

THE DETERMINANTS OF MIGRATION IN SMALL ISLANDS

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Abstract

This study examines the determinants of migration in forty two small mainly tropical islands less than three million in population. Thirteen independent variables are used to measure various economic, social and demographic influences on small island migration patterns. Two profiles are constructed contrasting the characteristics and behaviour of twenty three immigrant and nineteen emigrant islands. The former are found to be more affluent than their emigrant counterparts with higher per capita income and lower unemployment. They also exhibit lower infant mortality, fertility and greater progress through the demographic transition. Immigrant islands are also characterised by dependent political status and the assumed favourable advantages of substantial trade, investment and tourism linkages with their patron countries. Finally, a provisional multivariate model is developed that suggests a combination of determinants account for most of the variation in island migration. They include per capita income, working-age population, literacy and political status.

Keywords

Small islands, migration, political status, immigrant, emigrant

Introduction

All adults are familiar with debates over migration at both personal and national levels, and with constraints and opportunities. All can rehearse and perform the dualities that attend migration, and which have become almost a mantra - honed by regular personal experience, reflection and repetition— to the extent that rationales for both mobility and stasis have almost become clichés. (Connell, 2008: 1032)

According to Christensen and Merz (2010), migration is a special propensity of island populations. Because of insularity and geographical constraints, livelihood mobility has become an insular way of life, an inseparable dimension attached to boundedness and limited land area (Connell and King, 1999). In small islands in particular, with limited

domestic hinterland, emigration has perennially served as the path to economic and social betterment (Baldacchino, 2011). Previous case studies have focused on the various causes of migration as well as the effects of migration on the economic and demographic structure of both sending and receiving societies (McElroy and de Albuquerque, 1988). However, no study has examined the determinants of migration for a large number of islands in a cross-sectional framework.

This study seeks to specifically examine the migration patterns of small islands across the world. It attempts to achieve this by performing three tasks. The first is to empirically determine the individual economic, demographic and environmental factors that result in either positive or negative net migration on small islands. The second is to develop distinct socio-economic and demographic profiles for both immigrant and emigrant islands to gain a better understanding of the differential island migration patterns and the factors that influence them. Finally, the third is to develop a model that will determine the migration pattern of the typical small island by empirically establishing the key influences that explain the behaviour of insular net migration.

This research is significant for several reasons. First, the study will add to the already extensive literature on migration in general, and on island migration in particular. Second, it will lead to a deeper understanding of migration in a globalised world since migration impacts both sending and receiving societies. Third, understanding the determinants of migration will further clarify the operation of the MIRAB (ie Migration, Remittances, Aid and Bureaucracy) construct (Bertram and Watters, 1985) based on aid and emigrant labour and return remittances, the pioneering model that has historically dominated the Island Studies literature. Finally, the research should also help island policy makers better interpret and control their migration situation.

Literature

Migration – voluntary and involuntary – emigration and immigration embody the very socio-economic and demographic history of islands (Semple, 1911). According to Connell (2007), the propensity to migrate became embedded in the early experience of Pacific islanders. In the Caribbean, Richardson (1992) argues that the migration adaptation so common across the Antillean archipelago was actually rooted in the African slaves' preoccupation with escape from the sugar plantation. A selective review of the subsequent literature on island migration suggests four main themes: (1) the universality of the island migration experience, (2) the causes and effects of that experience, (3) the impact of government policy on migration flows, and (4) the comparison between emigrant and immigrant island societies.

In the first case, scholars have amply documented the universality of migration in tropical islands across all oceanic basins in a series of celebrated case histories. These include Montserrat (Philpott, 1968) and St. Kitts-Nevis (Richardson, 1983) in the Caribbean, Niue (Connell, 2008) and Cook Islands (Connell, 2005; Cleland and Singh, 1980) in the Pacific, and Comoros in the Indian Ocean and Cape Verde in the Atlantic (McElroy and Morris, 2002). In the second case, a number of individual island studies have examined the motivations behind island migration. These include the search for better employment and educational opportunity, for medical treatment, for family reunion, as well as to escape warfare or natural/environmental disaster (Hayes, 2010).

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Another stream of literature has examined the impact of migration especially on demographic behaviour. Both in the Pacific (Connell, 1988) and the Caribbean (Harewood, 1976), scholars have noted the effects of heavy outmigration on both the population growth and fertility in labour-sending islands. In related research, McElroy and de Albuquerque (1990) found that migration tends to accelerate the demographic transition in sending societies by hastening the fertility and retarding the mortality transition, and to slow down progress in labour-importing islands by reversing these effects.

A third major theme has been the impact of migration policy on mobility patterns in both sending and receiving societies. In the case of labour exporters for example, Richardson (1985) emphasises the role of the government of Barbados in facilitating the recruitment of West Indian labour to build the Panama Canal. Likewise, de Albuquerque and McElroy (1986) stress a similar role of the Bahamian government in supplying temporary farm labour to the US in the first half of the 20th century. In the case of labour importers, Segal (1975: 44) traces the impact of changing immigration restrictions in the US and Great Britain on emigrant flows from the Caribbean, a region that had “borne the deepest and most continuous impact from international migration of any region in the world”. Similarly, Fawcett and Carino (1987) detail the wide-ranging fluctuations in Asian and Pacific island migration corresponding to shifts in US immigration policy.

A final focus has been sparked by recent research on the so-called migration transition whereby former labour exporters or emigrant islands become, often under the strong growth imperatives of rapid tourism and offshore finance development, labour importers or immigrant islands. Examples include the Bahamas (Marshall, 1982; 1981), the US Virgin Islands (de Albuquerque and McElroy, 1982) and the Cayman Islands (Connell, 1994). One follow-up study (Mitchell and McElroy, 2011) has recently examined the structural and behavioural differences between immigrant and emigrant islands and concludes that the former are more affluent, socially progressive and demographically advanced than their emigrant counterparts, in large part because of their greater degree of post-War diversification. This analysis forms the point of departure for the present study, which seeks to further define the differences between the two types of islands stratified by their migration experience as well as to empirically establish the key determinants of island net migration.

Methodology

To accomplish the three planned tasks, 2012 or latest data for forty-two island jurisdictions with a population of less than three million were compiled from the *World Factbook* website (CIA, 2012). Although there is no universal agreed upon definition of a small state (Crowards, 2002), this cut-off was chosen following the lead of the early pioneers in cross-sectional small island research (Armstrong et al, 1998; Armstrong and Read, 2000) as well as recent follow-up research (Bertram, 2003; McElroy and Parry 2010). Net migration was used as the dependent variable. Thirteen independent variables were employed to measure various economic, social and demographic influences on small island migration patterns. For example, economic behaviour was measured using per capita GDP, the unemployment rate, the percentage share of service activity in GDP to gauge the influence of tourism, the percentage of the working-age population, and island area as a proxy for general resource availability. Demographic behaviour was measured by population growth, birth and death rates, and the sex structure of the

working-age population. Social and health advancement was measured by life expectancy, adult literacy and infant mortality.

Finally, political status was measured dichotomously with dependence scored as one (1.0) and independence scored as zero (0.0) without dealing more precisely with gradations or degrees of dependence, eg colonial status v integration v free association (Bertram, 2003). This crude dichotomous formulation was preferred for three reasons. First, there is no standard way to differentiate the multiform dependency arrangements proliferating across the island periphery in recent years, ie overseas departments, collectivities, municipalities and so on. Second, all the subnational island jurisdictions (SNIJs) or so-called microterritories share a similar degree of basic autonomy and thus comprise a homogeneous category (Taglioni, 2011; Baldacchino, 2010). Third, past island research has shown the dichotomous variable to be an effective descriptor (Oberst and McElroy, 2007; McElroy and Pearce, 2006).

Forty-two island jurisdictions were selected that met the under three million population size criterion and for which full data were available. They included 23 immigrant islands and 19 emigrant islands. Their migration status was determined by examining migration trends from 2006-2010 using the World Bank Data (2011) website. Islands with negative trends were classified as emigrant and those with either positive trends or zero net migration were classified as immigrant. This recent five-year period was considered sufficiently long to establish a migration pattern. Among the total, 23 are sovereign and 19 are dependent islands. Thirteen are located in the Caribbean and include: Antigua and Barbuda, Anguilla, Aruba, British Virgin Islands, Bahamas, Barbados, Cayman Islands, Grenada, Jamaica, Montserrat, St. Lucia, St. Kitts and Nevis, St. Vincent and the Grenadines. Twelve are located in the Pacific and include: Federated States of Micronesia, Fiji, French Polynesia, Guam, Kiribati, Marshall Islands, Northern Mariana Islands, Nauru, New Caledonia, Palau, Tonga and Vanuatu. Seven are located in the Atlantic and include: Ascension, Bermuda, Cape Verde, St. Helena, St. Pierre and Miquelon, Sao Tome and Principe, and Tristan da Cunha. However, the World Factbook combines Ascension, St. Helena and Tristan da Cunha together into one island data set. Four are located in the Indian Ocean and include: Comoros, Maldives, Mayotte and Seychelles. Finally, four are located in Europe (Faroe Islands, Guernsey, Isle of Man, and Jersey), one in the Persian Gulf (Bahrain) and one in South Asia (Brunei) (a nation located on the north of Borneo island).

Based on the results of past studies (Mitchell and McElroy, 2011; McElroy and Pearce, 2006), the working hypothesis is that the emigrant islands experiencing stagnation and chronic outmigration, in contrast to the immigrant islands characterised by in-migration spawned by rapid economic growth, will have lower population growth, working-age population, life expectancy and literacy, per capita GDP and tourism (services/GDP), as well as higher unemployment, birth, death and infant mortality rates. It is also expected that emigrant islands will be dominantly sovereign and immigrant islands will be dominantly dependent. In order to empirically test migration patterns, first bivariate regressions with each independent variable and net migration were run to determine initially which factors have a strong influence on island migration patterns. Second, a mean difference analysis was conducted to determine whether in fact different migration patterns do discriminate distinct island socio-economic and demographic profiles. Finally, a series of multiple regressions were run to determine the most important set of influences on island migration patterns.

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Analysis and Results

Univariate descriptives were examined in order to gain understanding of all fourteen variables and predict the outcomes of the multiple regression analysis that follows.

Variable label	Variable	Means	SD	Min	Max
NMR	Net migration rate	-1.05	8.71	-20.97	18.56
PCGDP	Per capita GDP of the island jurisdiction	18022.5	17260.25	1000	69900
UNEMP	Unemployment rate of the island jurisdiction	0.13	0.15	0.010	0.9
SERVICEGDP	Percentage share of service activity in GDP	0.69	0.16	0.25	0.97
WORKAGE	Percentage of the working-age population (15-64 years old)	0.66	0.06	0.51	0.77
SIZE	Island size in square kilometer	2627.14	5004.10	21	18575
POPGROWTH	Population growth rate	0.009	0.010	-0.01	0.028
BR	Birth rate	17.48	6.99	8.32	38.03
DR	Death rate	6.35	1.79	2.6	9.92
SEXRATIO	Sex ratio of working-age population: The ratio of males to females between 15-64 years old in the population.	1.01	0.15	0.66	1.57
LIFEEXP	Population life expectancy	75.03	5.45	63.11	87.9
ADULTLIT	Adult literacy rate	0.92	0.09	0.57	0.997
IMR	Infant mortality rate	17.045	16.314	2.47	73.45
POLIDEP	Political dependency: 0=politically independent 1=politically dependent		42.5% politically dependent; 57.5% politically independent		

Table 1. Univariate descriptive statistics for net migration rate and the thirteen predictor variables (n=40)

Major Migration Determinants

Scatterplots showing the bivariate relationships between NMR and all independent variables were generated to examine whether they all satisfy linear relationships. The birth rate, per capita income and infant mortality were transformed to their log forms to ensure linear relationships with the outcome variable (net migration) in order to satisfy the assumption for OLS regression. From an examination of the scatter plots of bivariate relationships, Northern Marianna Islands was shown to be an extreme outlier in all plots distorting the bivariate and multivariate regression relationships significantly. For example, as a result of the ongoing financial crisis that began in 2008, in 2010 the Northern Marianas experienced large-scale emigration (-73.6/1000) of Chinese and Filipino workers due to the sharp deterioration in garment exports to the US as well as the fall-off in Japanese tourism (BEA, 2010). A similar exodus (-41.3/1000) is projected for 2011-2012. Therefore, Northern Marianas was taken out from the data set for the regression analyses.

	NMR
logPCGDP	5.095*** (1.031)
UNEMP	-26.943*** (8.519)
SERVICEGDP	16.256* (9.021)
WORKAGE	86.233*** (21.044)
SIZE	-0.00003 (0.0003)
POPGROWTH	580.003*** (143.781)
logBR	-12.011*** (3.442)
DR	0.164 (0.800)
SEXRATIO	-9.552 (9.648)
LIFEEXP	0.590** (0.241)
ADULTLIT	10.957 (17.470)
logIMR	-4.214** (1.646)
POLIDEP	7.452*** (2.599)

Note: *p<0.10; **p<0.05; ***p<0.01

Table 2. Bivariate relationship between net migration and all independent variables

The results of the bivariate regressions are shown in Table 2 (above). They indicate that eight variables have a statistically significant relationship with the net migration rate. These include: three demographic variables—population growth (P=0.000), log crude

birth rate ($P=0.001$), and the percentage of working-age population ($P=0.000$); two economic variables—log per capita GDP ($P=0.000$) and the log unemployment rate ($P=0.002$); two health variables—log infant mortality ($p=0.015$) and life expectancy ($P=0.009$); and one political variable—political status ($p=0.007$). Regarding the demographic variables, higher population growth is normally characteristic of an immigrant island not only because positive net migration feeds demographic growth but also because such islands are usually experiencing some economic growth expansion and are thus pulling in resources, including labour. A celebrated case is the more than doubling of the population in the 1960s in the US Virgin Islands undergoing rapid tourism development partly as a result of the close-off of visitation to Cuba during the Castro era (de Albuquerque and McElroy, 1982). In addition, these immigrant islands are also typified by falling fertility for all the usual reasons, ie rising urbanisation, increasing female educational and employment opportunities and so on. Finally, these islands also possess larger working-age populations (15–64 yrs.) than their emigrant, labour-exporting counterparts. This is a finding of previous research (McElroy and Pearce, 2006) as well as a function of the assumed burgeoning economic activity of these labour-importing islands.

Regarding the economic variables, it is no surprise that log per capita GDP is positively associated with positive net migration. In fact, Mitchell and McElroy (2011), using 2009 data, found that per capita income in immigrant islands averaged nearly three times higher than in emigrant islands. As in the present study, these islands included a number of rapidly growing popular tourism destinations and offshore financial centres experiencing labour-intensive development. They include Aruba, Bahamas, Bermuda, the British Virgin Islands and Cayman Islands in the Caribbean as well as Jersey, Isle of Man and others in Europe. Moreover and related, it is not unexpected that the unemployment rate is negatively associated with net migration. Clearly, as the literature suggests (Connell, 2007), one of the most important motivations for migration is to seek better employment prospects.

Socio-economic and Demographic Profiles

In order to more clearly see the operation of different factors that determine the different migration patterns in both immigrant and emigrant islands, socio-economic and demographic profiles were developed for the two island groups—23 immigrant and 19 emigrant (the actual count of emigrant islands in the data set is 17 since Ascension, St. Helena and Tristan da Cunha are grouped into one data point)—using mean difference analysis. The mean values for the thirteen independent variables and their respective P-values are shown in Table 3 below.

Considered together, the results reveal distinct island profiles with eight of the thirteen variables statistically significant. The results also confirm the hypotheses outlined earlier that the immigrant islands would be more affluent and socially advanced than the emigrant islands. For example, average per capita income in the former (US\$25,909) is more than three times higher than the emigrant island level (US\$7,253). In addition, the unemployment rate in the former (7.1%) is barely a third the emigrant average (20.1%). As expected in labour-importing societies, the working-age population is also statistically significantly larger (68 v 64%) because of the traditional age-selectivity of migrants from the 15–64 cohorts. In addition, one other variable behaves in the expected direction although difference between the averages is not significant. Immigrant islands boast

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markedly higher levels of service activity (71%) than labour-exporting islands (66%), which suggests the former resemble the small, highly developed tourist-driven island economies (SITES) common in the Caribbean (McElroy, 2006).

Variables	Emigrant Islands (se) (n=17)	Immigrant Islands (se) (n=23)	P-value Ha: diff (E-I) <, >, or ≠ 0
PCGDP	7252.9 (1202.1)	25982.6 (3925.3)	diff < 0***
UNEMP	0.201 (0.051)	0.071 (0.011)	diff > 0***
SERVICEGDP	0.663 (0.027)	0.713 (0.039)	diff ≠ 0
WORKAGE	0.637 (0.015)	0.684 (0.009)	diff < 0***
SIZE	2345.9 (1184.2)	2740.9 (1064.3)	diff ≠ 0
POPGROWTH	0.005 (0.003)	0.013 (0.002)	diff < 0***
BR	21.238 (1.831)	14.841 (1.052)	diff > 0***
DR	6.049 (0.459)	6.437 (0.377)	diff ≠ 0
SEXRATIO	1.025 (0.037)	1.002 (0.030)	diff ≠ 0
LIFEEXP	73.4 (1.4)	76.2 (1.0)	diff < 0*
ADULTLIT	0.922 (0.017)	0.923 (0.023)	diff ≠ 0
IMR	22.414 (4.374)	13.076 (2.923)	diff > 0**
POLIDEP	0.176 (0.095)	0.609 (0.104)	diff < 0***

Note: *p<0.10; **p<0.05; ***p<0.01

Table 3. T-test results showing the mean values and standard errors for the thirteen independent variables, and their respective P-values for both immigrant and emigrant islands

According to Table 3, islands clustered by migration experience are also distinct across demographic and social/health characteristics. For example, predictably, labour-importing islands recorded considerably higher population growth averaging 1.25% against 0.46% for labour exporters. Differences would have been larger were it not for the

high rates of natural increase among the emigrant islands. Their substantially higher fertility (21.2 v 14.8) suggests they lag behind the immigrant islands in the demographic transition. In addition, because of their lower level of relative affluence, they exhibit lower health levels. Their average infant mortality rate (22.4) is almost twice the immigrant island average (13.1), and their average life expectancy lags the labour-importing average by three years, ie 76 to 73 years. On the other hand, there are no differences between the two island groups in terms of literacy or the sex structure of the working-age population. This latter outcome is contrary to the usual male-sex selectivity of migration (Avasakar, 2011). It may mean that not only male islanders migrate for construction and manufacturing employment overseas but also that females are leaving for service work in hotels, restaurants and gift shops in expanding insular resort areas.

Finally, the results also indicate a significant difference in political status between immigrant and emigrant islands, namely that the former are more politically dependent and the latter dominantly sovereign microstates. Such affiliated status is associated with substantial centre-periphery trade, aid and investment flows that partly explain why dependent islands generally outperform their independent neighbours (Dunn, 2011). The somewhat fluid and/or amorphous political status particularly of offshore islands also affords the strategic use of jurisdictional resources by island policy makers to manipulate metropolitan ties for local benefit. In so doing the dependencies carve out economic niches like tax havens, offshore banking centres and duty-free manufacturing entrepôts. This is the so-called PROFIT model of small island economy elaborated by Baldacchino (2006). In short, a considerable body of recent research has argued that affiliated political status is a major dimension explaining why non-sovereign outperform sovereign island microstates (Armstrong and Read, 2000) and, indeed, why the post-War march of decolonisation has stalled on their shores (McElroy and Pearce, 2006). This outcome in addition to the above discussion of other aspects of the socio-economic and demographic profiles concludes that differential migration does discriminate the structure and behaviour of small, mainly tropical, islands in a fundamental way.

The Provisional Island Migration Model

In order to develop a comprehensive island migration model, bivariate descriptives were first examined by conducting pairwise analysis in order to check whether there is any multicollinearity between predictor variables. According to the results of the pairwise analysis, four independent variables, namely POPGROWTH, SIZE, DR, and SEXRATIO, were taken out due to high multicollinearity. Next, to achieve the highest degree of explanation and best-fitted model, a backward step-wise model building approach was implemented by first including all predictor variables and then dropping those that did not show statistical significance.

Table 4 presents the results of fitting the taxonomy of multiple regression models for net migration, as a function of logPCGDP, WORKAGE, ADULTLIT, and POLIDEP. In Model 1, controlling for the rest of the predictor variables, logPCGDP, WORKAGE, and POLIDEP show statistically significant positive association with net migration while ADULTLIT is negatively related to net migration. However, all the rest of the predictor variables do not show any statistical significance with net migration. The R² value of Model 1 is 0.71, indicating that all variables together account for 71% of the variation in the net migration rate.

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In Model 2, only the four variables that showed statistically significant relationships with net migration in the previous model, adjusting for all other variables, were included. They are logPCGDP, WORKAGE, POLIDEP, and ADULTLIT. According to the result, all four variables show statistically significant relationships with island net migration, controlling for the rest of the variables, and are responsible for roughly two-thirds of all of the variation in island migration ($R^2=0.66$). The 5% reduction in R^2 value compared to Model 1 is expected and is a relatively small reduction since five predictor variables were excluded from Model 1 to Model 2. Moreover, the p-values corresponding to each predictor variable have improved compared to Model 1, indicating improved accuracy. Therefore, Model 2 is chosen as the final model. In brief, net migration is a positive function of dependent political status, the percentage of the working-age population and log per capita income, and a negative function of the literacy rate.

The final prediction equation is presented below:

$$\overline{NMR} = -39.939 + 3.876\logPCGDP + 69.883WORKAGE - 50.173ADULTLIT + 7.472POLIDEP$$

A literal straightforward interpretation of the regression coefficients of this provisional island migration model suggests the following. On average, in the population, a 1% difference in the percentage of working-age population positively corresponds to a 69.9 unit difference in the net migration rate. Meanwhile, on average, politically dependent islands corresponds to 7.5 unit higher net migration rate compared to politically independent islands. Moreover, on average, in the population, a 1% point difference in adult literacy rate negatively corresponds to 50.2 unit difference in island net migration. Lastly, a one-unit difference in log per capita GDP is positively associated with 3.9 unit difference in net migration.

	Parameter Estimate (se)	
	M1	M2
Intercept	-62.550 (52.480)	-39.939*** (12.562)
logPCGDP	4.035* (2.000)	3.876*** (1.231)
UNEMP	10.950 (20.510)	
SERVICEGDP	6.146 (7.726)	
WORKAGE	78.932* (38.776)	69.883*** (20.824)
logBR	2.524 (8.245)	
LIFEEXP	0.068 (0.348)	
logIMR	-0.175 (2.609)	
ADULTLIT	-52.874*** (17.69)	-50.173*** (12.562)
POLIDEP	9.669***	7.472***

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	(3.091)	(2.168)
<i>R² Statistics</i>	0.7160	0.6599
<i>SSModel</i>	1613.50	1692.37
<i>SSResidual</i>	640.14	872.39
<i>dfResidual</i>	20	29

Note: *p<0.10; **p<0.05; ***p<0.01

Table 4. Results of fitting a taxonomy of multiple regression models for NMR as a function of *logPCGDP*, *WORKAGE*, *ADULTLIT*, and *POLIDEP* (n=39)

These four important migration determinants are interpreted as follows. First, immigration is positively associated with political affiliation since it is these dependencies or SNIJs that effectively parley their jurisdictional resources into successful niche enclaves in tourism, offshore finance and export manufacturing in the post-War global economy. It is this malleable or open-ended political status that enables them to creatively secure benefits from their metropolitan patrons. Second, such islands attract migrant labour because of the lucrative job opportunities available as indicated by their relatively superior per capita income levels. As suggested in the literature, livelihood mobility in the post-War era is primarily the search for economic advancement and opportunity. According to Massey and others (1993: 455), “the volume of international migration is directly and significantly related, over time and across countries, to the size of the international gap in wage rates” (ibid). The favourable gap in average income share by the dependencies (see Table 3) is ample evidence of their relatively dynamic economies and of their attraction for migrants.

A third and closely related dimension of these immigrant island societies is a burgeoning working-age population. This variable identifies in particular the expansion of demand for domestic goods and services and related construction activity associated with rising affluence and middle class status, and increasing family formation by young immigrants. It suggests swelling demands for homes, consumer durables, personal and other services, and public infrastructure (schools, hospitals, roads, etc.). Fourth, contrary to the hypothesis, migrants also seem to be drawn to a lower level of educational achievement as measured by adult literacy. On the one hand, this may simply be a spurious outcome that suggests the need for a better indicator of educational attainment. On the other hand, it may indicate the flow of more educated islanders from the larger sovereign microstates like Jamaica and Fiji that are endowed with strong secondary and tertiary educational institutions toward the smaller non-sovereign islands which lack such infrastructure but are booming with opportunity. Such a result and interpretation, however, clearly point to the need for further research.

Conclusions

Because the propensity to migrate is so pervasive, island societies are often characterised by a so-called “culture of migration” (Connell, 2007). This study attempted

to examine aspects of that culture by empirically explaining the migration behaviour of some 42 small island jurisdictions less than three million in population spread across the Atlantic, Caribbean, Pacific and Indian Oceans. Thirteen socio-economic and demographic variables were selected first to develop two contrasting profiles of 23 immigrant and 19 emigrant islands. Results indicate that immigrant islands are significantly more affluent than their emigrant counterparts with more robust economies, more rapid population growth, larger working-age populations and lower average unemployment. The former are also characterised by more advanced health systems, as suggested by significantly higher life expectancy and lower infant mortality. In addition, they exhibited higher labour force participation and, as expected, lower fertility, suggesting they were more demographically mature than their emigrant neighbours. In short, affluent immigrant islands functioned as the economic destinations for the labour from the relatively stagnant emigrant islands.

This study also developed the first provisional multivariate model of small island migration determinants. They include four separate but related influences. First, political affiliation allows immigrant islands to carve out profitable export niches in the expanding global economy. Second, because these opportunities often involve labour-intensive international services (eg tourism, offshore finance) and light manufacturing (eg textiles, electronics), such immigrant destinations are characterised by high per capita income levels and tight labour markets. Third, in addition to the growth of export demand, young burgeoning working-age migrants swell the local population and expand the demand for domestic goods, services and investments which further sustain island economic activity in these dynamic immigrant island societies. Finally, rising affluence and low unemployment in immigrant communities also draw in relatively educated migrants, as measured by differential literacy rates, from more saturated labour markets elsewhere seeking work commensurate with their skills. In particular, this last finding is contrary to the literature that educational opportunity is a traditional motive for migration, and it clearly suggests the need for further research covering more islands, employing perhaps other variables, and developing case studies to explore the contours of island migration more directly.

While this study has focused on linear migration, ie the movement of labour from islands of lower to higher socio-economic opportunity, there is considerable literature on short-term seasonal migration among island destinations as well as longer term migration circulation, ie emigration and return involving the return inflow of skilled labour and investment. In the first case, seasonal migration in the Caribbean dates back to the early twentieth century when Bahamians annually migrated to Florida and Jamaicans to Central America to harvest fruit (Thomas-Hope, 1992). Since World War II, to cite two inter-island examples, cane-cutters from the Windwards periodically travelled to Trinidad, and Dominicans found seasonal employment in Guadeloupe and Martinique (Richardson, 1983). In Oceania, there is also considerable experience of seasonal migration of Pacific Islanders to Australia and New Zealand to maintain a sustainable agricultural labour supply in those metropolises (Alkema, 2012).

In the second case of migration circulation, according to Hugo (2003), modern forms of transport and communication have greatly reduced the distance between labour surplus origin and labour shortage destination nations, and spawned a substantial increase in non-permanent circular migration between countries. Examples in the Caribbean include the post-War emigration of West Indians to and from Great Britain, as well as the interregional flows of Leeward Islanders to and from the US Virgin Islands (de

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Albuquerque and McElroy, 1982) and the oil refineries of Aruba and Curacao (Connell and Conway, 2000). Among the classic MIRAB economies of the Pacific, circulation to and from metropolitan labour markets in Australia, New Zealand, and to a lesser extent, the United States, has been conditioned by a number of factors. Besides immigration policy in the receiving countries (Stahl and Appleyard, 2007), these factors include distance, the chronic need for remittances at home, and the large size of welcoming island communities established abroad (Ahlburg and Brown, 1998). If and when the data can be disentangled to identify these different migration streams, further research may allow comparative examination of seasonal and longer-term migration patterns and their implications for island development.

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