Guam	0.76	Cuba	0.60
Kiribati	0.49	Curaçao	0.61
Marshall Islands	0.69	Dominica	0.43
Micronesia (Federated States of)	0.86	Dominican Republic	0.66
Nauru	0.73	Grenada	0.76
Northern Mariana Islands	0.87	Guadeloupe	0.74
Palau	0.69	Guyana	0.01
Polynesian		Haiti	0.85
American Samoa	0.99	Jamaica	0.42
Cook Islands	0.77	Martinique	0.92
French Polynesia	0.73	Montserrat	0.49
Niue	0.77	Puerto Rico	0.58
Samoa	0.95	Saint Kitts and Nevis	0.59
Tokelau	0.85	Saint Lucia	0.40
Tonga	0.64	Saint Vincent and the Grenadines	0.49
Tuvalu	0.50	Sint Maarten (Dutch part)	0.55
Wallis and Futuna Islands	1.00	Trinidad and Tobago	0.33
		Turks and Caicos Islands	0.97
		United States Virgin Islands	0.43