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AgriSciences**

**THEMATIC EVALUATION OF EFFECTIVENESS OF
SYSTEM OF STATE SCHOLARSHIPS FOR STUDENTS
FROM DEVELOPING COUNTRIES**

MASTER THESIS

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Declaration of Integrity

I confirm that work in this thesis titled “Thematic evaluation of effectiveness of system of state scholarships for students from developing countries” is original and has been carried out by me as part of my programme of study. I also confirm that all secondary materials has been properly acknowledged by me and referenced in this work with the help of my supervisor.

Signed:

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Place and Date: Prague, 2015

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ABSTRACT

There are several scholarship schemes available world over established for different reasons, quite a number of these scholarships are aimed at acting as development aid for students from developing countries. One of such scholarships is the Czech Government scholarship for students from developing countries. Despite the intention of this scheme and the amount sunk into the scheme, so many graduates tend to stay back after their studies in the country thereby defeating the aims or purpose of the scheme. There has been little or no evaluation of the effectiveness of the scholarship scheme with a focus on graduates that remain in the country after studies. Hence this thesis is a research into the thematic evaluation of effectiveness of system of state scholarships for student from developing countries with a focus on Graduates that decided to stay back in the country after completion of their studies.

To achieve the aims of the thesis, five hypotheses were postulated. The research took on the form of explanatory research trying to gain new insights into reasons behind the decisions of students to remain in the country after studies; it employed the mixed method format i.e. using both quantitative and qualitative data for the research. Primary research data were collected through questionnaires sent electronically to respondents and in some cases self administered. In most cases during the self administration of the questionnaire, unstructured interviews were also conducted to support the quantitative data collected. The collected data was analysed using Microsoft excel, Shapiro-wilk's test as well as Kruskal wallis anova test and the result was presented using the visualization method.

The results of the analysis supported three out of the five hypotheses postulated, showing that majority of the graduates that stayed back after their studies did so because of a good integration into the Czech community when they first came into the country, the strength of the ties which they have to their families in home country as well as Job/ career advancement opportunities here in the Czech republic.

Keywords: Scholarships, development assistance, graduates, study, research, Czech Republic,

ABSTRAKT

Existuje několik systémů stipendií k dispozici po celém světě založených z různých důvodů, celá řada těchto stipendií je zaměřena na rozvojovou pomoc pro studenty z rozvojových zemí. Jedním z takových systémů stipendií jsou stipendia vlády České republiky pro studenty z rozvojových zemí. Přes záměr tohoto systému a částkou zapuštěnou do systému, velmi mnoho absolventů mají tendenci zůstat v zemi po ukončení studia, čímž porušovat cíle nebo účel systému. Bylo provedeno malé nebo žádné hodnocení účinnosti systému stipendií se zaměřením na absolventy, které zůstávají v zemi po studiu. Proto tato práce je výzkum tematického vyhodnocení účinnosti systému vládních stipendií pro studenty z rozvojových zemí se zaměřením na absolventy, které se rozhodly zůstat v zemi po ukončení jejich studia.

K dosažení cílů práce, pět hypotéz bylo postulováno. Výzkum vzal podobu vysvětlujícího průzkumu, který se snaží získat nové pohledy na důvody rozhodnutí studentů zůstat v zemi po studiu; smíšený formát metody tedy použití obou kvantitativních i kvalitativních dat pro výzkum. Primární data výzkumu byla shromážděna prostřednictvím dotazníků zaslaných elektronicky respondentům a v některých případech byly podávány osobně. Ve většině případů během samostatného podávání dotazníku, nestrukturované rozhovory byly také provedeny na podporu kvantitativních shromážděných dat. Shromážděná data byla analyzována pomocí Microsoft Excel, Shapiro-Wilks testu, stejně jako Kruskal-Wallisova ANOVA testu a výsledek byl představen metodou vizualizace.

Výsledky analýzy jsou podporovány třemi z pěti postulovaných hypotéz, ukazujících, že většina absolventů, které zůstali po ukončení svých studií, udělali to díky dobré integraci do české společnosti, když poprvé vstoupili do země, síle vazby, kterou mají ke svým rodinám v zemi původu, stejně jako pracovní/kariérní rozvojové příležitosti zde v České republice.

Klíčová slova: Stipendia, rozvojová pomoc, absolventi, studium, výzkum, Česká republika.

Table of Contents

1.0 INTRODUCTION AND LITERATURE REVIEW	1
1.1 Introduction	1
1.2 Literature Review	2
1.3 Importance of Scholarships at the National Level	2
1.4 Benefits of International Scholarships	4
1.5 Migration Theories and Causes of Migration.....	7
1.5.1 Causes of Migration	8
1.6 Concept of Brain Drain and Brain Gain as it affects both host and home Countries.	11
1.6.1 Positive impacts of brain drain.....	12
2.0 THE CZECH REPUBLIC SCHOLARSHIP SCHEME FOR THE STUDENTS FROM DEVELOPING COUNTRIES.	15
3.0 RESEARCH PROBLEM AND AIM OF THE THESIS	17
3.1 Research Problem	17
3.2 Objectives.....	18
3.3 Description of Main Indicators and their Specific Variables	19
4.0 MATERIALS AND METHODS	21
4.1 Respondents in this study	21
4.2 Research Approach	21
4.3 Research Method for the study.....	21
4.4 Target Group	21
4.5 Primary Data Collection Method – Questionnaire and Unstructured Interview	22
4.5.1 Reliability and Validity of Primary and Secondary Data Collection Method.....	22
4.5.2 Designing the Questionnaire	23
4.5.3 Conducting Interviews	23
4.6 Study Population and Sample Size.....	23
4.7 Data Processing.....	28
4.7.1 Analysis of Variance (ANOVA).....	28
5.0 RESULTS	30
6.0 DISCUSSION	43
6.1.Limitations to the Research.....	46
6.2 Recommendation.....	46
7.0 CONCLUSION	48
8.0 REFERENCES	49

Annexes 55

1.0 INTRODUCTION AND LITERATURE REVIEW

1.1 Introduction

Scholarships are very important tools for human capital development the world over owing to the fact that so many countries in the world especially the ones in the south are grappling with humongous economic, social and political problems. These problems prevents quite a large number of people in the society especially the less privileged from getting the required education to enable them get a better life in future. The system of state scholarships for students from developing countries has in so many ways plugged this problem. There are so many students studying out of their country of origin under one scholarship scheme or the other. The organization for Economic Co-operation and Development (OECD) estimates that in 2011, nearly 4.3million students were enrolled in tertiary education outside their country of citizenship (OECD, 2013).

Majority of these scholarships however are not properly monitored to ensure that the aims, purpose or reasons why they were created in the first place are not defeated. This is important because there are attendant problems associated with students studying outside their countries, in addition to the likely problem of implementation of the scholarship program. Some scholarship beneficiaries refuse to return to their home countries after studying which could defeat the aims of the scholarships and lead to brain drain or brain gain for the home and host country respectively, it could also lead to demographic problems in the host countries, more graduates chasing the less jobs could be another problem.

This thesis will examine the major reasons why graduates from developing countries that have benefitted from state scholarships tend to remain back after their studies in the host country with a focus on Czech Republic. A number of researchers have posited reasons why students remain in the host country after studies Baruch et al. (2006) using regression analysis and Cronbach's alpha reliability scores was able to explain some of the reasons for the inclination of students to remain in the host country after studies, some of which includes social support, family ties, career conception, labour market perception etc to mention a few. Using analyzed primary data collected via questionnaire, presented

using visualization method and also already published research as secondary data, this thesis would be examining reasons why graduates stay back after their studies in the host countries.

1.2 Literature Review

Scholarship is an amount of money that is given by a school, an organization, etc., to a student to help pay for the student's education. Scholarships are established for quite a lot of reasons, whatever reason it is for the establishment of any scholarship, it always has a positive connotation. Scholarships have been awarded for Scholarly purposes, motivation for academic excellence, a source of assistance to the less privileged in the society; it could also serve as a tool of development assistance and economic co-operation between two countries, several countries or regional bodies or political and strategic aims of government. There are so many scholarships around the world.

Scholarships have been an avenue for students from developing countries to get better education in developed countries or elsewhere besides their countries of origin.

What used to be unusual has now become a necessity if young people are to have a secure life in the middle class in a post-industrial economy. As such, one basic goal of higher education policy should be to make certain that this opportunity is not foreclosed by a family's income or wealth (Heller and Marin, 2004).

1.3 Importance of Scholarships at the National Level

The importance of scholarships cannot be overemphasized, it is not just a phenomena linked with only aid to developing countries, even within the developed countries the importance of scholarships are not farfetched.

In developed countries in contrast to the period of the 1970s, when public four year college tuitions were low and aid for poor students to go to college was rapidly rising, we have seen a quarter century of tuitions rising much faster than family incomes, family incomes becoming more unequal, huge disparities of wealth and savings by class and race, and a dramatic shrinkage in the proportion of college costs funded by need-based student aid (Heller and Marin, 2004). Also Goodman (2008) stated that college cost in

most industrialized countries have increased rapidly in recent years presenting a serious public policy dilemma given most governments stated goals of improving access to higher education. Heller and Marin (2004) also stated that in US societies where 40 percent of students are non-white, it is more important than ever to be sure that minority students can go to college in a society that does not believe in welfare or social supports, and where fairness rests on supposedly equal access to the education needed for economic success, these should be basic principles. In a society where the cost of college is soaring, affordability is a basic dimension of fairness. Unfortunately, it is being lost in too many state policy changes. Having said all these, the importance of scholarships come to play. Germany recognized the role of scholarship and necessity for all students to acquire education hence it loosened income limits for aid eligibility and tried transforming student loans into grants (Goodman, 2008).

Scholarships are important as it helps reduce the incidence of school drop outs evidence from Indonesia further buttress the importance of scholarships, Indonesia was in deep economic crisis in 1998, Its gross domestic product had dropped by 13 %, the rupiah had plummeted from a pre-crisis level of approximately Rp 2500 per US dollar to Rp 16,000, inflation had reached 77 % and the poverty rate increased from 11 % to about 20 % of the population (Cameron, 2009). The country was in a state of quagmire, the future of the young generation was in jeopardy. In addition to the woes of the country's economic fortunes was a concern for the social impact of the crisis - its effect on health, fertility, child labor and school enrollment rates but due to The Social Safety Net scholarship scheme the tide was controlled (Cameron, 2009).

In the face of all the challenges facing the Indonesian government, a scholarship scheme which had been established earlier or prior to the crisis was the surviving grace for the country. The scheme which was an ambitious program aimed at reducing school drop-outs in Indonesia during the economic crisis became the cornerstone for the country. Costing \$350 million over 3 years (funded by the World Bank, ADB and other bilateral donors), it was put in place at the start of the 1998/1999 school year and between 1.2 and 1.6 million scholarships were disbursed in that year (Jones et al., 2000). At this level drop-outs were reduced by about 3.0 % points (or 38 %) and costs were recovered. Given its success, the program can be viewed as a model to be followed by other countries that find themselves in a similar situation of crisis (Cameron, 2009).

Alon (2006) in his research on the effectiveness of financial aid in promoting the persistence of black and Hispanic students admitted to the most selective colleges and universities in the united states to complete their education found out that minority students at elite colleges may face hurdles in fitting into their educational institutions, not only because of academic difficulties and social isolation, but also because of financial constraints. Similarly, Piotrowski and Perdue (1998) interviewed black college dropouts who gave inadequate financial aid as a major reason for their quitting and so there was effectiveness of financial aid in promoting the persistence of black and Hispanic students admitted to the most selective colleges and universities in the united states to complete their education (Alon, 2006).

Navarra-Madsena et al. (2010) in their research on Role of Scholarships in Improving Success Rates of Undergraduate Science, Technology, Engineering and Mathematics (STEM) Majors found out that Scholarships may improve student academic performance as measured by grades achieved in coursework of STEM major students.

Kremer et al. (2005) also in its research on the topic; Incentives to Learn: Merit Scholarships That Pay Kids to Do Well, found out from the evaluation conducted in 2001 and 2002 that girls in Kenyan public schools and their parents selected randomly and offered merit scholarships and grants that covered their cost of fees and cost of school supplies respectively had significantly improved test scores than those that didn't benefit from the scheme.

Advocates for scholarships state its importance by arguing that these programs (i.e. Scholarships) raise college attendance rates, incentivize student achievement, prevent state-level brain drain, and reduce the financial burden of college (Goodman, 2008).

1.4 Benefits of International Scholarships

There are several types of state scholarships offered to nationals of developing countries in the mode of development assistance by developing countries. Each of these scholarships has its own theme or purpose for which it was initiated as well as its benefits. The former US President, George W. Bush, emphasized on the use of foreign education as a strategic tool in the "war on terror." According to Spilimbergo (2009) using dynamic panel regressions, as in previous studies on democracy and education,

including Barro (1999), Acemoglu et al. (2005), and Glaeser et al. (2006), discovered that numerous policy initiatives and large investment in education in the United States are based on the notion that foreign-educated students promote democracy in their countries of origin. The US government, for example, has through the Fulbright Program, financed more than 158,000 foreign students in the United States alone. The US government does not only finance the education of foreign students, but also annually issues more than 250,000 non-immigrant visas to foreign students; of which more than five million individuals have received visas to study in the United States since 1971 to 2009 (Spilimbergo, 2009). US efforts to educate foreign students have produced impressive results; 46 current and 165 former heads of governments are products of US higher education. Foreign leaders educated in the United States include Benazir Bhutto, Vicente Fox, Ehud Barak, Corazon Aquino, Hamid Karzai, and Michelle Bachelet (Spilimbergo, 2009). Despite the objective of this program which is believed to be a strategic tool of war on terror, cognizance was not put on the quota of students that actually stayed back after studies and why they chose to stay back hence defeating the objective of the program.

There are other benefits of scholarships apart from just fighting terror, entrenching democracy and being just a source of education, in some cases it leads to competitiveness of the level of education in the host country making the government to make new positive policies. Australian public higher education institutions in 2002 had over 185,000 international students and this constituted over 21 % of the total student enrolment load. Recruitment of international students has brought substantial financial benefits to Australia and its universities. In addition, more importantly, it has prompted Australia to make more deliberate efforts towards the internationalization of curricula and encourage expanded exchange of staff and students. At least in the short term, the prospects of future expansion in international student numbers are promising (Harman, 2004).

Another benefit of getting scholarship to study abroad was also reported by Calson and Widaman (2002) using a quasi-experimental design and factor analytic and analysis of variance procedures, they found out that students that studied abroad had increased levels of international political concern, cross-cultural interest, and cultural cosmopolitanism when they returned home making them the envy of their peers and preparing them for life in their country. Job opportunities is one benefit that is attached to studying abroad, mobile students get jobs with international assignments compared to non-mobile students.

Results show that mobile students - particularly those who graduated abroad - more often than non-mobile students search for and gain work experience abroad. The vast majority of mobile students return from abroad after graduation. In the domestic labour market, mobile students hold jobs with more international assignments than non-mobile students (Wiers-Jenssen, 2008). Apart from returning home to work, the chances of getting an international job because of the international exposure are also high.

There is also increased cultural awareness and adaptability in students that study outside their countries of origin. Using Cross Cultural Adaptability Inventory test, Kisantas et al. (2001) opined that students that study abroad possesses emotional resilience, flexibility and openness, perceptual acuity, and personal autonomy indicating that a period of study abroad enhanced the students' cross cultural awareness. Educational justifications for study abroad programs include increases in students' level of awareness of the interdependence of nations, value of diversity, development of global perspective and the importance of international understanding. Further, it is also postulated that students who attend study abroad programs become more competitive in the job market, and develop both language proficiency and lifelong friendships (Kisantas et al., 2001).

Langley and Breese (2005) opined that students studying abroad function as ethnographers, gathering empirical evidence about their host culture. Using spradley's means-end domain of semantic relationships, which arose from his theory stating that there are semantic relationships that occur in all human cultures and they are useful in analyzing cultural domains. Students who study abroad exemplify Spradley's means-end domain for they observe, interact, and travel as ways to learn the culture.

However, there are also criticisms of the provision of scholarships. For example, Nolan (2011) posited that despite fifteen country-level reviews of Australian Development Program [ADS] and its precursor scholarship programs, and two overall reviews of the ADS program from 1991, there are criticisms that their reviews do not sufficiently cover the broader impacts and performance outcomes which is to promote human and institutional capacity for long-term sustainable development through postgraduate education scholarships at Australian universities and that ADS scholars return to their home countries and contribute the skills gained from studying in Australia. However this work failed to determine what the inclinations of the ADS scholars were for them to stay

back in Australia after their studies instead of returning home to fulfill the aims of the scholarship.

1.5 Migration Theories and Causes of Migration

Migration is a very tricky issue, it has been studied by so many scholars in different field of life endeavors with each set of scholar coming to different conclusions. So to get a universal theory on migration without mincing words might be foolhardy, hence for a universal theory on migration, different scholars would have to come together to work on the issue.

Migration is a subject that cries out for an interdisciplinary approach. Each discipline makes up a part of the whole study, theoretically and empirically. Anthropologists made us look at migration as a form of networks and transnational communities, while sociologists and economist look at it from the angle of the importance of social and human capital and the difficulties of settling down and blending with the new community.. Geographers on the other hand want to know the spatial dimensions of migration and settlement. Political scientists and legal scholars have taught us how to understand the play of organised interest in the making of public policy; they also show us the impact migration can have on the institutions of sovereignty and citizenship. Historians keep records of the challenges faced by the migrant over time and in all of its complexity, making us have a greater understanding of the hopes and aspirations of migrants. Demographers do the greatest job among all the groups owing to the fact that they have empirical grasp on the movement of people across boundaries, and with theoretical and methodological tools can show us how such movements affect population dynamics in both sending and receiving societies (Behel and Hollifield, 2015).

The talk about migration has been on for decades, the debate on migration and development has swung back and forth like a pendulum, from development optimists in the 1950s and 1960s, to neo-Marxist pessimism over the 1970s and 1980s, towards more optimistic views in the 1990s and 2000s (Hein De Haas, 2010).

Weiner (1995) stated that the movement of people from the south to the north, for example refugees in Africa or guest workers in Asia and the Persian gulf states, led to the conclusion that there is an impending global migration crisis. Although this was

countered by Castles and Miller (2009) stating that whether there might be a migration crisis or not remains open questions. But clearly we are living in an age of migration.

The trend in migrations is so difficult to understand just as migration theory. This is because there is an ever changing trend and it brings with it attendant problems or issues which are alien to researchers or are different from what is already known.

Migration continually changes shape, form, direction, and content to such an extent that it is no longer possible to provide encompassing typologies of migrants, flows, destinations, or outcomes. Migration has become a *normal* feature of contemporary societies: a global phenomenon of flows and counter flows; geographical fluidity as opposed to population shifts; ongoing daily processes as opposed to unique events (O'Reilly, 2013).

In an historical context, highly skilled migration typically involved the forced movement of professionals as a result of political conflicts, followed by the emergence of the “brain drain” in the 1960s (Iredale, 2001). However, in the current situation, highly skilled migration represents an increasingly large component of global migration streams. The current state of theory in relation to highly skilled migration is far from adequate in terms of explaining what is occurring at the high skill end of the migration spectrum (Iredale, 2001).

1.5.1 Causes of Migration

Causes of migration are so numerous ranging for a need for better life, political asylum, education, marriages or friendships etc. Each migrant has a unique reason for migration and as such it cannot be holistically concluded that there is just one major reason why migrants relocate. There have been different studies on the causes and motives for migration though with all yielding different results as stated earlier. Psychologists typically work to understand people's motives and intentions to move to another country on an individual level, and this is done by different methods e.g. from different theoretical and methodological perspective like the psychoanalytic approach to studying immigrants' experience and their motivation. Another approach is to apply McClelland's three-motive model of human motivation (based on the motives for achievement, power, and affiliation) to the situation of international migration (Chirkov et al., 2007).

Migration studies have shown different reasons why people decide to migrate and stay back in their host countries. A lot of studies on migrants stress the importance of economic aspects in building a sustainable motivation for emigration – as cost-benefit or win-win theories with assumption that migration occurs from labor abundant to labor scarce countries (Afoloyan, 2001). This has made countries put in place different measures because not all migrants are skilled. Continuing growth of temporary skilled migration is heralding changes in the operation of professions. Formal procedures for recognizing the skills of permanent immigrant professionals are breaking down as “fast-track” processes for assessing the skills of temporary professional migrants are put in place. The increasing globalization of firms and the internationalization of higher education are encouraging professions to internationalize (Iredale, 2001).

Chirkov et al. (2007) Using psychological scales and survey methodology it was found out that people who are willing to emigrate possess higher levels of achievement and power motivation and lower levels of affiliation motivation in comparison to those who decide to stay in their home country. Similar studies have been conducted in the area of economic psychology it was found out that immigrant with a high level of ‘need for success’ economically outperform people without this motivation or people who emigrated for political reasons. Tartakovsky and Schwartz (2001) conducted a study of young Jews planning to move from Russia to Israel and found three emigration motives, specifically, *preservation*, which refers to physical, social, and psychological security, *self-development*, which refers to personal growth in abilities, knowledge and skill development, and *materialism*, which reflects the desire for financial success and wealth.

The actions of host countries also go a long way in increasing the wave of migration. The increased demand for skilled labour and the importance of highly skilled individuals for innovation has induced many countries to implement policies geared to attracting skilled migrants from abroad (OECD, 2002).

Other macro theories emphasize the role of relations at international level), which explain international migration through the penetration of capitalist economic relation into peripheral non-capitalist societies and its disruptive consequences which create a mobile population prone to migrate (Douglas et al., 1993).

According to Martin (1993) migration occurs between demand-pull factors that draw migrants into developed countries, supply push factors that push them out of their own countries, and a network of friends and relatives already in industrial societies who serve as anchor communities for newcomers”.

Within the sociological interpretation of this model, refugees, for example, are viewed as migrants ‘pushed’ by perceived threats to their life, liberties, or faith, whereas voluntary migrants are portrayed as ‘pulled’ by perceived hopes for a better future and promising economic opportunities (Rumbaut, 1991).

Notably, in addition to the ‘push’ and ‘pull’ actors, friends and relatives in already domiciled in host countries has been identified as an important socio-psychological factor in the motivation to migrate. This and other socio-psychological factors of migration have been accepted by various scholars, including economists, sociologists and psychologists (Booth et al., 1997). Ana Bleahu (2004) ascertained that most migrants begin as target earners, seeking to earn money for specific goals that will improve their status or well-being at home - building a house, paying for school, buying land, etc. The discourse of motivation on migration is different in different moments of migration; the life plan of the migrants is changing all the time. The motivations for circulatory migration and definitive migration are very different. Definitive migration is when the migrant is fully aware of why and what he wants to go do outside of his home country and has plans of either coming back to his home country soon or staying back permanently in the host country while circulatory migration occurs due to unforeseen circumstances in the sojourn of the migrants making definitive migration to change. Mainly at the beginning of their most migrant’s careers the motivation was clearly definite, during the time the relationship between causes and consequences, between personal explanations for their option on circulatory, definitive migration or for their return in sending countries became more complex and interactive.

From the several reasons stated above, one could assume that the intentions of migrants changes during their sojourn in the host countries culminating into them staying back and not returning to their home countries. Baruch et al. (2006) using regression analysis and Cronbach’s alpha reliability scores was able to explain some of the reasons for the inclination of students to remain in the host country after studies, some of which includes social support, family ties, career conception, labor market perception etc to mention a

few, his work was majorly focused on current students from different regions of the world studying in the USA and UK.

1.6 Concept of Brain Drain and Brain Gain as it affects both host and home Countries.

The brain drain and brain gain phenomena has been dealt with extensively by many researchers. Majority of researchers see brain gain as a major hindrance to the development of many developing countries, however more and more studies are beginning to show that in fact brain drain could be brain gain in disguise.

For some decades now the literature on labor migration between countries in the south and those in the north has shown that migration is associated with brain drain. The countries of origin lose high-skill workers. The loss is considered significant because without migration the home country would have had a more skilful workforce, and per capita output plus standard of living would have been higher; greater openness seems to have a negative result. Literatures on the brain drain have consequently concentrated on the question of how to mitigate this adverse consequence (for example Stark et al., 1997).

Using new data on emigration rates by education level, the impact of brain drain migration on human capital formation in developing countries was found. There was evidence of a positive effect of skilled migration prospects on gross human capital formation in a cross-section of 127 countries, using counterfactual simulations, countries combining relatively low levels of human capital and low emigration rates are shown to experience a 'beneficial brain drain', and conversely, there are more losers than winners, and the former tend to lose relatively more than what the latter gain (Beine et al., 2008).

The level at which brain drain depletes the human capital of countries is alarming - a survey from the Caribbean reveals that 41 % of those with a tertiary education and born in a Caribbean country now live in an OECD country (Agrawal et al., 2011). Also the most affected are the skilled workers needed for the development of the country. An analysis of the brain drain from the graduates in the 1970s of one of India's top engineering universities, IIT-Mumbai, reveals that 31% of its graduates settled abroad, while the estimated migration rate of engineers more generally was only 7.3 %. Recent alumni data in the case of IIT-Kharagpur, another top university, found 4007 registered alumni in

India, 3480 in the US, and another 739 spread over 59 countries (Agrawal et al., 2011). All these would have made meaningful contributions to their countries had they not left.

Straubhaar and Thomas (2000) talked about brain exchange as what occurs in Europe against what obtains (brain gain) in US. The US clearly understands and strategically sees that the immigration of highly skilled immigrants is crucial and decisive for growth and wealth of nations in the 21st century and so works towards attracting skilled migrants whereas in the case of Europe, mobility is mainly intra-European, representing a Brain Exchange. This is being fuelled by the Europeanisation of production and the creation of an internal labour market. However, the EU lacks the magnetic power to attract high skilled foreign scientists and to become leading centres of research intensive (service) production.

1.6.1 Positive impacts of brain drain

Having said all these it is also imperative to know that more researchers are beginning to look at the issue of brain drain from another angle. Researchers have posited that it could be beneficial if looked at from another perspective.

Stark et al. (1997) concluded that brain drain can actually be brain gain in disguise, using a model focussing on incentives, opportunities, and information. A low skilled worker having acquired some experience outside his home country might have to return to his country once the host who due to lack of information earlier now discovers from the little period at work that the worker doesn't possess special skills required for the job. Such a worker incident upon reduction in salary might be forced to go home thereby adding to brain gain in home country.

The development prospects of a poor country or region depend in part on its capacity for innovation. In turn, the productivity of its innovators, whom are often concentrated around urban centres, depends on their access to technological knowledge. The emigration of highly skilled individuals weakens local knowledge networks (brain drain) but may also help remaining innovators access valuable knowledge accumulated abroad (brain bank) (Agrawal et al., 2011).

Beine et al. (2001) posited that there are impacts of migrations on human capital formation and growth in the source country of migrants. The first impact, potentially

beneficial, accounts for the fact that migration opportunities foster investments in education since it is awarded a higher expected return when the economy is opened to migrations; this first effect is called the “brain effect”. The second impact, undoubtedly detrimental but which should not be the sole consideration, is due to the departure of some, if not all educated agents, and this second effect is called the “drain effect”.

Another positive to supposed brain drain is the substantial flows of financial remittances which highlights the many *benefits* to the country of origin from international migration, extending not just to money but also to the flows of ideas and technologies from its Diaspora. The latter raises the possibility that the migration of skilled human capital from poor countries may not just be a negative “brain drain;” it could also have more a positive effect as a “brain bank,” accumulating knowledge abroad and facilitating its transfer back to domestic inventors (Kerr, 2008).

There are also prospects on human capital formation although within a context of uncertainty. The rationale is roughly the following: in a poor economy with an inadequate growth potential, the return to human capital is likely to be low and hence, would lead to limited incentive to acquire education, which is the engine of growth. However, the world at large does value education and hence, allowing migration to take place from this economy would increase the educated fraction of its population. Given that only a proportion of the educated residents would emigrate, it could well be that *in fine*; the average level of education of the remaining population would increase (Beine et al., 2001).

Brain drain is not totally as detrimental as it seems to both the host countries that gains and the home country that is supposedly loosing as it is obvious that on the long run it comes back to benefit the home country although not true in all situations. Irrespective of this fact, some countries are already adopting ways to mitigate the effect of brain drain. A very good example is Colombia. To tackle brain drain phenomena, the Colombian government established ‘the Colombian Caldas' Network of Scientists and Engineers Abroad'. The experience of this strategy has been studied during the last four years by a Franco-Colombian research team. The network i.e. Colombia caldas network, consists of the remote mobilisation of intellectuals abroad and their connection to scientific, technological and cultural programmes at home (Meyer et al., 1997). This definitely is bound to ensure that the home country benefits from its pool of professionals domiciled

outside the country while at the same time keeping tabs on its army of citizens living abroad.

2.0 THE CZECH REPUBLIC SCHOLARSHIP SCHEME FOR THE STUDENTS FROM DEVELOPING COUNTRIES.

Europe as a whole attracts the most majority of foreign students from developing countries or both (48 per cent); i.e. developed and developing countries. The Czech Republic ranks still rather low among the least popular destination countries. Most of the foreign students come to study within different intergovernmental agreements, or international exchange program (e.g. Erasmus, Erasmus Mundus, Ceepus, etc.), while only a negligible percentage come to study on commercial (self-sponsorship) basis (Nemeckova et al., 2013). The ratio of foreign students enrolled in Czech tertiary educational institutions under the Czech government scholarship scheme expressed as a percentage of all tertiary students steadily increases year to year and in 2011 it reached 8.5 per cent (OECD, 2013). However very little attention is paid to its impacts, efficiency and/or effectiveness (Nemeckova et al., 2013). The scholarship scheme offered by the Czech Government serves as a development aid to developing countries and has been on since the 1950s. In 2012, the exact goals of the scholarship program was explicitly defined, when the Czech MFA approved a key document (the first of its kind) that set out the explicit objectives of the program as follows: (i) to provide tertiary education to those students in developing countries for whom (due to any reasons) such education would not be accessible in their home countries and via this to contribute to human capacities enhancement in particular countries, or their socio-economic development respectively and (ii) to strengthen the (mainly economic) relationships of the Czech Republic with developing countries via the alumni of the program (MFA, 2012). The second objective indicates that there could have been hidden motives for initiating and implementing the program (e.g. economic or political) even though they have never been officially defined (Nemeckova et al., 2013). The Czech government scholarship is considered to be the best form of scholarship amongst other types of scholarships in Czech Republic. The scholarship covers all level of tertiary education. The Bachelors program is always in Czech language which is usually preceded by a 1year preparatory program in Czech language, in language school. The master and doctoral studies however is both in Czech and English languages.

Czech Republic is still considered to be an ‘emerging donor’ in the field of international development co-operation. This is mainly due to the geopolitical shift of Czechoslovakia

after the end of the Cold War and the quasi-immediate interruption of its development aid during the first half of the 1990s. Czechoslovakia was involved in development co-operation with many ‘friendly countries on the road to socialism’ since the 1950s. The development aid of Czechoslovakia reached a peak high of 1 per cent of its Gross Domestic Product (GDP) by the end of the 1980s (Halaxa and Lebeda, 1998). The first set of students to benefit from the scholarship program were students from countries such as Vietnam, North Korea, Cuba and Mongolia and due to the overwhelming interest it attracted, the Czechoslovak government decided to establish a unique university only for students from developing countries in 1961. The university was called The University of 17th November although this experiment failed due to racial abuse amongst other factors, which led to the closure of the university and its subsequent transformation to a department at Charles University on 17th November 1974 (Holeckova, 2010). The Czech government scholarship initially started as aid from Czechoslovakia but after the split between the two countries in 1993, the Czech republic continued with the program, currently supporting over 600 students yearly and at an annual budget of between 5–6 million Euros, despite all these efforts and costs, very little attention is paid to its impacts, efficiency and/or effectiveness (Nemeckova et al, 2013). After joining OECD in 1995, the foreign development assistance became a major tool for political and institutional framework for the Czech government with a reinvigorated new drive towards achieving the goals of the aid program (OECD, 2007). However for over six decades that the development aid in the form of Czech scholarship has been on for students from developing countries, it has not been thoroughly evaluated. The effectiveness of the project was first challenged in the mid-2000s when the Czech Ministry of Foreign Affairs (MFA), which is also responsible for the coordination of the Czech development co-operation, questioned the development impacts of the Czech government scholarship scheme for students from the South for the first time. The commission through its research, concluded that assessing the scheme was difficult due to the dearth of information on students who have benefitted from the scheme because records were not kept from the beginning (Jelínek et al., 2004). In 2011 there was yet another evaluation of the whole scheme but the development aspect wasn’t properly dealt with (Horký et al., 2011). It is imperative to note that majority of the research done on this topic is at policy and implementation level, thorough work has not actually been done on the realization of these objectives by engaging the students that decided to stay back in the Czech Republic after their studies to know the real motivations for their decision.

3.0 RESEARCH PROBLEM AND AIM OF THE THESIS

3.1 Research Problem

Despite all the revitalization and agreements between Czech Republic and developing countries, there has been no concrete and precise report on the effectiveness and impact of the scholarship program on both the developing countries and the Czech Republic. Some critical voices among Czech non-governmental organizations even claim that provision of scholarship is only inflated aid which does not contribute to development of home countries. Although some of the beneficiaries from the scheme may have gone back home to contribute to the development of their country in one way or the other, there are still quite a large number of beneficiaries staying back in the country after their study. There are no official documented researches on the reasons why these beneficiaries have decided to stay back neither are there records of the number of students that have stayed back. This study therefore identifies the lack of evaluation of the Czech Scholarship Program as a major hindrance to its further development. Evaluation mechanisms, according to Johnson (2014) provides ways through which a system can be assessed for possible feedback, which is vital in identifying and restructuring areas of the system that may need further improvements, deletion or additions, for its successful implementation, optimality, efficiency and effectiveness. This lack of evaluation will in the long run defeat the main aim of initiating the scholarship scheme and create a problem of brain drain in developing countries as well as demographic problems for host country, among others. This research is therefore focused on the thematic evaluation of the effectiveness of the state scholarships system for students from developing countries with a focus on Czech Republic while the target group would be the Graduates that decided to remain in the Czech Republic after their studies. And to do this, reference will be made to a previous work done by Baruch et al. (2006) on: *Brain drain: Inclination to stay abroad after studies using the 'push/pull' model* pinning it with the theory of 'reasoned action'. This theory predicts that the actual action of the students (to stay or to return to their home country) will be positively related to their inclination to do so, which, in turn, will be affected by their attitudes. The result of this work will go a long way in helping the Czech Government, Governments of developing countries, the Czech Scholarship board, policy makers and other appropriate authorities to reevaluate and reformulate policies governing the current scheme while putting strategies in place for ensuring the effectiveness of the scheme for future purposes also.

3.2 Objectives

In line with the identified problem and research questions raised in this study as mentioned above, the study shall pursue the following objectives in an attempt to address these questions:

1. To determine the motivation for Czech state scholarships graduates to remain in the country after studies.
2. To determine which category (nationality or study program) of students tend to stay back more after their studies.

From previous studies and literature reviews on this subject matter, some factors have been mentioned at different times as being main reasons why students do not return to their countries after study. Some of these factors include family ties, settling down, labor market, career development, war/instability in home country, marriage/relationships in host country etc. So to achieve the set objectives of this thesis, the following hypotheses are postulated:

Hypothesis 1: lack of strong ties to the home country influences The Graduates decision to remain in Czech Republic after study.

Hypothesis 2: Easy integration into Czech Republic affects the decision of The Graduates to remain in Czech Republic after study.

Hypothesis 3: The availability of equal job opportunities and prospect of career development for foreigners impacts decision for The Graduates to stay in Czech Republic.

Hypothesis 4: War/political instability in home country is a driving force for The Graduates to remain in Czech Republic.

Hypothesis 5: Marriage/relationships with EU citizens affect The Graduates decision to remain in host country after study.

1

¹ For the purpose of clarity in these hypotheses, beneficiaries of the Czech government scholarship currently residing in the host country are referred to hereafter as “The Graduate”

3.3 Description of Main Indicators and their Specific Variables

For this study established and widely-used measures were used (Likert scale and some open ended questions). From previous studies and literature reviews on this subject matter, some factors have been mentioned at different times as being main reasons why students do not return to their countries after study. Some of these factors according to Baruch et al. (2006) include family ties, settling down, labor market, career development, war/instability in home country, marriage/relationships in host country etc. So to achieve the set objectives of this thesis, the following is a description of the main variables used for this study.

Strong ties to Family: Several questions were included into the questionnaire, in order to increase validity of the research instruments,. Sample questions are *'I support my family financially during or after my studies'*, and *'Family ties are important to me and I miss my family when I am in Czech Republic'*.

Integration: was measured by examining how The Graduates adjusted when they got into Czech Republic to see how it affected their decisions to stay, the support they received from their Universities, lecturers and the relationships they developed with fellow students as well as the Czech community. The responses options for this measure were some of the Sample questions for integration were *'my university was helpful in helping me settle down in Czech Republic'*, and *'My course mates were helpful in helping me settle down in Czech Republic'*.

Job opportunities and Career development: was measured by using Sample questions such as *'My opportunities for advancement in the Czech Republic are limited, my opportunities for advancement are limited in my home country'*, and *'I have a good chance of getting a good job in my home country'*.

2

² NB, a 5 point likertscale was used for testing all the quantitative variables while the mid-point which is Undecided was not used in the analysis

War and Political Instability: was measured in order to determine whether there was any particular condition preventing The Graduates from returning home. Sample questions used in examining this hypothesis was *“There is a high level of political unrest in my country thus making Czech Republic attractive to live in“* and *“ The political state of my country is good and it does not affect my decision to stay“*.

Marriage/Relationship with EU Citizen: This was also measured to know if this was the major reason of all the reasons why The Graduates remained after their studies. Sample questions like *“My getting married to an EU citizen was a major factor for staying in Czech Republic, I was propelled to stay in Czech Republic because I had strong relationship(s)“* and *“ I have children in Czech Republic so I decided to stay.*

4.0 MATERIALS AND METHODS

4.1 Respondents in this study

In this study the population that was interviewed is referred to as the respondents and is defined as the Graduates who have benefitted from the Czech Government scholarship scheme and they decided to stay in host country, and are currently residing in the country in contrast to previous studies which were focussed on either current students or those that left the host country after studies.

4.2 Research Approach

This research took on the form of exploratory research.

Exploratory research is usually carried out when there are few or no earlier studies to refer to, and the focus is on gaining new insights into a phenomenon for future investigation. This would include case studies, using interviews and/or surveys and reviews of previous related studies and an analysis of key objects as data collection instruments (Robert and John, 2003).

4.3 Research Method for the study

The nature of our method implemented a mixed format - focusing majorly on Quantitative with some Qualitative components.

The research methods followed in this thesis to gather information for the evaluation of state scholarships for students from developing countries included the following:

1. Collection of information relevant to the study via questionnaires,
2. Unstructured Interviews with Graduates from the Scholarship scheme that are still living in Czech Republic

4.4 Target Group

The target group for this study was graduates that had benefitted from the Czech Government Scholarship scheme and have decided to stay back in the country after graduation for one reason or the other.

These graduates were selected as they became available, a particular method of selection could not be used owing to the fact that these graduates were not readily available to be interviewed and there is no database or umbrella body from which information could be sourced about them. Their consent and cooperation was very important for the research to be successful so they were first briefed on the objectives of the thesis and then given the questionnaire to fill.

4.5 Primary Data Collection Method – Questionnaire and Unstructured Interview

Out of the various data collection methods available for collecting primary research data required for this thesis, the researcher applied the use of Questionnaire and Unstructured interviews.

4.5.1 Reliability and Validity of Primary and Secondary Data Collection Method

The secondary data applied in any research must not only be considered in terms of its relationship to research objectives and hypotheses, but also in terms of ‘the quality of the data’. Of particular importance with regards to data quality are the dimensions referred to as validity and reliability by researchers (Crowther and Lancaster, 2008). In the light of ensuring the secondary data method collection conforms to the dictates of the dimensions of reliability and validity in research. For the primary data, this research also followed published and proven methods of primary data collection as used by Baruch et al., 2006 and Nemeckova et al., 2013. And in addition to these methods, more questions were asked from the respondents on the different hypothesis especially on war/instability and relationship with EU citizen, an unstructured interview was also conducted during the data collection process. Other steps taking to ensure reliability and validity involve the following:

1. The list of questions is not long, it is concise and precise which would not bore the respondents, and can be answered in 10-15 minutes, and so, audience participation is almost guaranteed which leads to ease of getting data. Some questionnaires can be too long, and so, respondents rush through it, which makes data gotten irrelevant. Long questionnaires get less response than short questionnaires

2. Since the question length wasn't too much, it should guarantee some level of willingness to participate, it improves the response quality. Response rate is the single most important indicator of how much confidence you can place in the results.
3. Given the rate of technology we have, and the presence of millions of people online, the electronic survey is the fastest and easiest to administer, given the constraints of this project although it had to be used with personal administration.

4.5.2 Designing the Questionnaire

A total of twenty-four (24) questions were asked for the data collection, the questions in the questionnaire were asked with the hypothesis in mind and aimed at sufficiently answering the postulated hypotheses. The first 3 hypotheses had 3 questions each while the last two hypotheses i.e. War/political instability and Relationship to EU citizen had 2 questions each.

4.5.3 Conducting Interviews

For the purpose of this study unstructured interview method was chosen. Unstructured questions allow respondents to reply freely without having to select one of several provided responses.

The disadvantage of unstructured questions - that are also part of the semi-structured interview, is that the free responses solicited tend to produce results that are more difficult to analyze. But, if the interviewer is well-prepared before the beginning of the questioning process, it helps to resolve this problem to a large extent (Welman and Kruger, 2001).

4.6 Study Population and Sample Size

The population used for this study comprised of graduates who have benefited from the Czech government scholarships scheme and are currently residing in the Czech Republic in the past 10 years between 2003 and 2012. Currently the amount of students that benefit from the Czech government scholarship stand at a minimum of 600 yearly out of which between 29 and 30 % graduate yearly i.e. 174 out of 600 graduates at all levels

yearly (Nemeckova et al., 2013). For the 10 year period in this study, there would be 1740 graduates from the scheme. According to Nemeckova et al. (2013) there is no data on Alumni migration hence estimates was used in determining the home return rate of scholarship holders which stands at 50 % to 70 %.

Jelinek et al. (2004) in a previous study puts the home return rate to between 20 % to 50 % thus it is safe to say the range of return rate varies between 50 % to 80 %. So using an 80 % return rate, the population for this research was around 350 and using a 95 % confidence level the sample size was calculated to be 183 A sample of convenience technique was employed through the selection of the respondent that is, participants were informed about the purpose of the study and selected as they became available. The limitation of this selection method as mentioned earlier is the fact that these Graduates are not readily available hence for data collection we relied on networking amongst the graduates i.e. meeting one graduate and hoping to meet another graduate through the one we met already and so on.

A questionnaire was administered between November 2014 to January 2015 to Graduates who benefitted from the Czech scholarship scheme and are still residing in the Czech Republic. The Graduates cut across ten (10) universities in Czech Republic and across 8 different study fields.

One hundred and twenty questionnaires were administered but only Fifty nine Graduates eventually took part in the survey out of which two (2) responses were not analyzed due to incomplete data. The breakdown is as follows:

Table 1: Breakdown of respondents according to Universities

School	Frequency	Percentage
Ceska Zemedelska Univerzita v Praze	14	24%
Univerzita Hradec Kralove	11	19%
Vysoka Skola Chemicko-Technologicka	3	5%
Ceske Vysoke Uceni Technicke	3	14%
Univerzita Karlova	11	19%
Palacky University Olomouc	2	3.5%
Univerzita Pardubice	2	3.5%
Masarykova Univerzita	2	3.5%
Ostravska Univerzita	3	5%
Univerzita Tomase Bati	1	17%

Overall response rate was 48 % out of the 120 questionnaires administered. The gender distribution was quite even: 54 % were males while 46% were females. From the collected data it could be seen that most graduates studied Informatics and related courses, totaling up to seventeen (17) of the entire respondents and further breakdown can be seen below:

Table 2: Breakdown of respondents according to Course Studied

Course	Frequency	Percentage
Informatics	17	29.8%
Medical sciences	10	17.5%
Economics and Management	10	17.5%
Agriculture	4	7.0%
Chemistry	4	7.0%
Engineering	4	7.0%
Biological sciences	2	3.5%
*Others(with just one respondent)	5	8.7%

*others include Tourism management, Natural resources, Archeology, Finance and Law.

The country of origin varied, 27 were from African countries, 13 from Asian countries, 9 from European countries while 8 are from Latin America. Further breakdown can be seen below:

Table 3: Respondents according to regions

Regions	Frequency	Percentage
Africa	27	47.4
Asia	13	22.8
Europe	8	14.0
Latin America	9	15.8
Total	57	100.0

Table 4: Respondents according to country of origin

Country	Frequency	Percentage
Afghanistan	1	1.8
Albania	2	3.5
Angola	2	3.5
Benin	1	1.8
Bolivia	2	3.5
Bosnia	1	1.8
Cambodia	2	3.5
Colombia	1	1.8
Egypt	1	1.8
Ethiopia	3	5.3
Guinea	4	7.0
Honduras	1	1.8
India	3	5.3
Kazakhstan	1	1.8
Kenya	1	1.8
Kyrgyzstan	1	1.8
Macedonia	1	1.8
Moldova	2	3.5
Mongolia	3	5.3
Namibia	3	5.3
Nigeria	4	7.0
Palestine	2	3.5
Peru	4	7.0
Rwanda	3	5.3
Serbia	2	3.5
Sudan	1	1.8
Ukraine	1	1.8
Zambia	4	7.0
Total	57	100.0

4.7 Data Processing

The data collected was checked properly to ensure there were not significant missing values and the data affected after the check was left out of the subsequent analysis. The data was first analysed together as a group then divided into regions and analysed again for better understanding of the trends in the results. The data was analysed using Microsoft Excel and in some cases for further analysis, a Shapiro-Wilks test and a Kruskal-Wallis ANOVA test was employed. The result of the analysis was then displayed using the visualization method in figures and tables.

4.7.1 Analysis of Variance (ANOVA)

The statistics analysis used in this analysis is the non-parametric Kruskal-Wallis (KW) test. This is used because the survey data does not fulfill the ANOVA conditions such as normality, so a non-parametric tests (distribution-free) was used to compare three independent groups of the sampled data. This test, by Kruskal and Wallis (1952) is an alternative to the independent group ANOVA, when the assumption of normality or equality of variance is not met. The KW test compares population medians, and not population means, using the ranks of the data rather than their raw values to calculate the statistic.

After the questionnaire is completed, each item may be analyzed separately or item responses may be summed to create a score for a group of items. Hence, Likert scales are often called summative scales. A Kruskal-Wallis test is only appropriate where the following two assumptions are met:

- a) The dependent variable should be measured at the ordinal or interval/ratio level. Examples of ordinal variables include Likert scales
- b) The independent variable should consist of two or more categorical, independent groups.

4.8 Limitations

1. Constructing the questionnaire was not a very easy task. We had to ensure that the questions to be asked were short and relevant to the objectives of the thesis. More questions would have given us a better insight to more reasons to why the respondents

stayed back but more questions would have meant a longer questionnaire and the respondents under the excuse of unavailable time might be reluctant to fill the questionnaire.

2. Another major challenge was selection/locating the respondents. There is no database whatsoever or platform from which the respondents could be reached hence we had to rely on referrals.

3. The sample size for this research work was supposed to be 183 but due to unavailability of respondents emanating from reasons beyond our control such as the one stated above as the second limitation, we were only able to get 57 respondents.

4. The quality of the result was also impacted by the amount of response. In some of the questions majority of the respondents remained undecided making the result not strong enough for a definite conclusion.

5.0 RESULTS

HYPOTHESIS 1:

Lack of strong ties to the home country influences The Graduates decision to remain in Czech Republic after study

To test the hypothesis above the data was analyzed and a visual representation of the result was gotten as seen below:

Q1: I sometimes financially support members of my family during or after my studies

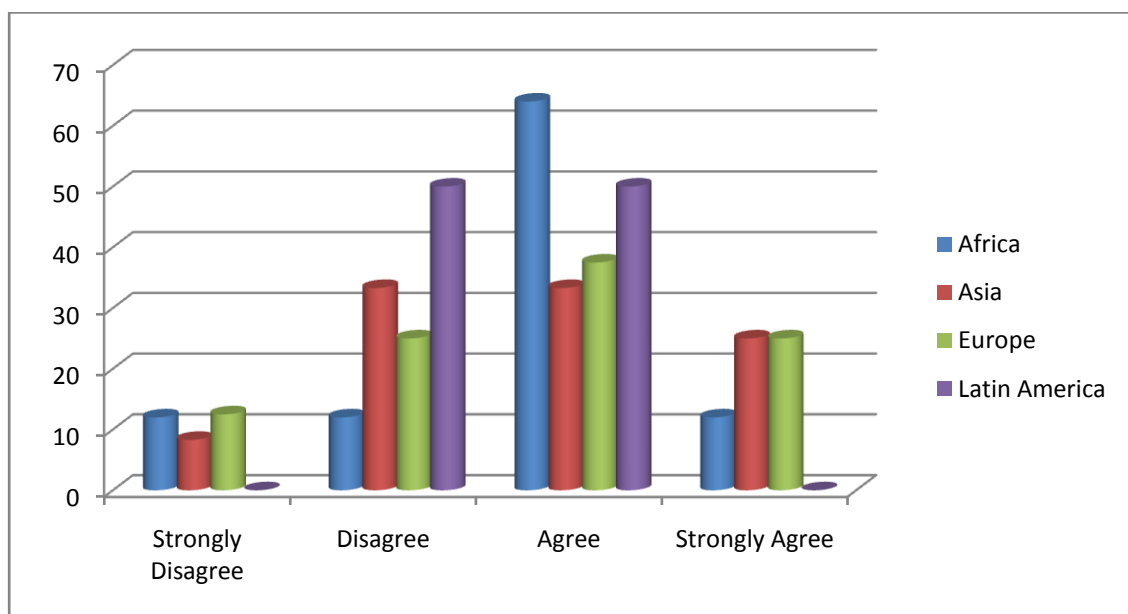


Fig 1: Graph showing number of respondents (%) that indicate they support their family members while in Czech Republic according to regions

The data was split into continents and then analyzed. A large amount of the respondents from all the regions indicated that they had strong ties to their families back home.63% of respondents either agreed or strongly agreed that they had strong ties to their families and so although they miss their family, they had to stay back for one reason or another.

Q2: Family ties are very important to me and I miss my family when I stay in Czech Republic

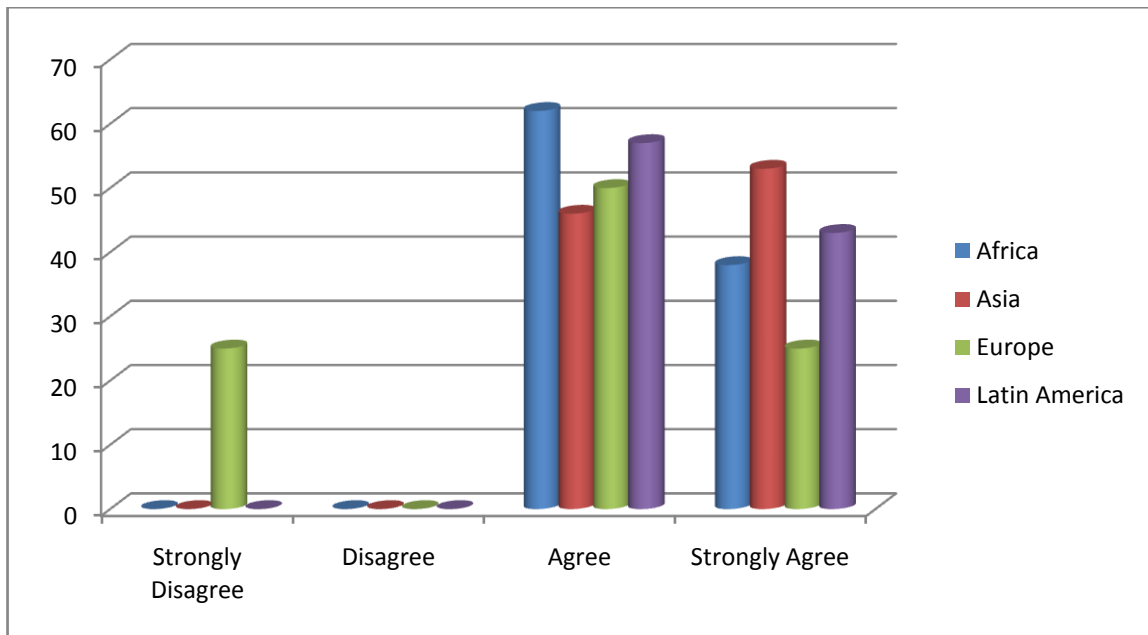


Fig 2: Graph showing number of respondents (%) that indicate they miss their family while staying in Czech Republic.

Although there was a sharp disagreement to the question asked by some respondents from Europe, the response represents less than 30 % of the whole respondents from Europe. The disagreement may be due to the fact that the proximity to home country is not much as compared to the respondents from the other regions that unanimously agreed with the question. 89 % of the respondents from the whole data put together indicated that they do miss their families while staying in the Czech Republic. This can be seen further by regions in fig 2 above as most of the respondents can be seen to either agree or strongly agree with the question asked. This further shows how strongly tied most of the respondents are to their families. One of the respondents during personal interview said *“I love my family so much and I miss them when I am in Czech Republic but I have to stay back to work and send money home for investments and their well being so that they would be fine at all times and also if I decide in the nearest future to go back home, I would have something to fall on”*.

Table 6: Responses to the questions 1 and 2 above - Mean values (standard deviation)

Continents	I sometimes financially support members of my family during or after my studies	Family ties are very important to me and I miss my family when I stay in Czech Republic
Africa	2.76 (1.22)	3.38 (0.49)
Asia	2.75(1.43)	3.54 (0.52)
Europe	2.75(1.50)	2.75 (1.16)
Latin America	2.5(1.06)	3.42 (0.53)

Just as seen in Fig 1 and 2, from the mean values above in reference to the first question, it can be inferred that majority of the respondents tended towards the positive i.e. most of the students agreed that they indeed have strong ties to their home country. Europe has the highest standard deviation which indicates that there were more extreme values in the data analyzed for this question also for the second question, the mean values indicates the direction to which most of the data tends and the sharp response from Europe concerning whether the respondents miss their family while they stay in Czech Republic is also clearly seen in the table and the value for standard deviation indicates that there is indeed an extreme value in the data but nonetheless, majority of the respondents still agreed or strongly agree that they have strong ties to their families. With the two questions asked, the responses support the hypothesis1 stated above.

HYPOTHESIS 2:

Easy integration into Czech Republic affects the decision of The Graduates to remain in Czech Republic after study.

To test this hypothesis, four questions were asked and the data collected was analyzed. Some of the analyzed data is presented as follows:

Q1: My University was helpful in helping me settle down in Czech Republic

As seen below, 17 % out of the total respondents put together mainly from Africa either disagreed or strongly disagreed that their Universities helped them settle down into the Czech Republic. While the remaining respondents agreed or strongly agreed that their

universities were pivotal to their integration into Czech Republic. 7 % of the total respondents were undecided.

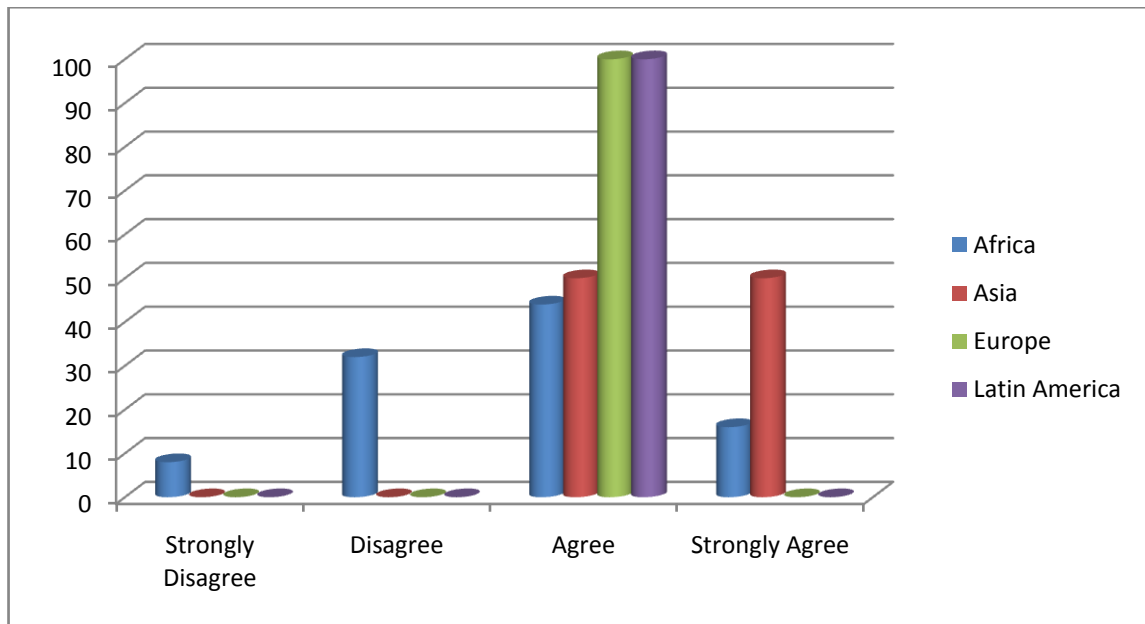


Fig 3: Graph showing number of respondents (%) by continents that indicated how universities were helpful to them in settling down in Czech Republic

Q 3: I got a feeling of acceptance from the Czech community

From the total respondents 38 % (agreed and strongly agreed) of the respondents indicated that they felt accepted by the Czech community in which they found themselves, although a large percentage of the respondents were undecided precisely 47 %. From the unstructured personal interviews conducted, it was found out that majority of the respondents were indifferent about the Czech community. A respondent stated “*I never really bothered about the Czech community, I go to school, get my stipendium, study, and stayed in the hostel, I didn’t have any business with the community*”.

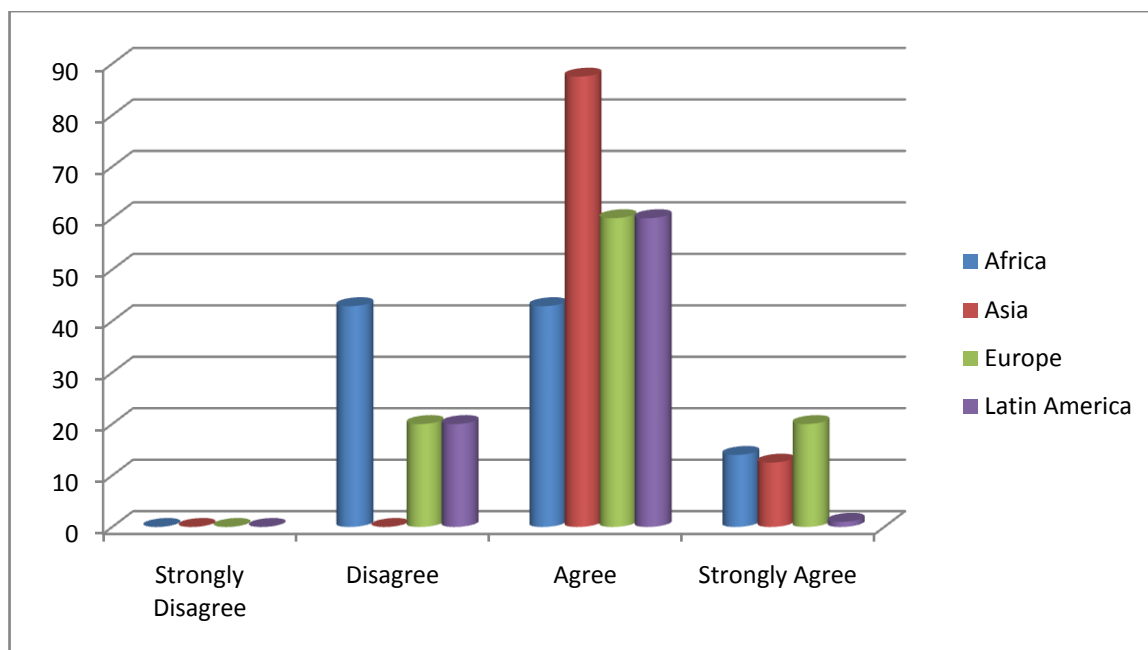


Fig 4: Graph showing number of respondents (%) indicating what their feeling of acceptance into Czech community was like.

Table 7: Responses to the questions 1 and 2 above - Mean values (standard deviation)

Continents	My University was helpful in helping me settle down in Czech Republic	I got a feeling of acceptance from the Czech community
Africa	2.68(0.85)	2.71(0.72)
Asia	3.5(0.55)	3.13(0.35)
Europe	3(0)	3.00(0.71)
Latin America	3(0)	3.00(0.71)

From table 7 above, it is evident that graduates from Asia agreed more that their universities were crucial in their integration into Czech Republic. Respondents from Africa have the lowest mean values and highest standard deviation which indicates that although they somewhat agree with the other regions, it is not on the same level while from the mean values and standard deviation for the second question, it is also evident that majority of the respondents answered in the affirmative that they had a feeling of acceptance from the Czech community. Despite the indifference shown by African students, the mean value still showed a shift to the positive for the question asked.

From the two questions above it can be deduced that majority of the respondents had quite a good integration into the Czech Republic supporting the hypothesis stated above that a good integration might eventually play a pivotal role in the reasons why the respondents decided to stay after their studies.

HYPOTHESIS 3:

The availability of equal job opportunities and prospect of career development for foreigners impacts decision for The Graduates to stay in Czech Republic.

In testing this hypothesis, four questions were also asked and the data collected was analyzed some of which is as follows:

Q2: There are plenty of good jobs in Czech Republic for those who want to get ahead

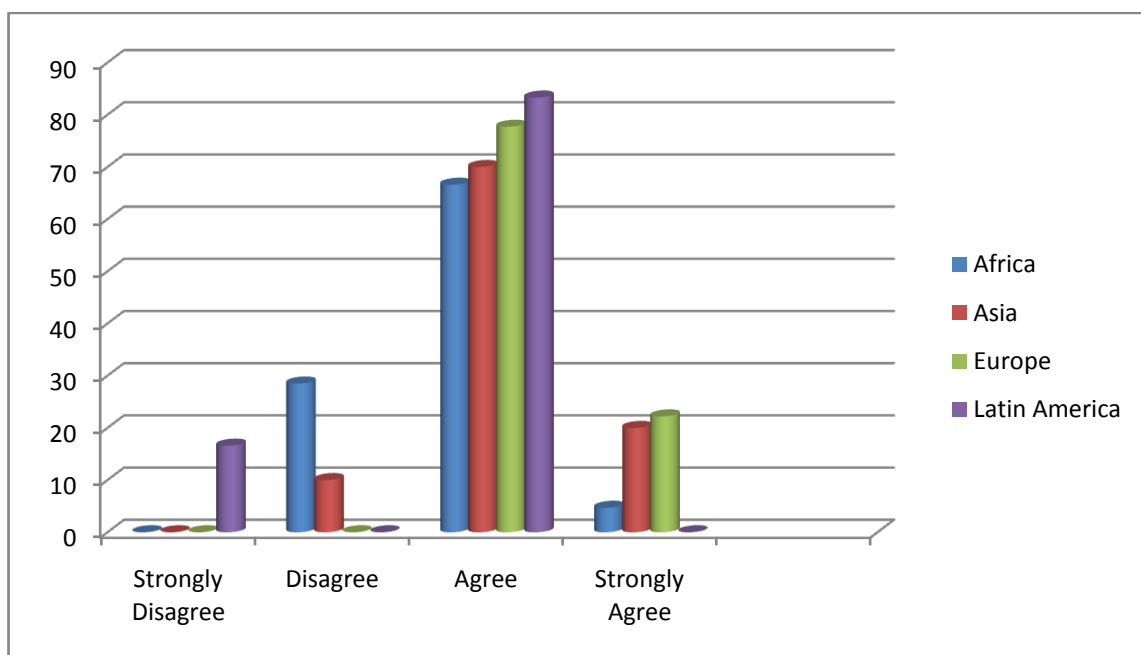


Fig 5: Graph showing number of respondents (%) that indicated that there were jobs in Czech Republic.

From the respondents put together, 65 % concurred that there were jobs in Czech Republic which is crucial for whoever wants to get ahead in life, while 21 % were undecided. From Fig. 5 above it can be seen that unanimously respondents from all the continents agree more that there are jobs available for whoever wants to forge ahead in Czech Republic.

In other to further test if there is any difference in the response rate from the different regions a statistical test was performed using a Kruskal-Wallis ANOVA test. The data was first tested for normality in other to determine the statistical test to be used so a Shapiro-wilk test was first done and the data was not normally distributed.

Owing to the fact that the data was not normally distributed due to different response rate because a likert scale was used for data collection, a non-parametric test was used hence the Kruskal Wallis ANOVA test. From the Kruskal-Wallis test, the p-value was: $p = 0.1142$ which is >0.05 (95 % significance level was used) meaning there were no differences between the groups and that The Graduates from all the different regions believed that there were jobs for whoever wants to get along in Czech Republic.

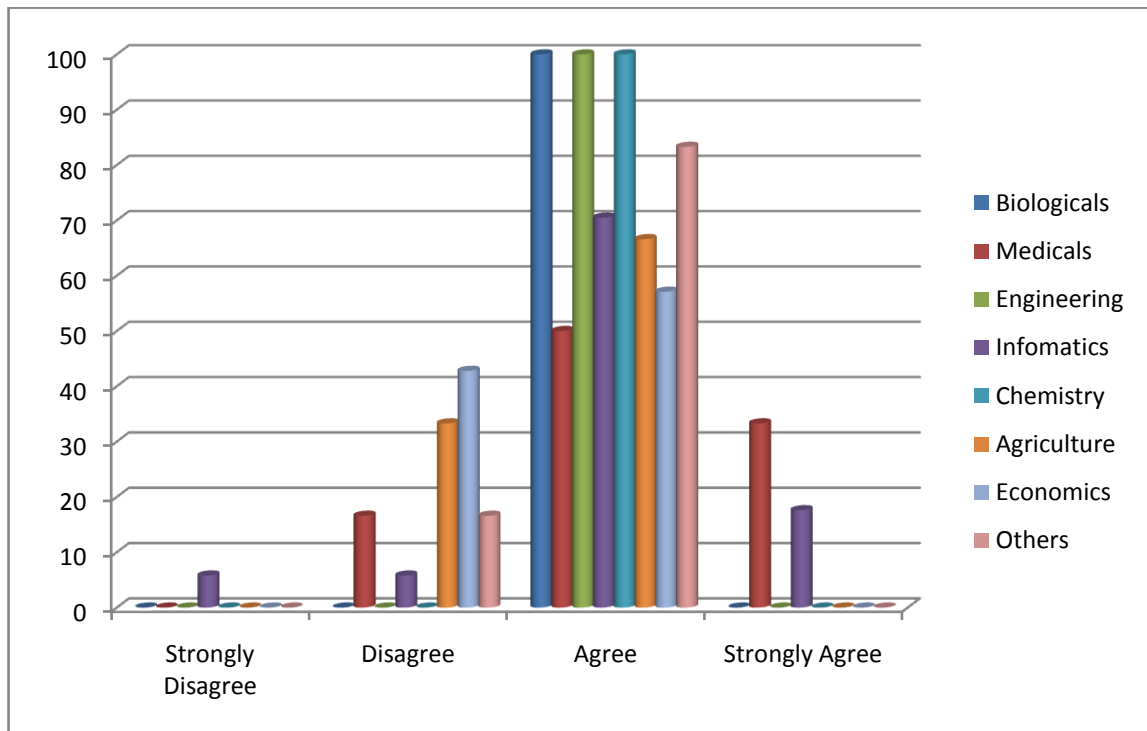


Fig 8: Graph showing responses (%) on job availability by course studied

The responses were also broken down into course studied as seen above in fig 8 and majority of the respondents agreed that there were jobs in the Czech Republic. It is important to note also that although graduates from engineering, chemistry and biological sciences related field agreed 100 % that there were jobs in Czech Republic for those who wanted to get along, majority of them do not work in the same field as what they studied in school as evident in their responses to the questionnaire and from the unstructured interviews conducted unlike graduates from medical and information

technology related fields. All the graduates from medical and Information technology related fields involved in this research are actually working in hospitals, IT firms or the IT department of most companies respectively.

Q3: My opportunities for advancement are limited in my home country

For this question approximately 49 % of the respondents either disagreed or strongly disagreed that they had limited chances of career advancements in their countries while 33 % were undecided. It is important to note that during data collection, there were unstructured interviews with respondents and some made it clear that though they stayed back because of jobs, there was a possibility of getting jobs in their countries also but there are other factors involved in their decision to stay back to work in Czech Republic instead of their countries. A respondent from Cambodia said *“I stayed back to work in Czech Republic not that I would not get a job back home, but because the social amenities that make life comfortable are missing in Cambodia, I just cannot imagine living in a country without constant power supply, good roads, medical care etc.”* Another respondent from Nigeria stated *“Going back home to get a good job is not the problem, apart from all the lack of social amenities in Nigeria, the endemic corruption which doesn’t allow for career growth is a major concern”*.

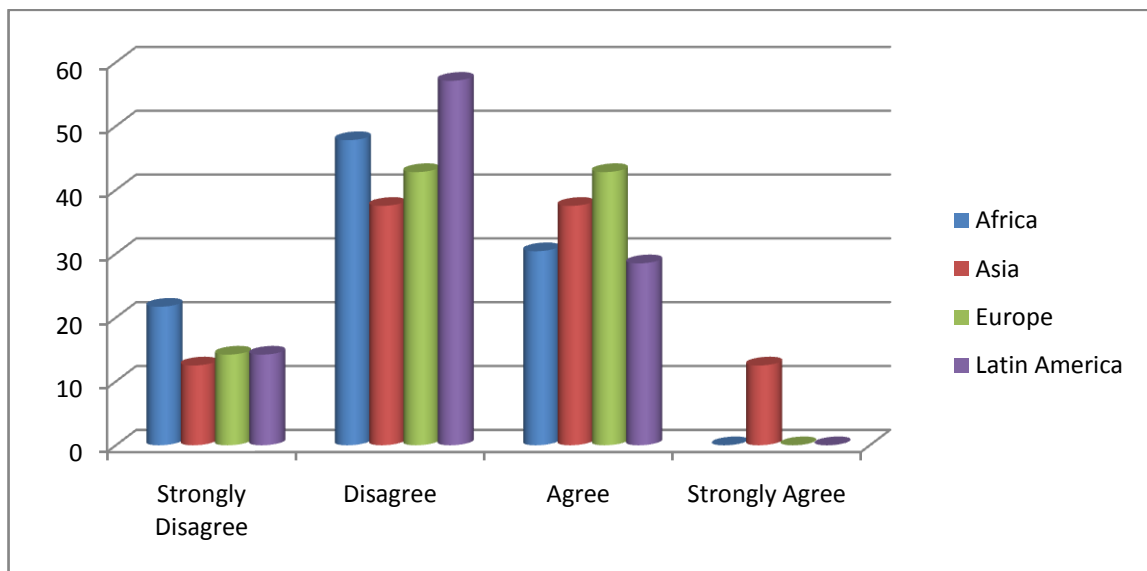


Fig 10: Graph showing number of respondents (%) according to question on availability of jobs in home country by regions

As seen above on the continental level, it is evident that respondents from Asia and Europe were somewhat in concordance to the question while most respondents from

Africa and Latin America disagreed. Some of the respondents from Africa stated that bad government, corruption and not so good working conditions are some of the reasons they prefer to work in Czech Republic as against going back home to take up the supposed available jobs at home. So therefore according to our hypothesis, it could be said that job opportunities play a crucial role in the decision of the respondents to remain after their studies.

Also just like the previous question, this particular question was also tested to see if there are differences between the 4 different groups. A Shapiro-Wilks test was first carried out on the data to test for normality but the data was not normally distributed. So the non-parametric Kruskal-Wallis ANOVA test was used. From the Kruskal-Wallis test, the p-value was: $p = 0.6696$ which is > 0.05 (95 % significance level was used) meaning there were no differences between the groups in their responses to the question that there were limited chances of advancement in their home countries although there was a little digression from Asia.

Table 8: Responses to the questions 2 and 3 above - Mean values (standard deviation)

Continents	Q2: There are plenty of good jobs in Czech Republic for those who want to get ahead	Q3: My opportunities for advancement are limited in my home country
Africa	2.76(0.54)	2.08(0.73)
Asia	3.10(0.57)	2.50(0.93)
Europe	3.22(0.44)	2.29(0.76)
Latin America	2.66(0.82)	2.14(0.69)

Table 8 above shows that from the low value of standard deviations, it can be inferred that there were little extreme values in responses to the questions above. For question 2, Graduates from all the regions agreed that there were jobs in Czech Republic with graduates from Europe agreeing more with the highest mean value and lowest standard deviation same can be seen for question 3 where the mean value and standard deviation showed a very low response from three out of the four regions concerning the question asked on opportunities for career advancement in their home country with respondents from Africa having the lowest mean value. However respondents from Asia slightly

agreed that there were limited opportunities for career advancement in their home country.

HYPOTHESIS 4

War/political instability in home country is a driving force for The Graduates to remain in Czech Republic

Test QuestionQ1: There is a high level of political unrest in my country thus making Czech Republic attractive to live in

From the result, approximately 61 % of the respondents either disagreed or strongly disagreed that war or political unrest in their country was a major factor why they remained in Czech Republic after their studies. However 12 % were undecided. Further breakdown shows the response on continental level as seen in the figure below. Although 25 % of respondents from Asia strongly agreed that war or political unrest was pivotal to their decision to stay behind after study, a larger percentage responded otherwise. From this result it could be said that war or political instability does not play a major role in decision making of respondents to remain in Czech Republic after their studies which greatly does not support the above stated hypothesis

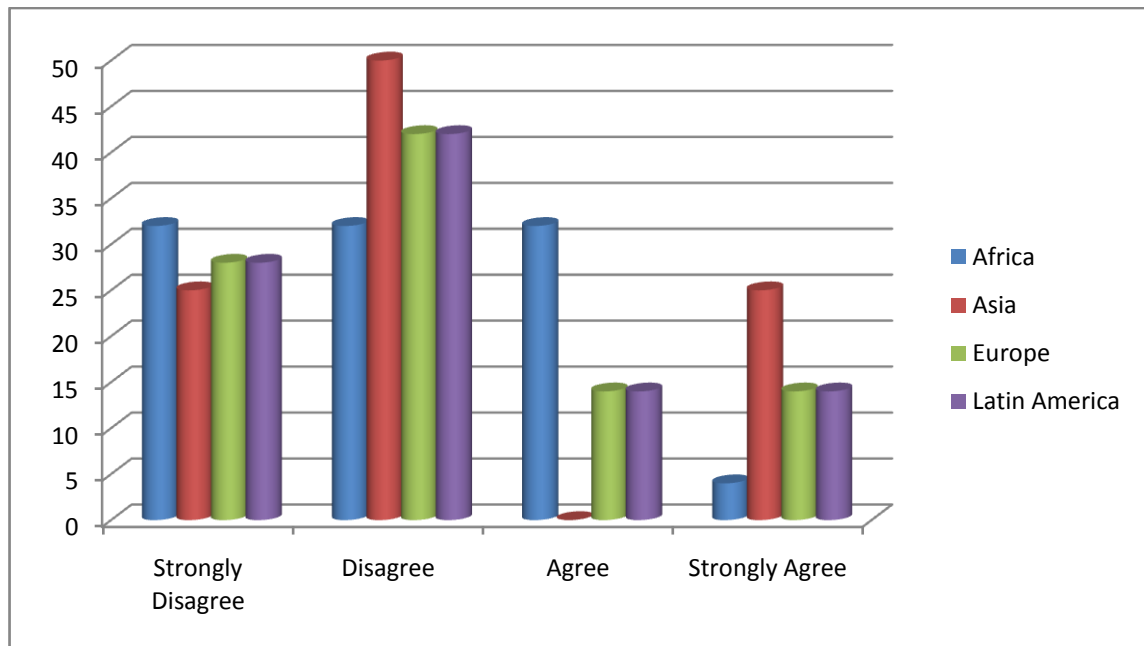


Fig 11: Graph showing distribution of responses (%) according to region to whether high level of political unrest in home country makes Czech Republic attractive to live in.

Table 9: Responses to the questions 1 above - Mean values (standard deviation)

Continents	There is a high level of political unrest in my country thus making Czech Republic attractive to live in
Africa	2.08(0.91)
Asia	2.25(1.09)
Europe	2.14(1.07)
Latin America	1.50(0.84)

Table 9 shows the mean value of the responses which indicates that majority of the respondents disagree with the question on whether war or political instability played a crucial role in staying back in Czech Republic after their study. Response from Asia had the highest standard deviation which explains the 25% seen in fig 11, which means that although majority of the respondents disagree with the question, there were extreme values which suggested otherwise.

HYPOTHEIS 5

Marriage/relationships with EU citizens affect The Graduates decision to remain in host country after study

Test Question1. My getting married to an EU citizen was a major factor for staying in Czech Republic

From the respondents 86 % disagreed or strongly disagreed that getting married to someone from the EU region made them remain in Czech Republic after studies while approximately 10 % responded otherwise, just 3 % of the respondents were undecided. Further breakdown as seen in the fig 16 below shows that there was a unanimous decision from the respondents that marriage do not influence their decision to remain except for a minute 5 % respondents from Asia who thought otherwise while there were extreme values at both ends of the scale in the data collected from respondents from Latin America.

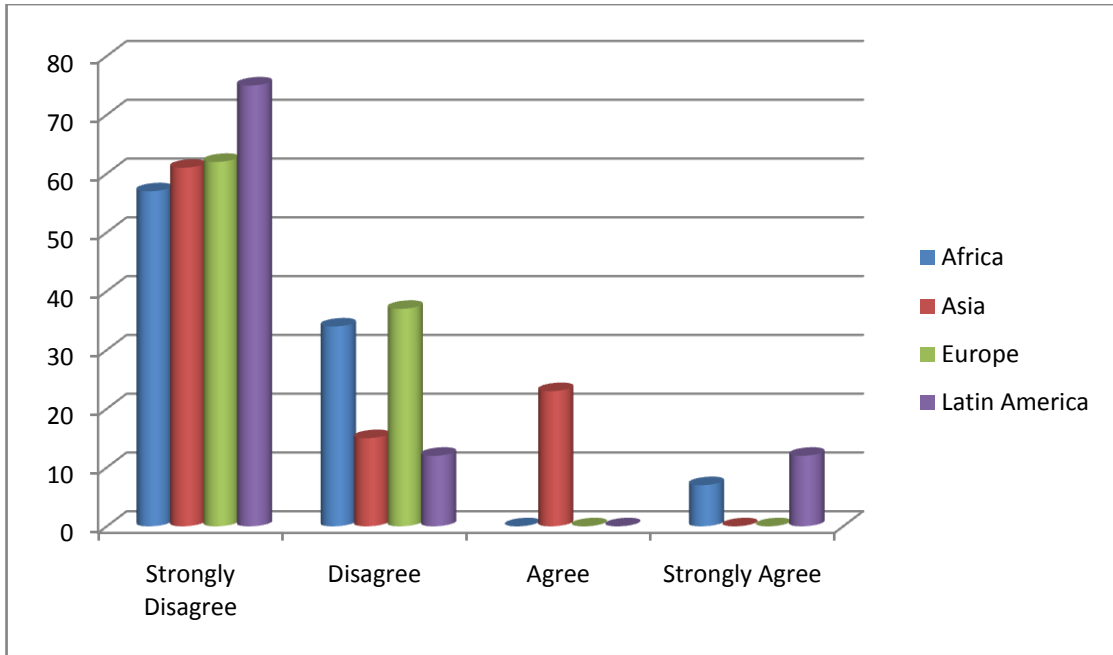


Fig 12: Graph showing responses (%) according to regions on Marriage to EU citizen

Q3: I have children in Czech Republic so I decided to stay

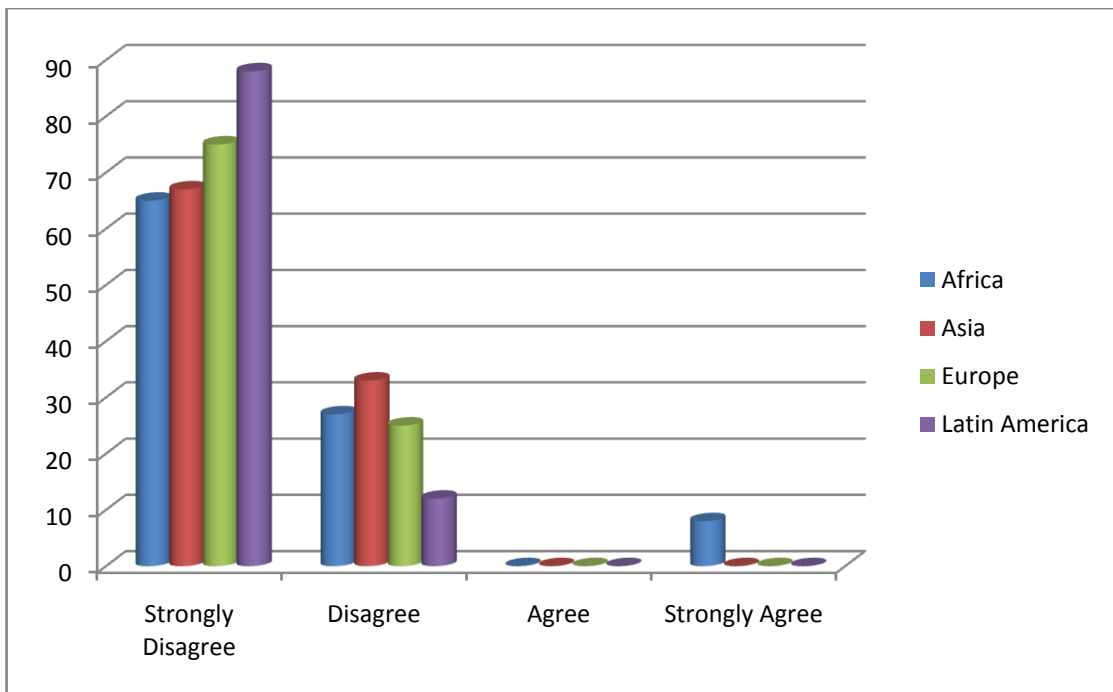


Fig 13: Graph showing responses (%) on if The Graduates stayed because they had children

Also just like the previous question with the exception of 2 respondents from Africa representing just 3 % of the whole respondents, every other respondent approximately 91 % of them either disagreed or strongly disagreed that having children was a reason for them to stay back after their studies. It is imperative however to note that majority of the respondents to this question were either newlyweds or unmarried.

From the two questions used to test the above stated hypothesis, it could be said that marriage to an EU citizen or having children in Czech Republic does not to a large extent influence the decision of respondents to stay after their studies; this fully negates the hypothesis stated above.

Table 10: Responses to the questions 1 and 3 above - Mean values (standard deviation)

Continents	Q1: My getting married to an EU citizen was a major factor for staying in Czech Republic	Q3: I have children in Czech Republic so I decided to stay
Africa	1.57(0.86)	1.5(0.86)
Asia	1.62(0.91)	1.33(0.49)
Europe	1.38(0.51)	1.25(0.46)
Latin America	1.50(1.07)	1.13(0.35)

From all the mean values calculated for the 5 hypotheses above, mean values in table 10 were the least indicative of the fact that irrespective of the region, there is a strong agreement that marriages to EU citizens have bearing on decisions of graduates to stay in the host country after study so also is having children.

6.0 DISCUSSION

In so many developed and developing countries, a lot has been said and written about development assistance to students from developing countries in form of scholarship, grants etc. This can be seen as a two edged sword in that depending on who is on what end, it could have a negative or a positive impact. To this effect it is imperative to define the terms of every development aid and ensure that there are mechanisms in place to make sure the terms are adhered to. In this research work since our major focus is Czech Republic, we tried as much as possible to find out what were the major aims for the establishment of the state government scholarships for students from developing countries and it was found out that the terms or aims of the scholarship were not even defined until 2012 (MFA, 2012). To make it even worse the scheme has not been evaluated since inception until recently by Nemeckova et al. (2013).

This study provides an insight into an under-researched but very important issue which is growing rapidly amongst many proponents of development aid as a means of assistance to developing countries. The contributions of this research would help better understand the reasons why graduates decide to remain in Czech Republic after their study.

The contributions can be seen in three different ways:

- Spawning the need for further research into the subject matter.

There has been different researchers worldwide at one point or the other although far in between working on this same particular topic and coming up with different results and suggesting areas of further research to add to what is already known (see Nemeckova et al 2012., Baruch et al., 2006, Horky et al., 2011, Jedinek et al., 2004) in line with the recent call for further studying global research agenda (see Peng, 2004: Ramamurti, 2004).

- The Graduates accomplished their main aim which was to study.

The other contribution is to further buttress the aims of the scholarship scheme by the Czech government as defined in the Czech MFA document released in 2012 which made it clear that the major aim of the scholarship scheme was to provide tertiary education to those students in developing countries for whom (due to any reasons) such education would not be accessible in their home countries and via this, contribute to human

capacity enhancement in particular countries, or their socio-economic development respectively, Just as stated by Heller and Marin (2004) one basic goal of higher education policy should be to make certain that this opportunity is not foreclosed by a family's income or wealth. From the unstructured interviews conducted during the data collection process it was clear that so many of the graduates might not have been able to get the required education if they had not gotten the scholarship as at the time they got it due to different reasons ranging from limited carrying capacities of home universities compared to the teeming population of students seeking university studies to the cost of tuition which could be out of reach for parents to afford. Also data from Czech government as stated by Nemeckova et al. (2013) showed that a minimum of 600 students get the scholarship yearly and at least 174 graduates yearly, hence approximately 13800 students have benefitted from the scheme since 2002, out of which at least 4002 graduated at all levels respectively. This might not represent a huge success but it in a way indicates that the scholarship is operating in the right direction.

➤ Enumerate the key reasons The Graduates stayed in Czech Republic after studies.

To test the hypothesis, the data collected was analyzed and the results were visualized in form of descriptive analysis, graphs, tabulated results. From the analysis, it was found out that out of the five hypotheses postulated; three were fully supported by the data collected i.e. Family ties, Integration into the Czech Republic and Job Opportunities.

Out of these three hypotheses, job opportunities in the Czech Republic received full support and was the major factor why most of the graduates decided to stay behind after their studies irrespective of whether they had previous work experiences or not. Majority of the respondents, precisely 39 out of a total of 57 did not have any work experience before getting the job they currently do while 17 did have work experience. Majority of the graduates were involved in IT related endeavors which is supposedly the most lucrative in Czech Republic. The result also shows that although all the respondents from the different regions unanimously agreed that job opportunity was a major factor for staying behind, graduates from Africa tend to stay more because of poor working conditions and remunerations back home. This finds credence from the work of Baruch et al. (2004) in which he posited that career advancement and job availability contributes greatly to decisions of students to remain in the host country after their studies.

From the analysis also we could see that graduates from Latin America and Europe had a better integration than those from Asia and Africa due largely to the initial culture shock and struggle with the language although they later came to terms with the situation and this contributed to their reasons for staying back after their studies.

Family ties were another reason supported by this research as contributing to the respondent's decision to stay in Czech Republic after their studies. There was almost a unanimous response from the respondents when asked if they really missed their families while in Czech Republic except of course for some of the respondents from Europe which is quite understandable because they can get to go home to see their families as often as they want. The need to stay back to work in order to support family members at home cannot be overemphasized, this is an important reason for most of the respondents to stay back. This is supported by the research of Ana Bleahu (2004) in her research on migration studies in which she stated that migrants most times migrate with a certain target but while in the host country, events change and the migrants target changes informing the new decision to remain in the host country.

The other two hypothesis i.e. War or Political Instability in home country and Marriage/Strong relationship to EU citizens got partial or little support from the respondents.

Most of the respondents indicated that there was peace in their country, also from the mean values and standard deviation it is obvious where the whole result tended towards which indicates that although in some regions there might be instability which may have made some of the respondents to stay back after their studies, it is not a major reason why majority of the respondents decided to remain in the country.

Also just like War/Political instability, relationships or marriages were not in any way the motivating factor for the respondents to remain in the Czech Republic after their studies. In fact this hypothesis had the least support in all the entire hypotheses tested. The respondents clearly veered off this point as a major reason for their decision to stay back. Majority of the respondents opposed the notion that having children with an EU citizen in any way informed their decision to remain in the country after their study, from this hypothesis it is clear that relationships may have been developed along the line of study, but it didn't really form the major crux of why the graduates decided to stay. This result could have been influenced by the fact that majority of the respondents that

participated in this research are in their late twenties and as such are yet to start a family or have children which may have swayed the decision to stay in another direction.

The result of this work shows similar result to the research work conducted by Baruch et al. (2006) using regression analysis to explain some of the reasons for the inclination of students to remain in the host country after studies, some of which includes social support (integration), family ties, career conception, labor market perception etc to mention a few.

6.1 Limitations to the Research

1. One major challenge was dearth of information, little of no information was available as to how the respondents could be located leading to big challenges in selecting/locating the respondents. There is no database whatsoever or platform from which the respondents could be reached hence we had to rely on referrals.

2. The sample size for this research work was supposed to be 183 but due to unavailability of respondents emanating from reasons beyond our control such as the one stated above as the second limitation, we were only able to get 57 respondents.

3. The quality of the result was also impacted by the amount of response. In some of the questions majority of the respondents remained undecided making the result not strong enough for a definite conclusion.

4. The topic is a vastly under-researched topic so much work could not be used for triangulation method. Majority of the work done so far has been at the policy and implementation level.

5. There were also security issues by some of the respondents, some respondents reluctantly filled the questionnaire while some outrightly refused to participate in the research work for fear of their information getting to the police and maybe facing deportation.

6.2 Recommendation

Further research is recommended to fully back up the ones already done in this field of research with a more robust attempt at locating more respondents to give better credence to the results, also an older age range of graduates that benefitted from the scholarship scheme should be engaged so as to know if the last two hypotheses which were not fully

supported by this research work could be supported by older age range of respondents especially the hypothesis on Marriage/Relationship to EU Citizen. Government should also endeavor to invest in the evaluation of the scheme in other to be sure the scheme is still in the right direction. Also since majority of the respondents indicated that job opportunities are reasons for staying back after studies, it is highly recommended that the Czech government work hand in hand with government of home countries for job placements for these graduates after their studies, this would go a long way in encouraging these graduates to want to go back home after their studies.

Policy makers should also endeavor to provide more scholarships in fields required by the Czech labor market in other to prevent the emergence of lots of unemployed graduates in future, this is important because it would be a wasted effort if after the whole study in Czech Republic.

The Government could also ensure strict adherence to the contract signed by scholarship beneficiaries before commencement of studies stating return to home country after study which obviously is currently not adhered to because there is no database of graduates from the scheme let alone for those that decided to remain behind.

7.0 CONCLUSION

This thesis provides a clear insight into the effectiveness of the Czech government scholarship for students from developing countries. From the objectives of this thesis, it can be concluded that there are several reasons why graduates decide to remain in the Czech Republic after their study some of these reasons include job/career advancement, integration and family ties. Job/career advancement plays the most pivotal role in Graduates decision to stay back in the country after studies owing to so many reasons ranging from availability of job opportunities in Czech Republic to unfavorable working conditions in home country and better chances for career development in Czech Republic.

A very good integration into Czech Republic also accounts for the decisions of some graduates staying back after study as majority of the graduates see the country as their second home and feel comfortable settling down in the country. While strong ties to the family in the home country also plays a pivotal role in decisions made by graduates to stay back after studies to make some money and support the family back home instead of going home to a world of uncertainty.

This thesis brings useful information and insights on the effectiveness of system of state scholarships for students from developing countries and it can be valuable for other students or Government agencies in carrying out similar or further studies in this area.

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a) Strongly Disagree b) Disagree c) Undecided d) Agree e) Strongly Agree

3. I got a feeling of acceptance from the Czech community

a) Strongly Disagree b) Disagree c) Undecided d) Agree e) Strongly Agree

4. The Czechs in my community were rather distant and unapproachable

a) Strongly Disagree b) Disagree c) Undecided d) Agree e) Strongly Agree

To what extent did any of the questions above influence your decision to remain in Czech Republic after your studies? a)1 b)2 c)3 d)4 e)5 (N.B: 1 - least influence , 5 - Strong influence).

JOB OPPORTUNITIES AND CAREER DEVELOPMENT

1. My opportunities for advancement in the Czech republic are limited

a) Strongly Disagree b) Disagree c) Undecided d) Agree e) Strongly Agree

2. There are plenty of good jobs in Czech republic for those who want to get ahead

a) Strongly Disagree b) Disagree c) Undecided d) Agree e) Strongly Agree

3. My opportunities for advancement are limited in my home country

a) Strongly Disagree b) Disagree c) Undecided d) Agree e) Strongly Agree

4. I have a good chance of getting a good job in my home country

a) Strongly Disagree b) Disagree c) Undecided d) Agree e) Strongly Agree

To what extent did any of the questions above influence your decision to remain in Czech Republic after your studies? a)1 b)2 c)3 d)4 e)5 (N.B: 1 - least influence , 5 - Strong influence).

WAR/POLITICAL INSTABILITY

1. There is a high level of political unrest in my country thus making Czech republic attractive to live in

a) Strongly Disagree b) Disagree c) Undecided d) Agree e) Strongly Agree

2. The political state of my country is good and it does not affect my decision to stay

a) Strongly Disagree b) Disagree c) Undecided d) Agree e) Strongly Agree

To what extent did any of the questions above influence your decision to remain in Czech Republic after your studies? a)1 b)2 c)3 d)4 e)5 (N.B: 1 - least influence , 5 - Strong influence).

MARRIAGE/RELATIONSHIP WITH EU CITIZEN

1. My getting married to an EU citizen was a major factor for staying in Czech Republic

a) Strongly Disagree b) Disagree c) Undecided d) Agree e) Strongly Agree

2. I was propelled to stay in Czech Republic because I had strong relationship(s)

a) Strongly Disagree b) Disagree c) Undecided d) Agree e) Strongly Agree

3. I have children in Czech Republic so I decided to stay

a) Strongly Disagree b) Disagree c) Undecided d) Agree e) Strongly Agree

To what extent did any of the questions above influence your decision to remain in Czech Republic after your studies? a)1 b)2 c)3 d)4 e)5 (N.B: 1 - least influence , 5 - Strong influence).