

EMIGRATION:

Bermuda's Qualified Human Capital Departs



A 2010 Census Analytical Brief



GOVERNMENT OF BERMUDA

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Introduction

According to Bermuda's 2010 Population and Housing Census, emigration was defined as the permanent relocation of persons who moved abroad after the 2000 Census Day (20 May 2000) for at least one year between 21 May 2000 and 20 May 2010. This definition excludes cases where persons lived abroad temporarily on vacation, for educational purposes or medical reasons. In addition, members of households who emigrated during this decade and were known to have returned to Bermuda during the same period were excluded.

Using an analogy, the process of emigration is likened to the flow of water that drains out of a sink. The water that runs from the faucet symbolizes the flow of persons to the island of Bermuda (or immigrants). The pool of water in the sink represents Bermuda's population of working, non-working and children; and the drainage of water signifies the flow of persons out of Bermuda (or emigrants) when the drain is released. This census brief focuses on the characteristics of Bermuda's emigrant population during the intercensal period. It also highlights the impact of the demographic process of 'brain drain', that is, the loss of skilled human capital as a result of persons emigrating.

The 2010 Census of Population and Housing marked the first time information about Bermuda's former residents living abroad was collected. This question was asked of household reference persons who were responsible primarily for affairs of their households. Collecting data on emigration is important to determine the profile

and extent to which persons are leaving Bermuda. In particular, the loss of skilled human resources can have an adverse effect on the development of a country. The following 2010 Census data was analyzed about Bermuda's emigrants:

- year they moved abroad;
- date of birth;
- sex;
- race;
- Bermudian status;
- primary reason for leaving Bermuda;
- country of destination;
- highest academic qualification at the time of moving abroad; and
- main occupation prior to moving overseas.

An analysis of this type of information provides a clear picture for planners and decision makers to assess the impact of emigration as it relates to the loss of human technical expertise, skills and knowledge.

What You Should Know About This Brief

At the end of Bermuda's 2010 Population and Housing Census data collection period, there were roughly 4,400 outstanding households for which data had not been obtained. To address this undercount, and in alignment with statistical best practices, administrative data sources were utilized to impute important demographic data items such as age, sex, date of birth, Bermudian status, employment and

race. Therefore, census records for 1,106 households comprising 2,551 persons were imputed for these demographic data items.

The imputation reduced the undercount of outstanding households and resulted in the Department of Statistics successfully obtaining a rate of 96% coverage of households during the 2010 Census. However, emigration data was not imputed and therefore the tables within this brief exclude persons for which detailed information was not obtained.

There were a total of 1,121 persons who were reported to have emigrated during the intercensal period. However, detailed data was captured for 974 of these persons which forms the basis of the tables and analysis in this brief.

For supporting data that is referenced in this publication but not provided, please contact

the Social Division at the Department of Statistics at e-mail address statistics@gov.bm or telephone number 297-7761.

Note: Percentages may not add to 100% due to rounding.

Limitations

The census information collected on emigrants was proxy data and limited to the information provided by the household reference person. The main limitation of the 2010 Census emigration data is that it was unable to capture situations where entire households left the island, as there was no one to provide this information. In addition, if all of the household members of an emigrant moved to another household in Bermuda, the information about the emigrant would not have been collected.

2010 Census Highlights for the Emigrant Population

- A total of 1,121 persons emigrated from Bermuda between 2000 and 2010.
- The median age of emigrants was 28.0 years.
- Emigration flows were highest (41%) during the period 2007–2009.
- Persons steered more (39%) towards emigrating to the United States of America.
- Nearly half or 47% of emigrants who were Bermudian left for employment reasons.
- More than half or 53% of Bermudian emigrants held degrees.
- Almost three out of 10 emigrants 16 years and older held professional occupations.

Demographic Characteristics of Emigrants

Bermuda's 2010 Population and Housing Census collected detailed information for 974 persons who emigrated from the island between 2000 and 2010 (Table 1). Seventy per cent of emigrants were Bermudian and 27% were non-Bermudian. Irrespective of Bermudian status, the majority of emigrants were 16 to 34 years old. However, a greater proportion of Bermudians (64%) were categorized in this age group than non-

Bermudians (38%) (Table 1). The median age of all emigrants was 28.0 years and the median age of non-Bermudians was 4.7 years higher than Bermudians. There was an even split of males and females who emigrated and there was no difference between the sexes by Bermudian status. During the decade, the proportion of emigrants who were white (42%) was one percentage point higher than the proportion of black emigrants (41%). An analysis by Bermudian status indicated that a higher proportion of Bermudian emigrants were black than white and the reverse was the case for non-Bermudians. This is reflective of the racial composition of the respective intercensal Bermudian and non-Bermudian populations.

Table 1

Emigrants by Bermudian Status and Selected Demographic Characteristics at Time of Emigration, 2010

Demographic Characteristics	Bermudian Status							
	Number				Percentage Distribution			
	Total	Bermudian	Non-Bermudian	Not Stated	Total	Bermudian	Non-Bermudian	Not Stated
Total	974	684	266	24	100	100	100	100
Age Group								
Under 16 Years	112	80	28	4	11	12	11	17
16 to 34 Years	554	441	102	11	57	64	38	46
35 to 49 Years	165	97	66	2	17	14	25	8
50 to 64 Years	75	47	26	2	8	7	10	8
65 Years and Over	18	12	4	2	2	2	2	8
Not Stated	50	7	40	3	5	1	15	13
Median (Years)	28.0	27.1	31.8					
Sex								
Male	485	339	133	13	50	50	50	54
Female	486	343	132	11	50	50	50	46
Not Stated	3	2	1	0	**	**	**	**
Race								
Black	401	322	65	14	41	47	24	58
White	405	259	139	7	42	38	52	29
Mixed and Other	140	79	58	3	14	12	22	13
Not Stated	28	24	4	0	3	4	2	**

** Less than 1%

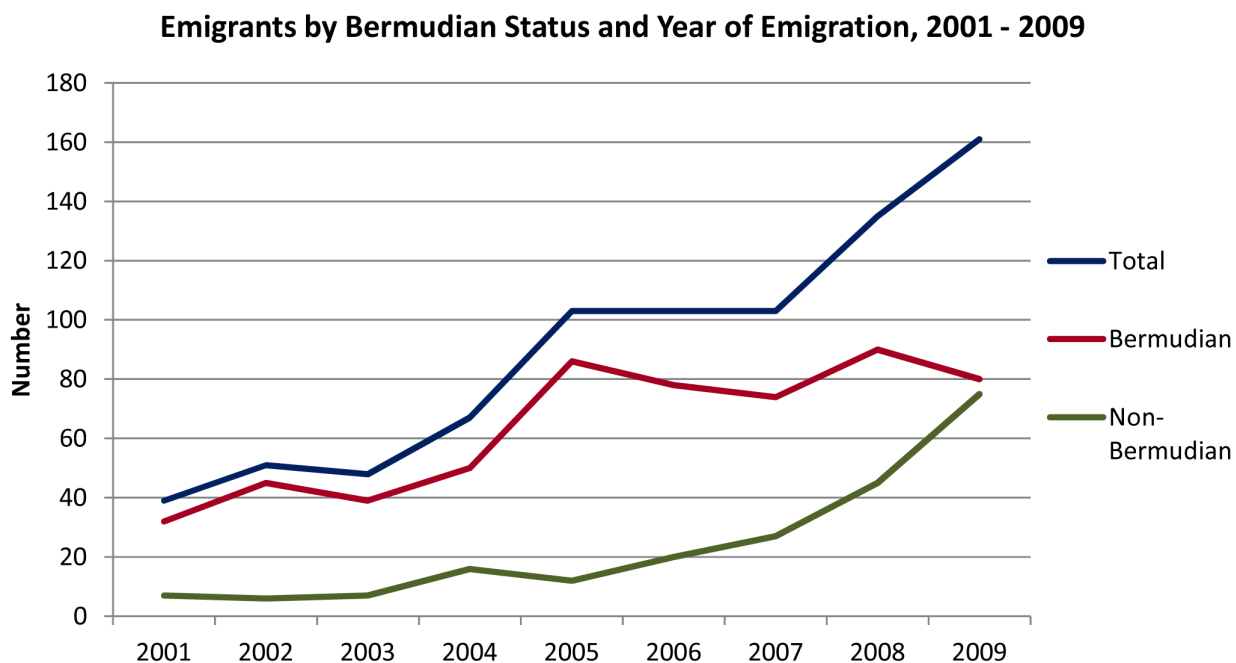
Source: Population and Housing Census, 2010

Bermuda Emigration Flows, 2000 – 2010

Figure 1 illustrates that although there were some fluctuations in persons leaving the island between 2001 and 2009, the general trend was an increase in the total number of emigrants over time. In fact, there was a 313% (122 persons) surge in the total number of emigrants during this period. It is noteworthy that Bermudian emigrants were the major contributors to the variations in the outflows. The largest proportion of emigrants departed in 2009 (20% or 161 persons) and 2001 was the year with the smallest proportion of emigration (5% or 39 persons). Bermudians (16% or 90 persons) were more likely to have emigrated in 2008 whereas non-Bermudians (35% or 75 persons) were more likely to do so in 2009.

Emigration data collected in 2000 and 2010 are not for the entire calendar year and therefore are not comparable with the years 2001 to 2009. The following analysis will focus solely on three equal time periods to facilitate comparisons. Table 2 shows that the time period with the highest flow of emigrants was 2007–2009 (41%) and that 2001–2003 recorded the lowest (14%). There was little variation in the timing of emigration when comparing sex. The time period 2007–2009 recorded the greatest level of emigration for Bermudians and non-Bermudians. However, a far greater proportion of non-Bermudians (55%) left the island during this time period than Bermudians (36%).

Figure 1



Source: Population and Housing Census, 2010

Table 2**Emigrants by Selected Demographic Characteristics and Period of Emigration, 2010**

Demographic Characteristics	Period of Emigration ¹							
	Number	Percentage Distribution						
	Total	Total	2000	2001-2003	2004-2006	2007-2009	2010	Not Stated
Total	974	100	6	14	28	41	9	1
Sex								
Male	485	100	6	15	25	42	10	1
Female	486	100	6	14	31	39	8	1
Not Stated	3	100	33	**	**	67	**	**
Bermudian Status								
Bermudian	684	100	8	17	31	36	7	1
Non-Bermudian	266	100	3	8	18	55	14	2
Not Stated	24	100	4	8	46	33	**	8

** Less than 1%

Source: Population and Housing Census, 2010

¹ The year 2000 represents the period from May 21, 2000 to December 31, 2000.

The year 2010 represents the period from January 1, 2010 to May 20, 2010.

Bermuda Emigration Flows by Country/ Region of Destination

Table 3 shows that the top three countries/ regions of destination chosen by emigrants were the United States of America (USA) (39%), the United Kingdom (UK) (25%) and Canada (16%). This may be attributed to a combination of factors such as:

1. Foreign-born non-Bermudians returning to their country of former residence.
2. Students who completed their studies overseas choosing to reside in one of these countries.
3. On the enactment of the *British Overseas Territories Act, 2002*, Bermudians who were British Overseas Territories Citizens had the

opportunity to obtain a passport as a British citizen.

Females were more likely to have emigrated to the USA and UK whereas males were more likely to have emigrated to Canada. When deciding to relocate overseas, Bermudians differed in country of destination compared to non-Bermudians. Eighty-seven per cent of Bermudian emigrants moved to the USA, UK or Canada compared to only 59% of non-Bermudians. This suggested that non-Bermudians were more likely to have emigrated to other regions of the world (Table 3). Although both Bermudians (43%) and non-Bermudians (27%) were most likely to have emigrated to the USA, Bermudians' second choice was to relocate to the UK while non-Bermudians chose Canada.

Table 3**Emigrants by Country/ Region of Destination and Selected Demographic Characteristics, 2010**

Demographic Characteristics	Country/ Region of Destination											
	Number	Percentage Distribution										
		Total	United States of America	United Kingdom	Canada	Caribbean	Azores/ Portugal	Other European Countries	Asian Countries	African Countries	Other Countries	Not Stated
Total	974	100	39	25	16	5	1	4	3	1	4	2
Sex												
Male	485	100	37	23	17	7	2	4	4	2	3	2
Female	486	100	39	26	15	4	1	4	3	1	6	1
Not Stated	3	100	100	**	**	**	**	**	**	**	**	**
Bermudian Status												
Bermudian	684	100	43	29	15	3	**	3	2	1	3	1
Non-Bermudian	266	100	27	14	18	10	4	6	8	2	6	3
Not Stated	24	100	38	29	8	8	**	**	**	**	13	4

** Less than 1%

Source: Population and Housing Census, 2010

Reasons for Emigrating

Leading Reason for Emigrating was Employment

The top two reasons why persons left Bermuda were employment (39%) and family (25%) (Table 4). Roughly 18% of respondents indicated other reasons why persons left the island. Some of these included: affordability, retirement and to exercise the right of free establishment (each represented 2%) and crime was chosen by 1% of emigrants. Males (42%) were more likely to leave the island for employment reasons than females (36%) (Table 4). On the other hand,

females (28%) were more likely to emigrate due to family reasons than males (22%). For nearly half (47%) of Bermudians, employment was their primary reason for leaving compared to one-fifth (20%) of non-Bermudians. Bermudians and non-Bermudians were equally likely to have emigrated due to family reasons (25%). Nearly a quarter (24%) of non-Bermudians were reported to have left the island because their work permit had expired or was terminated. It should be noted that non-Bermudians who left for employment reasons would not have an expired/ terminated work permit, unlike the 'work permit expired/ terminated' category.

Table 4**Emigrants by Primary Reason for Emigrating and Selected Demographic Characteristics, 2010**

Demographic Characteristics	Primary Reason for Emigrating								
	Number	Percentage Distribution							
	Total	Total	Employment	Family	Work Permit Expired/ Terminated	Other Returning Citizens	Environment	Other	Not Stated
Total	974	100	39	25	7	5	4	18	2
Sex									
Male	485	100	42	22	7	5	5	17	2
Female	486	100	36	28	6	6	3	20	2
Not Stated	3	100	**	**	**	**	**	100	**
Bermudian Status									
Bermudian	684	100	47	25	**	2	5	20	2
Non-Bermudian	266	100	20	25	24	15	2	13	2
Not Stated	24	100	25	25	4	**	4	29	13

** Less than 1%

Source: Population and Housing Census, 2010

Educational Profile of Emigrants 16 Years and Older

Bermuda is Experiencing the 'Brain Drain' Effect

Brain drain can be viewed as an 'economic cost' to a country, as persons with qualifications and skills leave. Nearly half (48%) or 418 emigrants 16 years and older had a degree as their highest academic qualification (Table 5). This is more than double the proportion of degree holders (20%) in Bermuda's total population 16 years and older in 2000. As a large proportion of emigrants were degree holders, this is an indication of 'brain drain' where highly qualified persons are lost from the host country (Bermuda) to the benefit of the country of destination.

Table 5 shows that overall, female emigrants had higher academic qualifications than males. Although an equal proportion of males and females earned technical certificates or associate degrees, more than half of female emigrants (53%) had a degree compared to 44% of male emigrants. Additionally, a higher proportion of non-Bermudian emigrants (14%) had earned technical/vocational certificates or associate degrees than Bermudians (9%). Bermudian emigrants fared better at the degree level with 53% having attained degrees compared to 37% of non-Bermudian emigrants. Eighty-three per cent of Bermudian degree holders were under 35 years of age. Of particular significance is that 37% (322 persons) of emigrants 16 years and over were Bermudian degree holders, as it is important for Bermuda to retain the most qualified Bermudians to fill local jobs. The departure of young Bermudian degree holders would likely lead to the need to recruit qualified non-Bermudians to fill the void in the job market.

Table 5**Emigrants Aged 16 Years and Older by Selected Demographic Characteristics and Highest Academic Qualification at Time of Emigration, 2010**

Demographic Characteristics	Highest Academic Qualification						
	Number	Percentage Distribution					
	Total	Total	None	High School Certificate	Tech./ Voc. Cert./ Assoc. Degree	Degree	Other/ Not Stated
Total	862	100	5	27	10	48	9
Sex							
Male	430	100	7	30	10	44	9
Female	431	100	3	25	10	53	8
Not Stated	1	100	**	**	**	**	100
Bermudian Status							
Bermudian	604	100	4	29	9	53	5
Non-Bermudian	238	100	9	24	14	37	16
Not Stated	20	100	5	30	10	40	15

** Less than 1%

Source: Population and Housing Census, 2010

Occupational Profile of Emigrants 16 Years and Older

The two leading occupational categories of persons departing Bermuda were professionals (29%) and service workers and shop and market sales workers (19%) (Table 6). The least popular occupational groups for emigrants were plant and machine operators and assemblers (2%) and skilled agricultural and fishery workers (2%).

A total of 642 persons who emigrated from Bermuda had held a job and were part of the Bermuda workforce prior to their departure. Interestingly, the number of working males (317) and females (324) who emigrated was relatively

the same. Sixty-seven per cent (427 persons) of the working population were Bermudian. Additionally, 28% (121 persons) of Bermudian emigrants worked in professional occupations such as accountants, computing professionals and teaching professionals. The most popular professional occupations held by non-Bermudian emigrants were accountants, registered nurses, primary education teaching professionals and computing professionals. In the second most common occupational group of service workers and shop and market sales workers, Bermudian emigrants were most likely to be salespersons, waiters/ waitresses and beauticians. On the other hand, non-Bermudian emigrants worked primarily as nursemaids/ nannies, waiters/ waitresses and private sector housekeepers in this occupational group.

Table 6**Emigrants Aged 16 Years and Older by Selected Demographic Characteristics and Major Occupational Groups Prior to Emigration, 2010**

Demographic Characteristics	Major Occupational Groups ¹											
	Number	Percentage Distribution										
	Total	Total	Senior Officials & Managers	Professionals	Technicians & Associate Professionals	Clerks	Service Workers & Shop/ Market Sales Workers	Skilled Agricultural & Fishery Workers	Craft & Related Trades Workers	Plant and Machine Operators & Assemblers	Elementary Occupations	Not Stated
Total	642	100	8	29	9	10	19	2	9	2	3	10
Sex												
Male	317	100	6	26	9	3	18	3	15	3	6	10
Female	324	100	10	31	9	16	21	**	2	1	**	11
Not Stated	1	100	**	**	**	100	**	**	**	**	**	**
Bermudian Status												
Bermudian	427	100	9	28	10	12	15	1	9	3	3	10
Non-Bermudian	197	100	6	28	5	7	28	3	9	1	4	11
Not Stated	18	100	11	39	17	**	11	**	6	**	**	17

¹ Excludes Armed Forces due to no cases reported.

** Less than 1%

Source: Population and Housing Census, 2010

Conclusion

The 2010 Population and Housing Census indicated that the time period with the most emigration was 2007 to 2009. During the decade, the majority of emigrants were 16 to 34 years of age and an equal proportion of males and females emigrated. A greater share of emigrants were

Bermudians than non-Bermudians and a higher percentage of whites emigrated than blacks. The data shows that emigrants 16 years and older were most likely to have degrees, resulting in brain drain. The professional category was the leading occupational group for emigrants and the top reason for emigrating was employment. The USA was the most prominent country of destination for emigrants.



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