

**DETERMINANTS OF BRAIN DRAIN AND THE IMPACT OF NEW ECONOMIC  
MODEL – THE CASE OF MALAYSIA**

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## **Table of Content**

Acknowledgement	i
Table of contents	ii
Lists of tables	vi
Lists of figures	vii
Lists of appendixes	vii
Abstrak	ix
Abstract	x
 <b>Chapter 1: Introduction</b>	
1.1 Introduction	1
1.2 Background of study	1
1.3 Research Problems	3
1.4 Research Questions	6
1.5 Research Objectives	6
1.6 Significance of the Study	7
1.7 Definition of Key Terms	7
1.7.1. Brain Drain	8
1.7.2. New Economic Model (NEM)	8
1.8 Organization of the Remaining Chapters	9
 <b>Chapter 2 : Literature Review</b>	
2.1 Introduction	10
2.2 Theories associated with intention to go abroad for work / study	
2.2.1 Maslow Hierarchy of Needs	16
2.2.2 Theory of Reasoned Action	18

2.3	Intention to leave	18
2.4	Expectation Construct	19
2.5	Perceived Opportunity Construct	21
2.6	Sustainability Construct	22
2.7	Safety and Security Construct	23
2.8	New Economic Model	23
2.9	Literature gap	26
2.10	Theoretical Framework	27
2.11	Hypothesis Development	28

## **Chapter 3 : Methodology**

3.1	Introduction	29
3.2	Research Design	29
3.3	Population and unit of analysis	30
3.5	Sample size	30
3.6	Sampling Method	30
3.7	Measurements of Variables	31
3.7.1.	Demographics variable	32
3.7.2.	Determinants that influence the intention to go abroad for work or study	32
3.7.2.1	Expectation construct question	32
3.7.2.2	Perceive Opportunity construct question	33
3.7.2.3	Sustainability construct question	33
3.7.2.4	Safety and security construct question	33
3.7.2.5	Intention to go abroad question	34

3.7.3 Determinants that influence the intention to go abroad for	
3.7.3.1 New Economic Model question	35
3.7.3.2 Intention to go abroad in the light of New Economic Model question	36
3.8 Data collection technique	37
3.9 Data analysis technique	37
3.9.1. Descriptive analysis	37
3.9.2. Factor analysis	37
3.9.3 Reliability Test	38
3.9.4 Correlation analysis	38
3.9.5 Hierarchical regression analysis	39
3.10 Summary	40

## **Chapter 4 : Data Analysis and Results**

4.1 Introduction	42
4.2 Response rate	42
4.3 Demographic profile of respondents	43
4. 4 Goodness of measures	44
4.4.1 Factor analysis	45
4.4.1.1 Factor analysis of determinants that influence Malaysian skilled worker to go abroad.	46
4.4.1.2 Factor analysis of New Economic Model	49
4.4.1.3 Factor analysis of intention to go abroad	54
4.4.1.4 Factor analysis of intention to go abroad in the light of new economic model	55

4.4.2 Reliability analysis	56
4.5 Revised Theoretical Framework	58
4.6 Revised Hypothesis Development	59
4.7 Descriptive Statistics and Correlation Analysis	60
4.8 Hierarchical Regression Analysis	62
4.8.1 The relationship between determinants that influence the intention to go abroad with intention to go abroad for work / study	64
4.8.2 The relationship between new economic model with intention to go abroad for work or study in the light of new economic model	65
4.9 Hypotheses Testing	67
4.10 Summary	68

## **Chapter 5: Discussion and Conclusion**

5.1 Introduction	69
5.2 Recapitulation of the study	69
5.3 Discussion	71
5.3.1 Determinants that influence the intention to go abroad and intention to go abroad for work / study	71
5.3.2 New economic model and intention to go abroad for work / study in the light of New Economic Model	74
5.4 Implications of the study	76
5.5 Limitations	78

5.6 Scope for future study	78
5.7 Conclusions	79
<b>Reference</b>	80
<b>Appendixes</b>	86

## **List of Tables**

<b>Table No:</b>	<b>Title of Table</b>	<b>Page</b>
Table 2.1	Summary of previous literature review toward brain drain	15
Table 4.1	Particular of questionnaires	42
Table 4.2	Demographic profile	43
Table 4.3	Rotated component matrix for determinants that influence Malaysian citizens to go abroad	48
Table 4.4	Rotated component matrix for new economic model on intention to go abroad in the light of New Economic Model	52
Table 4.5	Summary of factor analysis on intention to go abroad	55
Table 4.6	Summary of factor analysis on intention to go abroad in the light of new economic model	56
Table 4.7	Summary of reliability test	57
Table 4.8	Summary of descriptive analysis for determinants and correlation analysis	60
Table 4.9	Summary of descriptive analysis for New Economic Model and correlation analysis	61

Table 4.10	Summary of descriptive analysis for dependent variables and correlation analysis	61
Table 4.11	Hierarchical regression analysis on determinants that influence the intention to go abroad– Intention of Malaysian citizen to go abroad.	64
Table 4.12	Hierarchical regression Analysis on New Economic Model– Intention of Malaysian citizen to go abroad in the light of New Economic Model.	66
Table 4.13	Summary for the hypotheses testing.	68

### **Lists of Figures**

<b>Figure No:</b>	<b>Title of Figure</b>	<b>Pages</b>
Figure 2.1	The new economic model	24
Figure 2.2	Theoretical framework	27
Figure 4.1	The revised theoretical framework	58

### **Lists of Appendixes**

<b>Appendixes No:</b>	<b>Title of Appendix</b>	<b>Pages</b>
Appendix A	Survey's questionnaire	86
Appendix B	Factor analysis of determinants on intention to go abroad	94
Appendix C	Factor analysis on New Economic Model	97



Appendix D	Factor analysis of Intention to go abroad	100
Appendix E	Factor analysis on intention to go abroad in the light of new economic model	102
Appendix F	Reliability analysis for determinant on intention to go abroad – expectation construct	104
Appendix G	Reliability analysis for determinant on intention to go abroad – opportunity construct	105
Appendix H	Reliability analysis for determinant on intention to go abroad – Sustainability construct	106
Appendix I	Reliability analysis for determinanat on intention to go abroad – safety and security construct	107
Appendix J	Reliability analysis for new economic model on intention to go abroad – sustainability and inclusiveness construct	108
Appendix K	Reliability analysis for new economic model on intention to go abroad – Business environment construct	109
Appendix L	Reliability analysis for new economic model on intention to go abroad – high income construct	110
Appendix M	Reliability analysis for intention to go abroad	111
Appendix N	Reliability analysis for intention to go abroad in the light of new economic model	112
Appendix O	Regression analysis – determinants that influence the intention to go abroad on intention to go abroad for work / study.	113
Appendix P	Regression analysis – effect of new economic model on intention to go abroad for work /study.	120

## **ABSTRAK**

Kajian ini mengkaji factor yang mempengaruhi niat rakyat Malaysia untuk pergi ke luar negara untuk bekerja / belajar dan kesan model ekonomi baru terhadap mereka. Globalisasi telah meningkatkan mobiliti pekerja mahir dan membolehkan mereka untuk mencari peluang perkerjaan lebih mudah di seluruh dunia. Negara maju terus merebut saintis dan krim intelektual dari negara pembangun dan negara kurang maju yang akhirnya menyebabkan “Brain Drain”. Diaspora Malaysia melebihi 1 juta dan satu pertiga daripada itu ialah orang berpendidikan tinggi. Oleh itu, kita semata-mata melatih profesional untuk memenuhi keperluan negara maju dan bukannya diri sendiri. Dalam kajian ini, data 105 responden telah digunakan untuk menganalisis hasil kajian. Responden terutamanya terdiri daripada pengajian di peringkat Ijazah Sarjana Muda, sarjana dan pemegang PhD yang memenuhi keperluan asas "Brain Drain". Faktor yang terlibat dalam kajian ini ialah jangkaan, peluang, kemampanan, keselamatan dan Model Ekonomi Baru. Analisis regresi hierarki digunakan untuk menganalisa data yang dikumpul. . Hasil kajian menunjukkan jangkaan, peluang dan keselamatan mempengaruhi niat untuk pergi ke luar negara untuk bekerja / belajar secara positif. Sebaliknya, kesan model ekonomi baru didapati berkaitan negatif dengan niat untuk pergi ke luar negara bagi bekerja / belajar. Kajian ini memberikan maklumat yang penting kepada kerajaan Malaysia dan pemilik polisi bagi memahami keperluan rakyat Malaysia dengan lebih mendalam supaya mereka boleh mengambil tindakan yang sewajarnya untuk menangani isu tersebut dan mengekalkan krim intelek di Malaysia.

## **ABSTRACT**

This study examines the determinants that influence the Malaysian citizens' intention to go abroad for work / study and the effect of the new economic model. Globalization has increased the mobility of the skilled workers and enabled them to seek opportunities more easily all around the world. The developed countries keep on grabbing the scientists and cream of intellectuals from developing countries and under developed countries which eventually causes brain drain. The Diaspora of the Malaysian is 1 million and one third of it is highly educated people. Thus, we are training professionals just to fulfill the needs of developed countries rather than our own selves. In this study, 105 respondents' data have been used to analyze the results of the questionnaires survey. The respondents mainly consisted of undergraduates, degree, masters and PhD holders which fulfilled the basic requirement of "brain drain". The determinants (factors) included are the expectations, perceived opportunity, sustainability, safety and security and New Economic Model reflections. The analysis was carried out using hierarchical regression models. The results show that the expectation, perceived opportunity and safety and security were positively influencing the intention to go abroad for work / study. On the other hand, the effect of the new economic model was found to be negatively correlated with the intention to go abroad for work / study. This study provides an important information to the Malaysian government and policy owners to better understand the needs of Malaysian citizens so that they can take appropriate action to tackle the issue and retain the cream of intellectuals in Malaysia.

## **Chapter 1: Introduction**

### **1.1 Introduction**

This chapter mainly focus and explains the research outline of the study. The flow starts with highlighting the background of the intended study and the problem statement followed by research objectives and lastly the research question. Definition of key terms will be included to enhance understanding. Significance of the study will be the last part for this chapter.

### **1.2 Background of study**

There has been a lot of development going around the world nowadays as compared to decade back. South East Asia has been one of the fastest developing regions in the world. Country like Thailand, Indonesia, Singapore, Vietnam and Myanmar are all luring foreign investment into the country in order to boost up the economy. Malaysia has also been actively involved in developing the country from an agricultural base economy to become a high technology and well developed country.

Development of country and industrialization has a direct impact on labour market. The country development has increased the people's expectation of living standard such as better facilities, better healthcare system or public transportation which require expertise such as doctors, accountants or others professional to operate and manage. Investment from foreign country to setup factory locally has also increased the demand for professional job or technical expertise like engineers, IT specialists or managers. The demand for labour or to be more specific professionals has become greater when China opens its door and welcomes foreign investors into their country.

To make matter worse, globalization has increased the mobility of the skilled workers and enabled them to seek international opportunities more easily. This has directly impact the demand or competition for skilled labour between firms. The firms' competition for skilled labour has become ferocious with the effect of globalization. The shortage for skilled worker in host country somehow has to be filled and most of the country aiming the developing country professional which is cost effective. This has led to a shortage of skilled workers in developing country especially Asian countries where there is poor economic climate at home. The poor economic condition has forced young people to make their pursuit in their career in more developed country. Malaysia could not escape from this phenomenon as well. The phenomenon above is called brain drain as skilled workers are leaving or working for other countries rather than the motherland. No contribution has been placed to develop the country once the skilled worker leave for other countries.

Brain drain will have a negative impact on the country's development. The nation provides all necessary infrastructure and resources to train the human capital. If the person decide to stay and work for other countries, all the investment the country provided will be down the drain. No contribution will be provided to the home country which eventually will hinder the development of the country. Hence, it is very important to retain the talent in home country to help develop the country

Based on the latest World Bank report on April 2011, the Diaspora of Malaysian is over 1 million and one third of it is highly educated people. Among the 1 million people who are staying overseas, half of it is actually staying in our neighbouring country Singapore. The World Bank report (The World Bank, April 2011) shows that almost 54% of the brain drain hosted in Singapore follow by Australia, Brunei and United Kingdom.

Brain drain is not only an issue in Malaysia itself but are all around the world. The issue affects all countries around the world regardless of either the country is developed or

under development but the issue is more serious in developing country. Many journals have pointed out that lost of talent is more serious in developing country but there are some journal which mention that even in developed country like Germany also face the similar issue.

Furthermore, there is a short term research granted by University Sains Malaysia granted to Puan Junaimah Jauhar on the brain drain issue title: the propensity to move abroad among professionals on 1 June 2010 (USM, 2012). This shows there is a lot of interest in society or community to really understand the issue. The findings hopefully could help government draft a policy that can tackle the brain drain issue in Malaysia and eventually bring Malaysia towards a successful future by retaining the professional.

### **1.3 Research Problems**

While Malaysia is trying to develop the nation, there are a lot of talented teenagers or skilled workers who are leaving the nation to seek for better opportunities outside the country. For examples, 30 years back, people always said Malaysia is comparable to Korea and Taiwan, but look at what Taiwan and Korea are achieving now. They are much stronger in term of economic capabilities as compared to Malaysia now. They can be considered the leader of electronic technology and has become a fully developed country. As of today, Vietnam and Indonesia re already picking up the pace for development and the gap between Malaysia has been reduced significantly. Malaysian has to put in extra effort to increase the productivity and reduce the talent loss to other country.

There are a lot of news on the loss of talent in Malaysia. Recently The New York Times published a title called “Loss of Young Talent Thwarts Malaysia’s Growth” (Gooch, 2010) which highlighted the skilled workers or teenagers believe that Singapore are better in term of education, job opportunity and higher wages. Above reason are the reasoned why Malaysian citizen is leaving. Inside the article, one interviewee mentioned “I might return to

Malaysia if I had a really good job offer there, which I think would be unlikely or if I eventually get married to a Malaysian who wants to live in his hometown” (Gooch, 2010). This showed how dim the chances are for skilled worker to return to Malaysia once they leave and how pessimistic the thinking of skilled worker toward Malaysia future.

Among the famous that have left Malaysia for better career advancement or opportunity is Azly Rahman, who is the lecturer for Columbia University in United States of America. Not to mention the Malaysia born entrepreneurs and business tycoon Robert Kuok (Razak & Wong, 2010). Adding to the list for the latest talents that Malaysia are losing includes Former PETRONAS CEO Tan Sri Hassan Marican who has been appointed as chairman of Singapore Power Limited according to Malaysia Insider (Chooi, 2012). All the above shows that Malaysia still losing its talent personals which are potential to help develops Malaysia towards a better future.

According to the latest World Bank report on April 2011, the Diaspora of Malaysian are over 1 million and one third of it is highly educated people. Among the 1 million people who are staying overseas, half of them are actually staying in our neighbouring country Singapore. The World Bank report (The World Bank, April 2011) show that almost 54% of the brain drain hosted in Singapore follows by Australia, Brunei and United Kingdom.

If compare with neighbouring country, Malaysia’s innovation index based on the Global Innovation Index 2011 is ranked 31<sup>st</sup> while Singapore is ranked 3<sup>rd</sup> and Australia is ranked 21<sup>st</sup> in the world (INSEAD, 2011) which is far below the developed country. The gross national income per capita for Malaysia in 2010 is USD 7,900 according to World Bank (World Bank, 2011) whereas Singapore gross national income per capita is USD 40,920, which is almost 5 times the earning of Malaysia. This will cause Malaysia to have a hard time to retain the professionals as the opportunities for learning and income is higher. The

good point is recently Malaysia has been ranked 1<sup>st</sup> among countries in Southeast Asia in the Global Peace Index (GPI) followed by Singapore, Vietnam and Laos (Thestar, 2011).

On the other side, on 30<sup>th</sup> March 2010, our Prime Minister introduced the New Economic Model (NEM) which the goals are to make Malaysia a developed and competitive economy where the people enjoy high quality of life and high level of income resulting from growth that is both inclusive and sustainable. The vision for New Economic Model is to transform Malaysia into a competitive, knowledge-based, innovation and eco-efficient economy that eventually will drive the country toward economic prosperity (National Economic Advisory Council, 2010). The New Economic Model introduced do acknowledged the brain drain issue Malaysia is facing and have stated several strategies to tackle the issue. Hence there is a need to conduct a survey and study the presented strategies that are able to reduce the intention of people to leave the country and directly benefitted Malaysia.

There are many research articles which mentioned that the students who study abroad have fewer intentions to return home once completed studies. Research paper by Aysit Tansel and Nil Demet Gungor in Turkey showed that the intention to return home after studies drop from initial 53% to 9 % after they have completed study (Tansel & Gungor, 2003). Will the New Economic Model encourage people to stay in Malaysia for further study and reduce the tendency of losing skilled worker as claimed by Aysit Tansel and Nil Demet Gungor?

Therefore it is worthwhile to conduct a research that focuses on investigating the key factors influencing the professional leaving Malaysia and the Influence of New Economic Model implemented towards retaining Malaysian skilled worker.



## **1.4 Research Questions**

This study attempts to answer the following research question:

1. Whether the higher the expectation of Malaysian citizens makes them to leave Malaysia for better career opportunities or to pursue higher education?
2. Whether the more the perceived opportunities offered to Malaysian citizens makes them to leave Malaysia for better career opportunities or to pursue higher education?
3. Whether the awareness on sustainability of Malaysian citizens makes them to leave Malaysia for better career opportunities or to pursue higher education?
4. Whether the higher the safety and security perceived by Malaysian citizens makes them to leave Malaysia for better career opportunities or to pursue higher education?
5. Whether the New Economic Model is able to retain Malaysia citizens in Malaysia?

## **1.5 Research Objectives**

To investigate the “brain drain” issue: the large-scale emigration of young, educated individuals from Malaysia as Malaysia citizens seek higher salaries and more promising career prospects in neighboring Asia countries. This study offers a comprehensive report on the economic aspects of the brain drain problem, and opinions of young Malaysian people who are currently seeking employment abroad; it also explore some of the potential factors that could convince these demographics to return to their home country. From the research questions, the objectives of the study are:

1. To identify whether the higher the expectation of Malaysia citizens makes them to leave Malaysia for better career opportunities or to pursue higher education.
2. To identify whether the more the perceived opportunities offered to Malaysian citizens makes them to leave Malaysia for better career opportunities or to pursue higher education.

3. To identify whether the awareness on sustainability of Malaysian citizens makes them to leave Malaysia for better career opportunities or to pursue higher education.
4. To identify whether the higher the safety and security perceive by Malaysian citizens makes them to leave Malaysia for better career opportunities or to pursue higher education.
5. To identify whether the New Economic Model is able to retain Malaysia citizens in Malaysia?

### **1.6 Significance of the Study**

Theoretically, this study contributes to Malaysia government and policy makers who wish to retain the professionals in Malaysia. Through this study, the determinants and intention to go abroad for better career opportunity or to pursue higher education will be analyzed critically. This study would provide a better understanding of why or reasons the Malaysian skilled worker leaving the country for better career opportunities overseas and how effective the New Economic Model launched by the government can help and tackle the brain drain issue.

### **1.7 Definition of Key Terms**

In order for the reader to have a common understanding of the concept used in this thesis and better understanding of the discussion in later chapters, the following key terms definitions were referred to specifically.

#### **1.7.1 Brain Drain**

Traditionally international labour migration refers to response to the existing gaps in wage levels between countries (Kazlauskiene & Rinkevicius, 2006). This was the

interpretation of labour migration and very much from brain drain although the wage differences do have influence on it. The concept of “brain drain” used in contemporary literature is to explain the emigration or departure of highly skilled labour force from the country of origin (Kazlauskiene & Rinkevicius, 2006).

According to Oxford dictionary, the explanation of brain drain is movement of trained technical and scientific personnel from one country to another because of better opportunities or others (Hornby, 1992). Korner and Iredale refer the “brain” from “brain drain” to a large category of people. It covers highly educated people with university degrees to well trained skilled personals (Kazlauskiene & Rinkevicius, 2006). Examples are managers, financial analysts, scientists, engineers and professionals.

The “brain drain” issue is not new and is getting great concerned specially from developing countries. For instance, Lebanon is facing most graduating medical students who migrate and which are consider the highest rate of leaving in Middle East region (Akl, et al., 2007).

#### 1.7.2 New Economic Model

New Economic Model (NEM) which goals are to make Malaysia to be a developed and competitive economy where the people enjoy high quality of life and high level of income resulting from growth that is both inclusive and sustainable was introduced by Malaysia’s Prime Minister on 30<sup>th</sup> March 2010. The vision for New Economic Model is to transform Malaysia into a competitive, knowledge-based, innovation and eco-efficient economy that eventually will drive the country toward economic prosperity (National Economic Advisory Council, 2010).

## **1.8 Organization of the Remaining Chapters**

This study is structured in five chapters. The first chapter provides an introduction as well as an overview of this study. The second chapter presents the review of literature that outlines previous studies undertaken in relation to determinants that influence the intention to leave and theoretical framework. Chapter three will mainly illustrate the data and variables in terms of research design, sample collection, measurement of variables, the method of data analysis and expected outcomes.

Chapter four will discuss the results obtained from the questionnaires which cover the demographic as well as the results from statistical analysis like factor analysis, reliability test, hierarchical linear regression and correlation. Lastly, chapter five will discuss the findings of this study, the implications as well as the limitations and suggestions for future study.

## **Chapter 2: Literature Review**

### **2.1 Introduction**

This chapter discusses the literature that has been undertaken by others researchers. Hence, this chapter gives an overview of the determinants that influence the intention of people to leave Malaysia for better career opportunities or to pursue higher education. Determinants involved are namely expectation, opportunity, sustainability, safety and security and lastly, new economic model. The underlying theory of this study will also be presented in this chapter. The constructed theoretical framework and hypothesis will be presented at the end of this chapter after reviewing previous literature.

Before going through the literature review, table 2.1 below showed the determinants that influence the intention to go abroad and eventually cause brain drain issue. The determinants shown are the findings based on the previous journal article which I have obtained. There are around 40 journal articles related to “brain drain” obtained from sources which include libraries as well as electronic source. Majority of the journal articles are from year 2006 onward with only a few articles which is earlier than year 2005. The journal articles are obtained from publishers like Elsevier, Sage, Blackwell, Wiley, Springerlink and even Emerald.

Factors	Authors	No. of Article
Financial Advantage / Wages	<p>Mari Kangasniemi, L. Alan Winters, Simon Commander (2007); Christian Dustmann (2003); Tova Hendel, Ilya Kagan (2010); John Connell, Pascal Zurn, Barbara Stilwell, Magda Awases, Jea-Marc Braichet (2007); Elie A. Akl, Nancy Maroun, Stella Major, Claude Afif, Bechara Chahoud, Jacques Choucair, Mazen Sakr, Holger J.Schunemann (2006); Aysit Tansel, Nil Demet Gungor (2002); Gamal I.Serour (2009); Nazish Imran, Zahra Azeem, Imran I Haide, Naeem Amjad and Muhammad R Bhatti (2011); Lisa Nguyen, Steven Ropers, Esther Nderitu, Anneke Zuyderduin, Sam Luboga and Amy Hagopian (2008); Ingo Forstenlechner (2010); Paul F. Clark, James B. Stewart, Darlene A. Clark (2006); Mireille Kingma (2001); Siew-Ean Khoo, Peter McDonald, Carmen Voigt-Graf, Graeme Hugo (2007); Allan M. Williams, Vladimir Balaz (2005); Nil Demet Gungor, Aysit Tansel (2007); Delanya Devlo (2004); Alan Barrett, Jean Goggin (2010); Marko Vujicic, Pascal Zurn, Khassoum Diallo, Orvill Adams, Mario R Dal Poz (2004); Krzysztof Krajewski-Siuda, Piotr Romaniu, Barbara Madaj, John Forbes, Lech Hubicki (2007); Hani TS Benamer, Amin Bredan, Omran Bakoush (2009); Richard P.C. Browna, John Connellb (2004); Michael S. Dahl a, Olav Sorenson (2010); Dr. M Oosthuizen, Dr VJ Ehler (2007); Muhammad Wajid Tahir, Rubina Kauser and Majid Ali Tahir (2011); Aušra Kazlauskienė, Leonardas Rinkevičius (2006)</p>	25

Career Advancement	<p>Mari Kangasniemi, L. Alan Winters, Simon Commander (2007); Stuart C. Cart, Kerr inkson, Kaye Thorn (2005); John Connell, Pascal Zurn, Barbara Stilwell, Magda Awases, Jea-Marc Braichet (2007); Elie A. Akl, Nancy Maroun, Stella Major, Claude Afif, Bechara Chahoud, Jacques Choucair, Mazen Sakr, Holger J.Schunemann (2006); Roman Gaiduk, Julija Gaiduk, dail Fields (2009); Aysit Tansel, Nil Demet Gungor (2002); Paul F. Clark, James B. Stewart, Darlene A. Clark (2006); Mireille Kingma (2001); Siew-Ean Khoo, Peter McDonald, Carmen Voigt-Graf, Graeme Hugo (2007); Allan M. Williams, Vladimir Balaz (2005); Nil Demet Gungor, Aysit Tansel (2007); Krzysztof Krajewski-Siuda, Piotr Romaniu, Barbara Madaj, John Forbes, Lech Hubicki (2007); Yixi Lu, Li Zong, Bernard Schissel (2009); Hani TS Benamer, Amin Bredan, Omran Bakoush (2009); Dr. M Oosthuizen, Dr VJ Ehler (2007); Aušra Kazlauskienė, Leonardas Rinkevičius (2006)</p>	16
Access to good technology (Training)	<p>John Connell, Pascal Zurn, Barbara Stilwell, Magda Awases, Jea-Marc Braichet (2007); Elie A. Akl, Nancy Maroun, Stella Major, Claude Afif, Bechara Chahoud, Jacques Choucair, Mazen Sakr, Holger J.Schunemann (2006); Roman Gaiduk, Julija Gaiduk, dail Fields (2009); Aysit Tansel, Nil Demet Gungor (2002); Mercy Mpinganjira (2009); Nazish Imran, Zahra Azeem, Imran I Haide, Naeem Amjad and Muhammad R Bhatti (2011); Mireille Kingma (2001); William S Harvey (2010); Elie A Akl, Nancy Maroun,</p>	13

	Stella Major, Claude Afif, Abir Abdo, Jacques Choucair, Mazen Sakr, Carl K Li, Brydon JB Grant, Holger J Schünemann (2008); Krzysztof Krajewski-Siuda, Piotr Romaniu, Barbara Madaj, John Forbes, Lech Hubicki (2007); Hani TS Benamer, Amin Bredan, Omran Bakoush (2009); Dr. M Oosthuizen, Dr VJ Ehler (2007); Muhammad Wajid Tahir, Rubina Kauser and Majid Ali Tahir (2011)	
Working Condition	John Connell, Pascal Zurn, Barbara Stilwell, Magda Awases, Jea-Marc Braichet (2007); Roman Gaiduk, Julija Gaiduk, dail Fields (2009); Aysit Tansel, Nil Demet Gungor (2002); Gamal I.Serour (2009); Nazish Imran, Zahra Azeem, Imran I Haide, Naeem Amjad and Muhammad R Bhatti (2011); Paul F. Clark, James B. Stewart, Darlene A. Clark (2006); Mireille Kingma (2001); Siew-Ean Khoo, Peter McDonald, Carmen Voigt-Graf, Graeme Hugo (2007); Nil Demet Gungor, Aysit Tansel (2007); Delanya Devlo (2004); Krzysztof Krajewski-Siuda, Piotr Romaniu, Barbara Madaj, John Forbes, Lech Hubicki (2007); Dr. M Oosthuizen, Dr VJ Ehler (2007); Aušra Kazlauskienė, Leonardas Rinkevičius (2006)	13
Political / Ethnic Problem	Stuart C. Cart, Kerr inkson, Kaye Thorn (2005); John Connell, Pascal Zurn, Barbara Stilwell, Magda Awases, Jea-Marc Braichet (2007); Elie A. Akl, Nancy Maroun, Stella Major, Claude Afif, Bechara Chahoud, Jacques Choucair, Mazen Sakr, Holger J.Schunemann (2006); Aysit Tansel, Nil Demet Gungor (2002);	9



	Nazish Imran, Zahra Azeem, Imran I Haide, Naeem Amjad and Muhammad R Bhatti (2011); Mussie Tessema (2009); Paul F. Clark, James B. Stewart, Darlene A. Clark (2006); Delanya Devlo (2004); Muhammad Wajid Tahir, Rubina Kauser and Majid Ali Tahir (2011); Aušra Kazlauskienė, Leonardas Rinkevičius (2006)	
Job Opportunity	Mari Kangasniemi, L. Alan Winters, Simon Commander (2007); Aysit Tansel, Nil Demet Gungor (2002); Mercy Mpinganjira (2009); Siew-Ean Khoo, Graeme Hugo, Peter McDonald (2010); Siew-Ean Khoo, Peter McDonald, Carmen Voigt-Graf, Graeme Hugo (2007); Susan B. Hansen, Carolyn Ban, Leonard Huggins (2003); William S Harvey (2010); Krzysztof Krajewski-Siuda, Piotr Romaniu, Barbara Madaj, John Forbes, Lech Hubicki (2007)	8
Economic Instability	Tova Hendel, Ilya Kagan (2010); Stuart C. Cart, Kerr inkson, Kaye Thorn (2005); John Connell, Pascal Zurn, Barbara Stilwell, Magda Awases, Jea-Marc Braichet (2007); Aysit Tansel, Nil Demet Gungor (2002); Mussie Tessema (2009); Siew-Ean Khoo, Graeme Hugo, Peter McDonald (2010); Nil Demet Gungor, Aysit Tansel (2007); William S Harvey (2010)	8
Security Instability	Tova Hendel, Ilya Kagan (2010); John Connell, Pascal Zurn, Barbara Stilwell, Magda Awases, Jea-Marc Braichet (2007); Aysit Tansel, Nil Demet Gungor (2002); Lisa Nguyen, Steven Ropers, Esther Nderitu, Anneke Zuyderduin, Sam Luboga and Amy Hagopian (2008); Mussie Tessema (2009); Dr. M Oosthuizen, Dr	6

	VJ Ehler (2007)	
Social Support	Yehuda baruch, Pawan S. Budhwar, Naresh Khatri (2006); Caitrona Ni Laoire (2007); Siew-Ean Khoo, Graeme Hugo, Peter McDonald (2010); M.Sidebotham, K.Ahern (2011); William S Harvey (2010)	5
Better Quality of life	Tova Hendel, Ilya Kagan (2010); Paul F. Clark, James B. Stewart, Darlene A. Clark (2006); Nil Demet Gungor, Aysit Tansel (2007); Susan B. Hansen, Carolyn Ban, Leonard Huggins (2003); Hani TS Benamer, Amin Bredan, Omran Bakoush (2009)	5

Table 2.1: Summary of previous literature review towards brain drain.

Table 2.1 above are the determinants selected based on 80/20 rules, determinants that show the higher frequency towards intention to leave are being selected as the independent variables. After analyzing through the independent variables, it is observed that the determinants can be classified into 4 categories which is expectation construct; perceived opportunity construct, sustainability construct and safety and securities construct.

The classification of the independent variable for this study is as below:

- Classification of expectation construct includes factors like financial advantage, and better career advancement.
- Classification of perceived opportunity construct includes factors like better working condition, job opportunity and better training opportunity.

- Classification of sustainability construct includes factors like better social support, economical instability and political problem.
- Classification of safety and security construct include factors like security insecurity, better quality of life and safety.

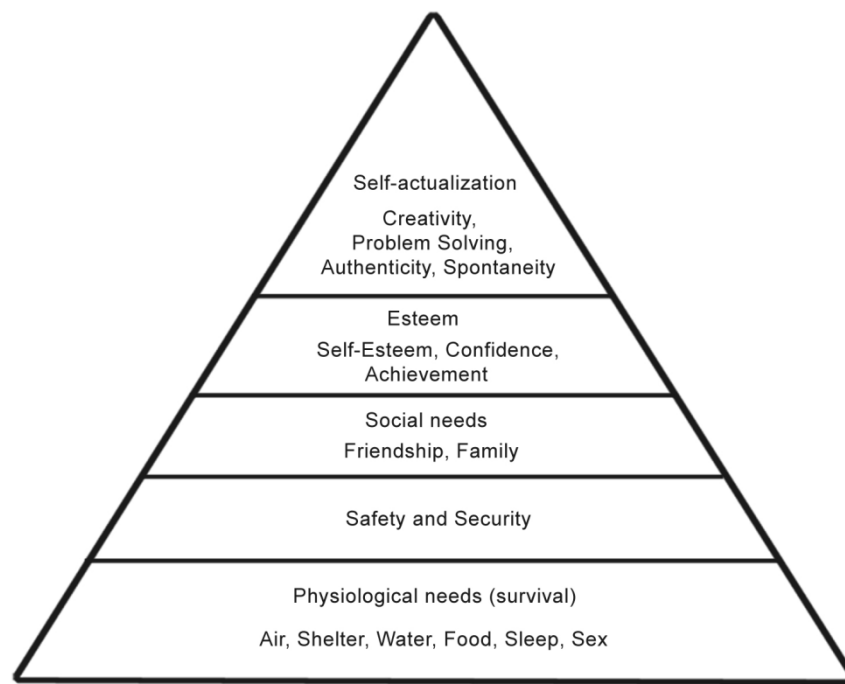
The 4 classifications discussed above which are expectation, perceived opportunity, sustainability and safety and security will be the independent variables for this study.

Besides that, the New Economic Model will also be the independent variable for this study to identify the relationship between the New Economic Model and the intention of Malaysian skilled worker to go abroad in the light of New Economic Model.

## **2.2 Theories associated with Intention to go abroad for Work / Study**

### **2.2.1 Maslow's Hierarchy of Needs**

The theory was proposed by psychologist Abraham Maslow during the year 1943 in his paper called A Theory of Human Motivation (Maslow, 1943). Later on, Maslow continues to extend the idea by including his observation of human natural curiosity. Below is the diagram of Maslow's proposed Hierarchy of Needs which Maslow used the word like physiological needs, safety and security, social needs, esteem and self-actualization to represent each rows inside the diagram.



As you can see from the pyramid proposed by Maslow, the more basic needs are at the bottom. According to Maslow's law, human beings must achieve the basic needs before the next level need becomes dominant. In other words, he means that the person will not feel the second level needs or the second level needs is not dominant until the demand for the first level need has been satisfied. This applies to the third level needs and so on. Maslow claims that once the need has been satisfied, it no longer a motivation source (George & Jones, 2008).

The physiological needs according to Maslow are those basic needs for survival. Examples are food, water and air. Shelter itself is also considered a basic need as it provides protection.

With the physical needs satisfied, human beings will look forward to the safety needs. According to Maslow, the safety needs include personal security, financial security as well as health and well-being. Financial security may refer to job security during financial crisis or lack of work opportunities or growth opportunities. In this study, the safety needs can be related to the need for higher income or better job opportunities.

With the above 2 needs are achieved satisfactorily, love and sense of belonging kick in. Maslow stated that people always seek to overcome their feeling of loneliness. In this study, the need for love and belonging can be related to the need for better working environment or better social support from the society.

The esteem needs can be related to the need for status or recognition which is promotion and career advancement in particular area or field.

### **2.2.2 Theory of Reasoned Action**

Another theory of motivation used as the basis for this framework of study, is the theory of reasoned action. According to this theory, the person's behavioural intention depends on the person's attitude toward the behaviour and subjective norms (Fishbein & Ajzen, 1975). In other words, if the person feels like behaving in a particular way, then it is likely the person will do so. In this study, Theory of Reason Action can be related to the factors and its effect of intention to leave Malaysia to work or study. As mentioned, the determinants are the factors that push skilled workers to work abroad, since skilled workers have much more choices in term of work opportunities and other advantages. Skilled workers will always look at jobs or work that can provide them biggest satisfaction in terms of financial advantage or career advantage. When skilled workers feel that the opportunity is not given or are not satisfied with the current situation in Malaysia, their attitude will lead them to look outside for better opportunities which finally lead to brain drain.

### **2.3 Intention to leave**

According to Theory of Reasoned Action from Fishbein and Ajzen, intentions are the only factor that determines the human behavior (Hooft, Born, Taris, Flier, & Blonk, 2005). Definition from Oxford advance dictionary, intentions logic is defined as the "conceptions

formed by directing the mind towards an object” (Hornby, 1992). In others words, people’s thoughts is controlling the intention.

Studies have shown that many skilled workers – especially doctors, have left their country to work overseas due to several reasons. There are many variables that influence the intention to leave among the skilled workers. Among that is higher income or financial advantage for going overseas (Tansel & Gungor, 2003; Connell, Zurn, Stilwell, Awases, & Braichet, 2007; Carr, Inkson, & Thorn, 2005).

Several authors have shown that career opportunity (Biondo, Monteleone, Skonieczny, & Torrisi, 2012) are positive and correlated to the intention to stay abroad or work abroad. Working condition may also influence the intention to work abroad. Biondo et al. (2012) and Tansel et al. (2003) found that unfavorable working conditions perceived by the host country worker tend to influence the intention to work abroad.

Although there are substantial researches done on the topic of intentions to go abroad by different researchers from different countries, there are only a few researchers on brain drain being conducted in Malaysian context. So far according to Jauhar and Yusoff (2011), only 2 studies have been conducted so far.

## **2.4 Expectation Construct**

Expectation is a belief that is centered on the future. It is actually a prospect that the person is expecting either for good or bad. In this study, expectations include the expectation for higher salary, better opportunity for personnel growth or better career advancement if working abroad. This can be seen as many of the studies showed that the salary, opportunity for personnel growth and career advancement has been the push factor. This showed people are expecting more and are not satisfied with the current conditions.

Based on the study by Jauhar and Yusoff on the factors that drive brain drain of accountants in Malaysia, higher salary has been the factors for the reason of brain drain. There are various studies by different researchers that show that higher wages for working abroad have been the main influence for the skilled worker (Tansel & Gungor, 2003; Connell, Zurn, Stilwell, Awases, & Braichet, 2007; Carr, Inkson, & Thorn, 2005; Dahl & Sorenson, 2010). Highlighted in the study by Oosthuizen et al. (2007) in South African which is based on 501 samples size, 95.5% of the nurses are not able to maintain the desired living standard due to low salaries and are considering to emigrate. 93.2% of the respondents did mention that they work in foreign countries just to save money for their own purposes.

This clearly shows that the expectations of higher salary does have influence the intention to leave. On top of that, from the study by Khoo et al. (Khoo, Hugo, & McDonald, 2011) showed that most of the skilled worker who leave had stated reasons such as better promotion or higher salary elsewhere. On the other hand, there are researchers who are using static model to estimate the duration of the migration related to wages differentiation. They studied the optimal migration duration where they tend to stay abroad (Dustmann, 2003). Study from Oosthuizen et al. (Oosthuizen & Ehlers, 2007) found that inadequate remuneration, lack of personnel growth and career advancement possibilities are the major factors that influences decisions to migrate.

Career advancement or promotion is also one of the expectations that can motivate skilled workers to leave when there is an inadequate career advancement opportunity perceived by the worker (Oosthuizen & Ehlers, 2007). Similar phenomenon as above was also observed by researcher Khoo (Khoo, Hugo, & McDonald, 2011). From the study, we are able to observe that the skilled worker's expectation towards personnel career advancement is notably important which may influence the intention to leave. Besides that, financial and

professional development perspectives were the factor influencing the Poland health professionals to go abroad.

## **2.5 Perceived Opportunity Construct**

Perceived opportunity can be interpreted to mean that the person is thinking of the chances of getting something. Under the umbrella of this study, the perceived opportunity consists of job opportunities, better working conditions as well as better training opportunities.

Empirical research focusing on job opportunity towards intention to leave is not much done in South East Asian countries even though the studies have been widely conducted in developed and European regions. Some researchers have examined the impact of job opportunity towards the intention to leave or return to country of origin (Khoo, Hugo, & McDonald, 2011) and interviewed the respondents on the reasons to leave.

Some researchers used questionnaire which consist of close-ended questions and some partial open-ended questions to perform survey on degree holders and professionals working full time abroad (Tansel & Gungor, 2003). Their findings showed working experience abroad does contribute to the intention of non return for professionals.

Finding from Connell et al. (Connell J. , Zurn, Stilwell, Awases, & Braichet, 2007) survey showed that upgrade qualification, experience gained, lack of opportunities on career advancement and heavy work load are the top contributors for the intentions to migrate. On the other hand, based on the interview with 100 doctors from Lahore's Mayo hospital in Pakistan showed that 84% of the respondents blamed fewer opportunities for further studies as the culprit for migration intentions (Tahir, kauser, & Tahir, 2011).



## **2.6 Sustainability Construct**

Sustainability is to ensure there is continuous supply to the needs. In other words, sustainability is the long term maintenance of social and economical aspects. In this study, the sustainability includes factors like better social support, economical and political stability towards intention to go abroad.

Empirical study has been conducted by using snow ball method where the desired samples size characteristic is rare in Lithuania. Social-economic effect has been identified as mostly have push effect towards migration (Kazlauskienė & Rinkevicius, 2006). Some journals stated that improving the working condition can help to combat the brain drain issue (Serour, 2009).

Some other researchers who have conduct the study on inclination to stay abroad after study have found out that the perception of ethnic differences do have the influence on the intention to stay (Baruch, Budhwar, & Khatri, 2007). The intention to learn about new culture is also the drive to study abroad in the context of Africa (Mpinganjira, 2011). There are researchers who claim migrants often prefer to migrate to culturally similar countries such as from Australia to United Kingdom or America (Carr, Inkson, & Thorn, 2005).

There are surveys conducted on the intention of students who opt for education abroad on China's cities. It showed that the developed cities' students like Beijing are more motivated to go abroad for study which they believed will benefit and improve the prospects of their future career from the cultural encounter (Hung, 2010).

According to Lam, political and economic perception are interact (Carr, Inkson, & Thorn, 2005). Political stability is the essence of retaining talent in the host country. Political motivation includes the policy decision, taxation as well as the freedom of movement.

## **2.7 Safety and Security Construct**

The ability of a nation to function and prosper relies heavily on its level of security and safety. The government has to ensure that all citizens living in the nation are safe and secure. Besides that, a stable country enables company and organizations to perform trade and business in a safe environment. Besides that, it also attracts foreign direct investment into the country due to safe environment (MAMPU, 2012).

Some of the researchers indicate that the reason for migration is due to security instability (Hendel & Kagan, 2011; Tansel & Gungor, 2003). Malaysia's safety ranks number one in South East Asia region. Even though the ranking is high, the concerns on crime rate and violence are there and still affects the intention to go abroad.

Unsafe working environment has been a push factor to migration (Oosthuizen & Ehlers, 2007). In the study, around 43.5% of the respondents reply that the unsafe working environment has motivated them to migrate.

## **2.8 New Economic Model**

New Economic Model (NEM) is policies introduced by the Malaysian government in March 2010. The main goals of the NEM are to transform Malaysia into high income advanced nation with inclusiveness and sustainability by year 2020. (National Economic Advisory Council, 2010). The New Economic Model diagram on Figure 2.1 showed the backbone of New Economic Model and how the main points interact to each other where the people are the main focus for these strategies.

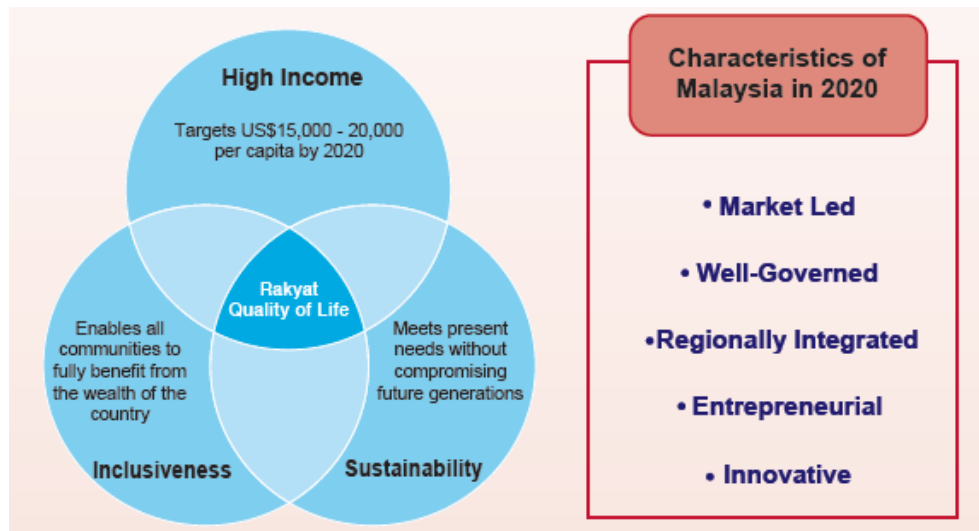


Figure 2.1– The New Economic Model (National Economic Advisory Council, 2010)

Under strategies reform initiatives, there are a total of 8 initiatives that are believed to be the fundamental to achieve the New Economic Model. These initiatives may not be new but are added new values to supplement the current policy. These initiatives are actually closely related to economical, political, safety and policies.

One of the strategies reform initiative states that the Malaysian labor market must work well. The job and workers must be matched efficiently so that efficiency and productivity can be increased significantly. Barriers that prevent the brightest people from gaining skills or knowledge must be removed in order to retain the gifted people to stay in boarders. It even touches on the education whereby the education system has to be improve so that it produces quality professionals and skilled workers that fit to the society and demand. (National Economic Advisory Council, 2010)

Other strategies on the New Economic Model include creating a competitive domestic economy like elimination of the subsidies or price control. Besides that, a commission will be setup to cover discriminatory and unfair practices. On top of that, improvement on government delivery and reduction of friction costs which mainly refer to corruption and weak government structures, are also being planned.