



Migration Patterns of Higher Education Graduates in Zamboanga del Norte

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Abstract

This study determined the migration patterns of graduates from the Province of Zamboanga del Norte (ZaNorte) during the School Years SY 2006 –2011. A random sample of 384 graduates from the eight colleges and one university in the Province responded to the questionnaire. It was found out that about one-fourth of the graduates of the province moved out for job-related reasons. Migration patterns of graduates in terms of age, gender, marital status, parents' educational background and income, and their high school and college backgrounds, activity after graduation, their employment status, sector and economic branch they worked in, their income, and relation of education and job were determined. The perceptions of the graduates of ZaNorte were found to be positive. The Province of ZaNorte needs to develop, retain and sustain highly skilled graduates to improve its economy.

Keywords and Phrases: *graduate migration patterns, socio-economic characteristics, graduates, migration decisions*

Introduction

Higher education graduates are considered as assets to the community in which they reside since they are associated with the socio-economic prosperity in the area (McCauley, 1999). Sommers (2003) stressed that highly knowledgeable, very skillful and upright graduates typically get attracted to higher paying jobs consequently contributing towards improving the economic growth in the area. Maintaining them is essential for economic growth; lack of them might create educational brain drain as well as economic distress in the area (IFPI, 2009).

The migration of graduates is a combination of human capital and utility theories. The Human Capital Theory (HCT) cited by Olaniyan and Okemakinde (2008) emphasizes that the economic prosperity and functioning of a nation depend on its physical and human capital stock. The Utility Theory of Migration cited by Kondo (2009) states that individual choice of place to live depends on its utility.

During the past five years, the Province has noticeably lost a great number of graduates. They either migrated to pursue advanced higher education out of the province

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or relocated to other cities and countries after graduation to seek jobs. Some graduates from the Province stated that they migrate out of the province because of the inherent disadvantages of living in a community where its economic growth is sluggish, the job prospects are scarce and limited and its wage range is stumpy, and where the poverty incidence is rising.

The National Statistical Coordination Board (NSCB) lately estimates that the magnitude of poor families in Zamboanga del Norte increased by about 8.1 percent from the 2006 figure of 101, 511. In 2009, the poverty incidence of families or the proportion of families in the Province with per capita income falling below the poverty line surges by 2.4 percentage points for a period of three years or 36.6 percent in 2009 from 34.2 percent in 2006 (NSCB, 2009). In 2011, the Province showed improvement but by only a minimal 1.2 percent.

The Province must, therefore, place emphasis on attracting or creating jobs that provide higher salaries so that high performing graduates in will be encouraged to stay in the province, and that out-of-the-Province graduates will be kindled to relocate here. In today's knowledge economy, the Province of ZaNorte simply cannot afford to lose graduates to other areas.

With this premise, this study determining the migration patterns of graduates in the Province of ZaNorte was conducted. Determining where these graduates move and ascertaining why they opt to migrate after obtaining their respective degree from HEIs in the Province and the factors that influenced migration decisions are of sufficient importance for the local government of Zamboanga del Norte to address this issue by designing public policy that helps increase the retention rate of graduates; hence serving current and future students better, consequently improving the socio-economic status of the Province as a whole.

Objectives

This study aimed to determine the migration patterns of graduates from the Province of Zamboanga del Norte (ZaNorte) during the School Year SY 2006 –2011.

Specifically, it seeks to find out the proportion of graduates from the Province of ZaNorte who decided to stay in the Province and moved out of from the Province; examine the reasons why they decide to either stay or leave the Province; determine data of migration of graduates from ZaNorte in terms of age, gender, marital status, parents' socio-economic status to include their parents' high educational attainment and combined annual income, and the graduates' high school and college educational background to include type of school, degree obtained, major/field of study and grade point average (GPA) at graduation.

This study also intends to find out the activity of graduates after graduation, their employment status, sector and economic branch they worked in, their income, relation of education and job and the perception of graduate of the economic, social, cultural, and environmental status of the Province of ZaNorte.



Significant relationship between migration decision and personal characteristics of the graduates and their perceptions of the economic, social, cultural, and environmental status of the Province was tested. This study also intended to propose a binary logistic regression model that could predict migration decision of future graduates from the Province; and finally, to provide public policy recommendations based on the results of the study.

Research Method and Design

This study employed the descriptive-survey method of research with the use of questionnaire in gathering the needed information. This study was conducted in the Province of Zamboanga del Norte (ZaNorte), Region IX – Zamboanga Peninsula.

A randomly selected 384 graduates from eight (8) colleges and one (1) university in the Province during the School Years 2006 – 2011 voluntarily participated in the email and completed the valid and reliable questionnaire personally administered by selected enumerators. The questionnaire duly made for the purpose of this investigation used IFPI (1999), and Tomatzky, et. al. (2001) as references in constructing the final survey-questionnaire.

The data gathered were tabulated, analyzed and interpreted using frequency count, percentage, rank, and weighted mean. Binary Logistic Regression Analysis was performed to predict migration decision of future graduates.

Results and Discussion

Proportion of Graduate-Respondents Who Decided to Stay and Moved Out from the Province. Of the 384 respondents, 293 or 76.3 percent decided to stay in the Province of ZaNorte and only 91 or 23.7 percent moved out from the Province or they migrated to other place outside the Province.

Reasons Why the Graduates Decided to Leave the Province. The main reason why the graduates of the ZaNorte decided to leave the Province was job-related with an average weighted value (AWV) of 3.7, followed by quality of life-related factors obtaining an AWV of 3.31, and last is family-related factors with an AWV of 3.24.

Having an average weighted mean (AWM) of 4.56, “Career opportunities seemed better outside the Province” ranked first among the reasons why the graduates decided to leave the Province. It is followed by “the pay/benefits seemed better in positions outside Province” obtaining an AWM of 4.49.

Following top reasons are: the job they got outside the Province was better than any job they were able to get in the Province (AWM of 4.43); they wanted to work for a specific employer that does have complete facilities (AWM of 4.37); they could not find a job that they wanted in the Province (AWM of 4.04); and, they had to live in a specific area of the country other than the Province because of their career field (AWM of 3.80). Indeed, the 24 % of the graduates that left the Province did so in order to land a better or better paid job and to enhance their career opportunities.

For quality of life-related factors, the graduates who left the Province divulged that they liked the recreational activities in the place to which they moved better than those in this Province (AWM of 3.39), followed by “they liked the cultural opportunities and social life to which they moved than those in the Province (AWM of 3.35). They also revealed that when they left the Province, they returned to a location in which they had lived before (AWM of 4.34), and they always planned to leave ZaNorte (AWM of 3.08).

Reasons Why the Graduates Decided to Stay in the Province. The main reason why the graduates of the ZaNorte decided to stay in the Province was quality of life-related with an average weighted value (AWV) of 3.74, followed by job-related factors obtaining an AWV of 3.26, and last is family-related factors with an AWV of 3.15.

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The top among the reasons why the graduates decided to remain in the Province is they think they found a job that they wanted in the Province which obtained an AWM of 3.85. It is followed by “the pay/benefits seemed better in positions outside Province” obtaining an AWM of 3.84. Following top reasons are: Career advancement opportunities seemed better in the Province (AWM of 3.72); and that they wanted to work for a specific employer that does have complete facilities (AWM of 3.58).

Certainly, for those graduates that decided to stay in the Province, the main reason was the desire to stay close to family and friends. The second most important reason were quality-of-life-related reasons (cost of living, climate), and the fact, that job in the province was found (or even seemed to offer better pay or career opportunities than elsewhere) came in third.

Age. Almost half or 45.57 percent of the graduate-respondents who left the Province were between 22 – 25 years old. Only 10.13 percent were between 18 and 21 years old. This reflects new graduates’ decisions to migrate to begin their professional career. Graduates in HEIs normally finished their respective degrees between age group of 22 – 25 years old.

Gender. More than half or 58.23 percent of the graduate-respondents who left the Province were females while only 41.77 percent were males. Female graduates tend to migrate in areas outside ZaNorte because job opportunities in the Province that require female workforce are insufficient. Jobs for women are difficult to find since most of the livelihoods in the Province are agriculture-based.

Marital Status. Almost two-thirds or 60.76 percent of the graduate-respondents who left the Province were single while only 39.24 percent were married. Most of the single graduates are agitated in starting their careers outside the Province than those who are married – they have to stay in the Province for their families.



Parents' Socio-Economic Status. Table 1 presents the profile of graduates who left in terms of their parents' socio-economic status to include highest educational attainment and combined annual income. The graduates' parents mostly have a high school background or less (> 50 %), while 20 % have had some college education, but not finished it. Roughly 20 % of the graduates' parents hold a bachelor's degree (and about 2% a higher degree) themselves. It is the mothers that more often have a higher education than the fathers. Around 75% of the graduates therefore are the first generation with a college degree in their family.

The annual income of the parents mostly is less than PhP. 100, 000 per year (46.84%), while a quarter or 30.38 percent earns between PhP. 100, 000 and PhP. 200, 000, and slightly less than a fifth percent earns up to PhP. 300, 000. This divulges the graduates' (who belong within or below the poverty threshold) enthusiasm to work outside the Province to earn high salary, thus improving the quality of their respective family's lives.

Table 1 Graduates' Parents' Socio-Economic Status to include Highest Educational Attainment and Combined Annual Income

| | Father | Mother | Parents combined |
|---------------------------------------|--------|--------|------------------|
| Highest Educational attainment | | | |
| Less than high school | 20.25% | 20.25% | |
| High school | 36.71% | 30.38% | |
| Some College | 22.78% | 24.05% | |
| Associate Degree | 1.27% | 0% | |
| Bachelor | 17.72% | 22.78% | |
| Master | 1.27% | 2.53% | |
| Doctor | 0% | 0% | |
| | | | |
| Annual Income (in PhP) | | | |
| Less than PhP100000 | | | 46.84% |
| PhP101,000-PhP200,000 | | | 30.38% |
| PhP201,000-PhP300,000 | | | 17.72% |
| PhP301,000-PhP400,000 | | | 5.06% |
| More than PhP400,000 | | | 0.00% |

Graduates' High School and College Educational Background. Table 2 presents the profile of graduates in terms of their college educational background to include type of school attended, degree obtained, major/field of study and grade point average (GPA).

Almost all graduates (97%) attended four years of high school. In stark contrast to their college education, which was mostly obtained at private schools (60.19%), the great majority of the graduates visited public high schools (75.82%). The great majority (91.6%) immediately pursued college education right after completing high school, and only a small minority took one (5.1 %) or two years (2.4 %) off between high school and college.

Those who left the Province studied slightly more often at private universities and obtained higher degrees than those who stayed in the province. The fields of study did not differ much between the two groups, with the notable exception of “education” – where the graduates stayed in the province significantly more often- and “engineering”, where the graduates more often left.

The GPA score at graduation does not show a normal distribution but is skewed to the right with more than 20 percent of the graduates achieving grades between 1.5 and 1. The average GPA grades of the two groups were almost identical (1.991 for the leavers and 1.998 for the stayers). Those with the best grades tended to leave the province more often, as did those with grades between 2.5 and 3.

Table 2 Graduates’ High School and College Educational Background to include Type of School Attended, Degree Obtained, Major/field of Study and GPA

| | All Graduates | Leavers | Stayers |
|--|---------------|---------|---------|
| High School | | | |
| Type of High School | | | |
| Private | 24.18% | 26.58% | 23.44% |
| Public | 75.82% | 73.42% | 75.56% |
| Number of Years to Finish High School | | | |
| Less than 2 years | 0.00% | 0.00% | 0.00% |
| 2 years | 0.90% | 0.00% | 1.17% |
| 3 years | 0.60% | 0.00% | 0.78% |
| 4 years | 97.01% | 97.47% | 96.88% |
| 0 5 years | 1.19% | 2.53% | 0.78% |
| 0 More than 5 years | 0.30% | 0.00% | 0.39% |
| College | | | |
| Type of Tertiary School | | | |
| Private | 60.9 % | 63.29% | 60.16% |
| Public | 39.1 % | 36.71% | 39.84% |
| Degree obtained | | | |
| Associate | 11.6% | 8.86% | 12.50% |
| Certificate | 2.4 % | 1.27% | 2.73% |
| Bachelor | 79.7 % | 79.75% | 79.69% |
| Master | 5.1 % | 6.33% | 3.91% |
| Doctorate | 0.3 % | 2.53% | 0.78% |
| Other | 0.9 % | 1.27% | 0.78% |
| Field of study | | | |
| Business | 26.7 % | 29.11% | 28.52% |
| Liberal Arts and Sciences | 8.4 % | 6.33% | 8.98% |
| Natural Sciences | 0.3 % | 0.00% | 0.39% |
| Education | 22.1 % | 17.72% | 23.44% |
| Engineering | 5.1 % | 10.13% | 3.52% |



| | All Graduates | Leavers | Stayers |
|--------------------------|----------------------|----------------|----------------|
| Law | 1.5 % | 3.80% | 0.78% |
| Nursing | 22.1 % | 21.52% | 22.27% |
| Others | 11.9 % | 11.39% | 12.11% |
| GPA at graduation | | | |
| 3.01 and above | 1.2 % | 0.00% | 1.56% |
| 2.51 to 3.00 | 16.4 % | 22.78% | 14.45% |
| 2.01 to 2.50 | 33.4 % | 27.85% | 35.16% |
| 1.51 to 2.00 | 28.4 % | 24.05% | 29.69% |
| 1.00 to 1.50 | 20.6 % | 25.32% | 19.14% |

Activity After Graduation. Table 3 reveals that 75 percent of the graduates were seeking a job after graduating, 21.49 percent stayed idle and only a small minority of 2.09 percent pursued a higher or another degree. Here the biggest differences could be perceived between those graduates that left the province (they were more interested in looking for a job) and those who stayed (of whom almost a quarter decided to stay idle). It is not surprising that a higher percentage or 2.64 percent of those who wanted to continue their studies stayed in the province (and most probably continued their studies at their home university).

Idleness after completion of studies should be discouraged. Clearly not looking for a job, but preferring to stay idle after completion of the studies for a longer period amounts to a waste of public means, and a waste of the quite substantial fees paid to the schools for tuition. It is, however, up to the parents of the lazy graduates to motivate them to seek work, and not to the educational system or society.

Table 3 Activity After Graduation

| Activity after graduating | All Graduates | Leavers | Stayers |
|----------------------------------|----------------------|----------------|----------------|
| Pursue higher degree | 2.09 % | 1.27% | 2.34% |
| Pursue other degree | 0.90 % | 0% | 1.17% |
| Seek job | 75.52 % | 84.81% | 72.66% |
| Stay idle | 21.49 % | 13.92% | 23.83% |

Employment Status. The graduates in the survey mostly were employed full-time (77.8 %), although almost a quarter held only a temporary position. 12.8 percent did not have employment. Part-time and temporary jobs are mainly held by the younger graduates, while the older the graduates get, the more often they hold permanent and/or full time jobs.

Those graduates who left the province significantly more often held full-time temporary jobs, while those who stayed in the province held significantly more often full-time permanent jobs. The two groups, however, did not differ in the percentage of those who were unemployed or held part-time jobs. It might be speculated, that landing a full-

time permanent job is an important reason for staying in the province, while finding full-time permanent jobs outside the province seems to be considerably harder.

Employment Sector. Almost half of the graduates (44%) work in government jobs, and another 13.8 % work in not-for-profit companies, while a scant 5.7 % are self-employed. One third of the graduates found jobs in the private sector. While the ratio of the self-employed and those working in the not-for-profit sector more or less matches expectations, more than one third of the graduates expected to work in the government sector, and less than 50 % wanted to work in the private sector. This ratio is rather disturbing and shows a considerable lack of entrepreneurship and competitiveness on the part of the graduates.

Prospective graduates’ attitudes to working in private sector should be changed. As the government sector per se does not create wealth, but only redistributes wealth generated by the private sector, is it somehow shocking to find, that young, well-educated Filipinos should mostly want to work in government. The private sector should think about setting up PR campaigns that induce graduates to work in the private sector.

Economic branch worked in. Table 4 presents the profile of graduates in terms of the economic branch they worked in. A more detailed analysis shows that in the public sector graduates mainly hold jobs in government agencies (16.98%) and in health care (13.84), whereas in the private sector the largest group works in “professional/business” (23.27%) which is not differentiated into economic branches.

An important difference can be seen in the jobs held by graduates that stayed in the province and those who left. The stayers significantly more often found jobs in the public sector (government – 19.17%, health care – 15%, transportation/public utility – 5.83%), while the leavers more often work in the private sector (construction-15.38%, retail/wholesale – 12.82).

Of the 12.84% of the graduates that were not employed at the time of the survey, more than half of them or 55.81 percent did not find a job in their career field, while 18.6% did not find a job in the geographic location where they wanted to live (and apparently preferred to be jobless rather than to move to more promising locations). A startling 18.6% of the graduates willingly chose not to have a job in order to spend time with their family. Clearly in their case the public funds for their education were wasted.

Table 4 Economic Branch They Worked In

| Economic branch worked in | All Graduates | Leavers | Stayers |
|----------------------------------|----------------------|----------------|----------------|
| Government/Public agency | 16.98 % | 10.26% | 19.17% |
| Education | 5.66 % | 5.13% | 5.83% |
| Transportation/Public utilities | 5.03 % | 2.56% | 5.83% |
| Health Care | 13.84 % | 10.26% | 15.00% |
| Construction | 8.18 % | 15.38% | 5.83% |
| Professional/Business | 23.27% | 23.08% | 23.33% |
| Service Provider Comm | 3.77 % | 2.56% | 4.17% |



| | | | |
|-----------------------------|---------|--------|--------|
| Finance/Insurer/Real estate | 3.14 % | 5.13% | 2.50% |
| Retailer/Wholesaler | 7.55 % | 12.82% | 5.83% |
| Farming | 1.89 % | 2.56% | 1.67% |
| Other service provider | 10.69 % | 10.26% | 10.83% |

Income. Table 5 presents the profile of graduates in terms of income. Most graduates in the survey already earn more than their parents and more than they expected. Only the expectations for the highest income bracket were not met, leaving the average income of the graduates slightly below expectations. Also more parents than graduates belong to the highest income group, which is not surprising, as the graduates mostly are in their twenties only. The average income of the parents therefore is bigger than that of the graduates.

Table 5 Profile of Graduates in terms of Income

| Income (PHP) | All Graduates | Age Range | | | | Expected income | | Parents |
|-----------------------|----------------|-----------|--------|--------|--------|-----------------|---------|----------------|
| | | 18-21 | 22-25 | 26 -29 | 30+ | Leavers | Stayers | |
| Less than 50,000 | 20.3 % | 18.75% | 5.19% | 5.77% | 4.44% | 10.00% | 18.38% | |
| 50,000-100,000 | 20.9 % | 18.75% | 20.78% | 20.19% | 20.00% | 10.00% | 9.56% | 51.0 % |
| 101,000-150,000 | 39.9 % | 12.50% | 22.08% | 22.12% | 13.33% | 25.00% | 26.47% | |
| 151,000-200,000 | 4.4 % | 43.75% | 38.31% | 38.46% | 24.44% | 27.50% | 12.50% | 26.5 % |
| 201,000-250,000 | 13.3 % | 6.25% | 12.34% | 11.54% | 37.78% | 22.50% | 24.26% | |
| More than 250,000 | 1.3% | 0.00% | 1.30% | 1.92% | 0% | 5% | 8.82% | 21.5 % |
| Average Income | 111,700 | | | | | 153,800 | 145,600 | 125,200 |

The salary expectancy differed between leavers and stayers, but leavers had only slightly higher expectations regarding income than stayers (+ 5.6 %). They mostly expected middle income (PhP. 151, 000 to PhP. 200,000), while stayers significantly more often expected a low income, but at the same time also had the highest income expectations.

Relation of Education and Job. Only about 47.5 % of the graduates work in fields that are related to their studies, while 52.5 % do not. This seems to be problematic on first sight, as there is a considerable amount of graduates outside their chosen field. It is quite astonishing, however, to see, that only 70.5 % of the graduates expected to work in the field where they obtained their education, while 29.5 % did not.

The great majority of graduates therefore seem to have no problem about the fact that study and job are not related. On the other hand it also means, more than one third of the graduates took up and completed studies in fields they did not expect to work. That seems to be a substantive mismatch and possible waste of public money. The difference

between the “stayers” and the “leavers” are hardly significant, but difficult to interpret: the leavers more often found a job in a field related to their study, but didn’t expect it as much as the stayers did, who found a job in their field of study less often.

A high amount of students not expecting to find and not finding jobs in fields related to their studies means, that a high proportion of the educational budget is misallocated. In order to enable students to make better decisions on what subjects to study, the information on what jobs (and how many, and where) are available in every particular field to prospective students should be improved and be made widely available.

Perceptions of Zamboangadel Norte (ZaNorte). Table 6 presents the perceptions of the graduates of ZaNorte. The perceptions of the graduates of their home province are flatteringly positive. The average mean range of all items reached 3.7 (very good), and the lowest ranking item (salary and benefits) were still considered “good” with a ranking of 3.2.

Stayers and leavers hardly differed in their opinions. Only the career opportunities and the level of salary/benefits in the province were seen as being slightly better by the stayers. The younger graduates had a slightly higher opinion of the province than the older ones, but again by a very low margin, and mainly due to their perception about the cost of living and the quality of education.

Quite interesting is the fact that the youngsters and the oldest graduates both think the least favourably about the career opportunities and the level of salary/benefits in the province, while the graduates in their twenties have slightly better opinion on these two issues.

Table 6 Perceptions of the Graduates of ZaNorte

| Characteristics | Perception of Graduates (WM) | | | | | | |
|-----------------------------------|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | All Graduates | Stayers | Leavers | 18-21 | 22-25 | 26-29 | 30plus |
| Career Opportunities | 3.35 | 2.67 | 2.56 | 1.875 | 2.06 | 2.13 | 1.92 |
| Salary and benefits | 3.22 | 2.84 | 2.67 | 1.625 | 2.03 | 2.04 | 1.83 |
| Cost of living | 3.54 | 3.49 | 3.48 | 4.625 | 4.28 | 4.26 | 3.92 |
| Education system | 4.10 | 4.02 | 4.13 | 4.125 | 3.89 | 3.91 | 3.58 |
| Family friendly environment | 4.10 | 4.08 | 4 | 4.75 | 4.44 | 4.30 | 4.33 |
| Cultural and social opportunities | 3.92 | 3.88 | 3.85 | 4.625 | 4.69 | 4.43 | 4.25 |
| Outdoor and recreational settings | 3.80 | 3.77 | 3.76 | 3.375 | 3.36 | 3.30 | 3.33 |
| Urban setting | 3.78 | 3.84 | 3.76 | 2.75 | 2.72 | 2.65 | 2.67 |
| Rural setting | 3.80 | 3.79 | 3.86 | 3.625 | 3.50 | 3.57 | 3.25 |
| Weather | 3.80 | 3.82 | 3.86 | 3.75 | 3.69 | 3.70 | 3.58 |
| Average | 3.70 | 3.61 | 3.59 | 3.51 | 3.47 | 3.43 | 3.27 |

Legend:

| AWMean Range | Verbal Description (VD) |
|--------------|-------------------------|
| 4.21 – 5.00 | Excellent (E) |
| 3.41 – 4.20 | Very Good (VG) |
| 2.61 – 3.40 | Good (G) |
| 1.81 – 2.60 | Fair (F) |
| 1.00 – 1.80 | Poor (P) |



The Logistic Model. Consider a ZaNorte graduate who decided to stay in the province or to leave the Province after graduation. The probability that a college graduate of ZaNorte will either decide to stay in the province or to leave outside the Province or countries is described by two logistic functions, namely: personal characteristics-oriented migration decision [$f(p)$] and ZaNorte characteristics-oriented migration decision [$f(z)$]:

$f(p) = \frac{e^p}{e^p + 1} = \frac{1}{e^{-p} + 1}$; where p denotes the probability of a ZaNorte graduate migrating out of the Province to start his professional career and is defined by the equation $p = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 \dots + \beta_n x_n$, where β_0 is called the intercept and $\beta_1, \beta_2, \beta_3, \beta_4$ and so on, are coefficient parameters of explanatory variables x_1 (gender), x_2 (age), x_3 (marital status), x_4 (type of HEI where he graduated), x_5 (college degree pursued), x_6 (college GPA), x_7 (mother's educational attainment), x_8 (father's educational attainment), and x_9 (parents' annual income).

After the analysis, the personal characteristics-oriented migration decision model is expressed: migration decision (Md) = $\frac{1}{e^{-p} + 1}$; where $p = 1.96 + 0.260$ Gender - 0.00771 Age - 0.057 M. Status + 0.265 Type - 0.0828 Degree - 0.143 GPA + 0.0079 Mothers educ - 0.0555 Fathers educ - 0.042 income

In this model, age, marital status, degree finished, GPA and parent's educational attainment and migration are inversely related. The younger the graduates are, the greater is the probability of migrating, so is if they are single, graduated in private HEIs, their father's educational attainment is high school or less, their parents' combined annual income is less than PhP 100, 000. Graduates' GPA and migration are also found to be inversely related signifying that the less the GPA is, the great is the probability of leaving the Province. Less GPA means higher performance. Male gender is associated with a less probability of migrating (Md goes down by 0.26 if the graduate is male), if they graduated in public HEI, mother educational attainment is low.

For the ZaNorte characteristics-oriented migration decision, the following function is used: $f(z) = \frac{1}{e^{-z} + 1}$; where z denotes the probability of a ZaNorte graduate migrating out of the Province and is defined by the equation $p = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 \dots + \beta_n x_n$, where β_0 is called the intercept and $\beta_1, \beta_2, \beta_3, \beta_4$ and so on, are coefficient parameters of explanatory variables x_1 (career opportunities), x_2 (salary and benefits), x_3 (cost of living), x_4 (education system), x_5 (family-friendly environment), x_6 (cultural and social opportunities), x_7 (outdoor and recreational activities), x_8 (urban setting), x_9 (rural setting) and x_{10} (weather). Hence, the model is expressed:

Migration Decision (z) = 1.35 - 0.0601 Career + 0.104 salary - 0.0923 cost - 0.0231 educ + 0.0178 family + 0.166 cultural - 0.258 outdoor + 0.170 urban - 0.127 rural + 0.0629 weather.

Summary and Conclusion

The results provide insights regarding the migration decisions of about one-fourth of the graduates of the Province of Zamboanga del Norte. Most of them were fresh graduates, single, and whose parents' annual income is less than PhP. 100,000 per year. A number of those who performed well in college also left the Province.

As presented earlier, the main reasons for graduates who left the Province is job-related. The graduates liked the province, but do not find enough job opportunities there, which force them to leave the province and go to work and live to areas with favorable economic opportunities. So, one of the most important tasks of the provincial government should be to increase their efforts to induce private companies to set up business in the province, especially those that can cater graduates in engineering, business education, and nursing. This would need a coordinated effort of offering incentives, reducing red tape when setting up a business and advertisement of the province as a business location plus considerable effort to improve transport infrastructure, among others.

Furthermore, in order to enable students to make better decisions on what subjects to study, information on what jobs (and how many, and where) are available in every particular field to prospective students should be improved and be made widely available. As the government sector per se does not create wealth, but only redistributes wealth generated by the private sector, is it somehow shocking to find, that young, well-educated Filipinos should mostly want to work in government. The private sector should think about setting up PR campaigns that induce graduates to work in the private sector.

The figure of those graduates who preferred to stay idle after graduation is disturbing. How would the community benefit from increase in educational attainment levels through better public services and more employment opportunities, when they stay inactive. With this, parents and HEIs should discourage this demeanor.

Indeed, the loss of educated people through migration should be afforded utmost concern of the government whose viability depends deeply on educated residents. In order to have a progressive economy, better-educated workforce is needed. Progressive economy significantly attracts more high-wage jobs which means that more expenditures can be allocated to program such as public services and education to the constituents.

The Province is in a difficult situation. It needs to produce, retain and sustain highly skilled graduates to improve its economy.

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