THE INFLUENCE OF NEW ECONOMIC MODEL ON INTENTION TO WORK ABROAD: AN EMPIRICAL STUDY TO ADDRESS BRAIN DRAIN ISSUE IN MALAYSIA

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Abstract: Although Malaysia is developing at a faster rate, it faces to some extent the problem of brain drain. Since independence in 1957, more than two million people have emigrated. In 2016, Malaysia's brain drain issue has reached critical stage. In the present study, the Malaysia's New Economic Model is used to address the brain drain issue. The purpose of the present study is to explore the factors influencing Malaysian intellectuals' intention to work abroad that contributes to brain drain issue in Malaysia. A sample of 105 usable survey questionnaires were analysed using partial least square approach via Smart PLS 3.0. The study reveals a significant positive relationship between higher expectations, perceived opportunities and lack of security on the intention of Malaysian intellectuals to settle in abroad for work. Interestingly, the New Economic Model makes Malaysian intellectuals to remain in the country for work due to better prospects for business environment, scope for higher income and economic sustainability.

Keywords: New economic model, brain drain, economic sustainability, push factors, pull factors.

Introduction

Brain drain is a phenomenon that occurs when people who have high qualifications and skills leaving their home country to another country. This phenomenon is not new and has been discussed extensively since the past ten years. This topic has become popular among researchers due to various factors including globalization, politics, economics, sociology, and technology (Baruch *et al.,* 2007). In general, brain drain is a global issue faced by many developing countries. Migration of educated intellectuals and highly skilled professionals has increased significantly since 1960 (Jauhar *et al.,* 2015). Globalization has resulted in the migration of professionals and intellectuals from many developing countries around the world such as Ghana (Dadson & Kato, 2016), Kenya (Nelson *et al.,* 2016), India (Walton-Roberts, 2015), and China (Ha *et al.,* 2016). Brain drain typically involves migration from a developing country to a more developed country to work (Beine *et al.,* 2001). This phenomenon is also a direct impact of the increasing demand for professionals in the developed country. For instance, Malaysia's brain drain issue is worsened by the weakening local economy but attractive work opportunities in developed countries like United Kingdom (UK) and Taiwan (Nadaraj, 2016). Hence, if the intellectuals migrate to work in other countries, it will bring negative impacts on the development of their countries of origin. The impact of their migration is the decrease in number of educated and highly skilled employees that is so critical to the productivity and economic growth in developing countries (Lowell & Findlay, 2002). However, when they return to the country of origin, they will bring back new knowledge, skills and experience from abroad that can be used to develop and improve their own country (Lowell & Findlay, 2002). Therefore, it is very

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important for developing countries to retain the talents of their intellectuals and to influence them to return to homeland to assist the country's development.

Many research has been carried out among intellectuals in different countries about their intentions to work abroad (Tessema, 2010; Tahir *et al,* 2011; Khoo *et al.,* 2011; Nadaraj, 2016). However, there are only few researches on brain drain being carried out in South East Asia especially in Malaysia, though the country is facing serious brain drain issue (Jauhar & Yusoff, 2011; Nadaraj, 2016; Azman *et al.,* 2016). Thus, the present study develops and tests two separate models to investigate the significant factors influencing Malaysian intellectuals to work abroad, that contributes to brain drain issue. In this study, New Economic Model (NEM) was used as a possible measure to address the issue (National Economic Advisory Council, 2010a). It includes several policies to address the brain drain issue. Based on NEM, the present research develops the second model to investigate the effectiveness of NEM to transform the brain drain issue to brain gain to Malaysia.

Brain Drain

Jauhar *et al.* (2015) conceptualized 'brain drain' as the movement or migration of skilled and talented individual from the country of origin to other country for work. The term 'brain' refers to knowledge and skill of highly competent individual. Whereby, the word 'drain' implies to the shortage of talented workforce due to migration rate beyond normal level (Bushnell & Choy, 2001). Most of the time, brain drain is perceived to have negative impact especially to the homeland. Scholars argued that the impact is higher on the developing countries because in those countries, the number of skilled workforce is normally limited. Although migration of workforce also provides positive impact to home country due to remittance sent home by

emigrants (Beine *et al.,* 2001; Stark, 2004), the findings are inconclusive. Researchers have already understood that brain drain problem also provides other benefits to the country of origin because it enables the transfer of knowledge from the host country (Dustmann & Kirchkamp, 2002) as well as greater opportunity to boost entrepreneurial initiatives and self-employment (Mesnard & Ravallion, 2001). The migrant normally creates networks abroad, thus, it helps to reduce informational barriers with regards to foreign direct investments (FDIs). As a result, foreign investors have become more interested to invest in their home country (Kugler & Rapoport, 2007). Furthermore, workforce migration has shown to influence better public health and reducing the rate of mortality in the home country. These are key determinants of a country's productivity (Hildebrandt & McKenzie, 2005).

Brain drain issue in Malaysia has begun since 1960s when many local students went to overseas to pursue for higher education. Upon graduation, many of them denied coming back and work in the home country (Jauhar *et al.,* 2015). According to economic report on brain drain in Malaysia (World Bank, 2011), the Malaysian diaspora has quadrupled over the last three decades. It was reported that almost one million people migrated in 2010. About fifty five percent of the entire diaspora resides in Singapore. The remaining include countries like Australia, Brunei, United Kingdom and United States. Unfortunately, almost a third of all migration is brain drain. At present, Malaysia's rate of brain drain among skilled workers is three times larger than two decades ago and is growing at the rate of six percent per annum. Based on the literature review, various factors have been found to influence the intention to migrate abroad. In this study, factors associated to brain drain is summarized in Table 1.

Table 1: Literature on factors causing brain drain

Factors	Authors
Expectation (high income/ financial advantage/ wages)	Kangasniemi *et al.* (2007); Hendel and Kagan (2010); Connell *et al.* (2007); Tansel and Gungor (2002); Barrett and Goggin (2010); Tahir *et al.* (2011); Dahl and Sorenson (2010); Oosthuizen and Ehlers (2007); Kazlauskiene and Rinkevieius (2006); Baruch (1995); National Economic Advisory Council (2010a, 2010b)
Career advancement	Kangasniemi *et al.* (2007); Carr *et al.* (2005); Connell *et al.* (2007); Gaiduk *et al.,* (2009); Clark *et al.* (2006); Lu *et al.* (2009); Oosthuizen and Ehlers (2007); Kazlauskiene and Rinkevieius (2006)
Access to good technology (training)	Connell *et al.* (2007); Gaiduk *et al.* (2009); Tansel and Gungor (2002); Mpinganjira (2009); Imran *et al.* (2011); Tahir *et al.* (2011); Oosthuizen and Ehlers (2007)
Working conditions/ business environment	Connell *et al.* (2007); Gaiduk *et al.* (2009); Tansel and Gungor (2002); Imran *et al.* (2011); Clark *et al.* (2006); Oosthuizen and Ehlers (2007); Kazlauskiene and Rinkevieius (2006); Serour (2009); National Economic Advisory Council (2010a, 2010b)
Political/ethnic problems	Carr *et al.* (2005); Connell *et al.* (2007); Tansel and Gungor (2002); Imran *et al.* (2011); Tessema (2009); Clark *et al.* (2006); Tahir *et al.* (2011); Kazlauskiene and Rinkevieius (2006)
Perceived opportunity	Tansel and Gungor (2002); Mpinganjira (2009); Khoo *et al.* (2011)
Sustainability	Hendel and Kagan (2011); Carr *et al.* (2005); Connell *et al.* (2007); Tansel and Gungor (2002); Tessema (2009); Khoo *et al.* (2011); National Economic Advisory Council (2010a, 2010b)
Security/instability	Hendel and Kagan (2011); Connell *et al.* (2007); Tansel and Gungor (2002); Tessema (2009); Oosthuizen and Ehlers (2007)
Social support	Baruch *et al.* (2007); Khoo *et al.* (2011); Sidebotham and Ahern (2011)
Better quality of life	Hendel and Kagan (2011); Clark *et al.* (2006)

New Economic Environment in Malaysia

According to World Bank (2011), more than one million Malaysians have migrated. While one third of them are highly educated intellectuals, half of them resides in Singapore. Though the overall migration rate has recently slowed down, the migration rate for skilled workforce remains high due to better pay in the neighbouring country. In 2010, the gross national income (GNI) per capita was USD7,900 in Malaysia. In contrast, the GNI per capita in Singapore was USD40,920, almost 5 times higher than Malaysia. Thus, it creates a challenging moment to Malaysian government to retain the intellectuals and professionals in the home country. Most of the policies and strategies introduced by Malaysian government were inadequate to address the issue (National Economic Advisory Council, 2010a). Hence, in March 2010, the NEM was introduced with the objective of ensuring Malaysia to be recognized as a developed nation by the year 2020. Malaysian citizen is predicted to receive high income level, better quality of life, and sustainable growth by the year 2020.

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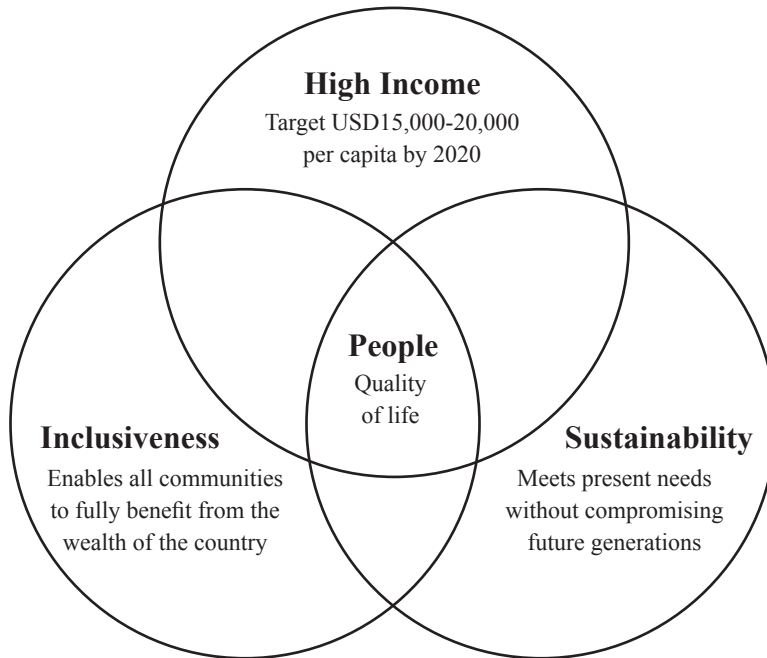*AN EMPIRICAL STUDY TO ADDRESS BRAIN DRAIN ISSUE IN MALAYSIA*

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Figure 1: Goals of Malaysia's New Economic Model
(Source: National Economic Advisory Council, 2010a)

Figure 1 illustrates the goal of the NEM that is to ensure a successful transformation of Malaysia into a sustainable, inclusive and high earning nation (National Economic Advisory Council, 2010a). The concluding part of the NEM report represents a significant milestone, as it completes the roadmap of the Economic Transformation Program (ETP). ETP is the two-component approach to achieve the economic growth target of NEM. The first component, the National Key Economic Areas, is an effort to identify, priorities and align support for the key sectors and major projects that will drive quantifiable economic growth that is already moving forward. The second component, a set of Strategic Reform Initiatives (SRIs) that is designed to remove blockages to the growth of the country (National Economic Advisory Council, 2010b). Despite NEM, it is challenging to retain Malaysian professionals who are looking forward in moving abroad. Hence, the present study is undertaken to investigate the attraction of new policies which may lead to reduction in the intention of intellectuals and professionals to migrate.

Conceptualization of a Model

Baruch (1995) developed 'push-pull' model, a two-factor model to understand the reasons behind brain drain issue. The model provides a clear explanation for cross-border movements of highly educated and skilled individuals. The individual migration decision is influenced by several 'pull' factors, including active recruitment by well-known employers, interesting compensation rate, world-class working facilities, and better quality of live. On the other hand, the 'push' factors originally come from the home country and consist of factors like political uncertainty, high living cost, and the difficulty to get jobs. One of the major destinations of Malaysian migrants is Singapore (World Bank, 2011). Singapore is believed to provide better education, more job opportunities and higher pay (Gooch, 2010). Besides, the crime rate in Singapore is also lower than Malaysia (Numbeo, 2013). These factors are considered as pull factors in the proposed model (Figure 2a). According to World Bank (2011), other than differences in

earnings potential, career prospects, quality of education and quality of life, displeasure with Malaysia's inclusiveness policies is also a key factor, particularly among the non-Bumiputeras that cause the diaspora. Hence, Malaysia needs to manage the push factors of migration by updating its inclusiveness policies. Today, over 90 percent of all inequality is a function of socio-economic differences within ethnic groups, rather than between them. Productivity and inclusiveness lie at the heart of Malaysia's transformation programs. Implementing these forcefully, will go a long way towards turning the brain drain into a gain. Due to this, the

Malaysian government introduced NEM with three pillars, namely high income, inclusiveness, and sustainability. These three pillars can be considered as one of the Malaysian government initiative to manage push factors that causing Malaysian diaspora. Therefore, in the present study these push factors are conceptualized into three different variables, namely, sustainability and inclusiveness, business environment, and high income. The second model aims to investigate the influence of these initiatives on the intention of Malaysian intellectuals to work abroad. The model is illustrated in Figure 2b.
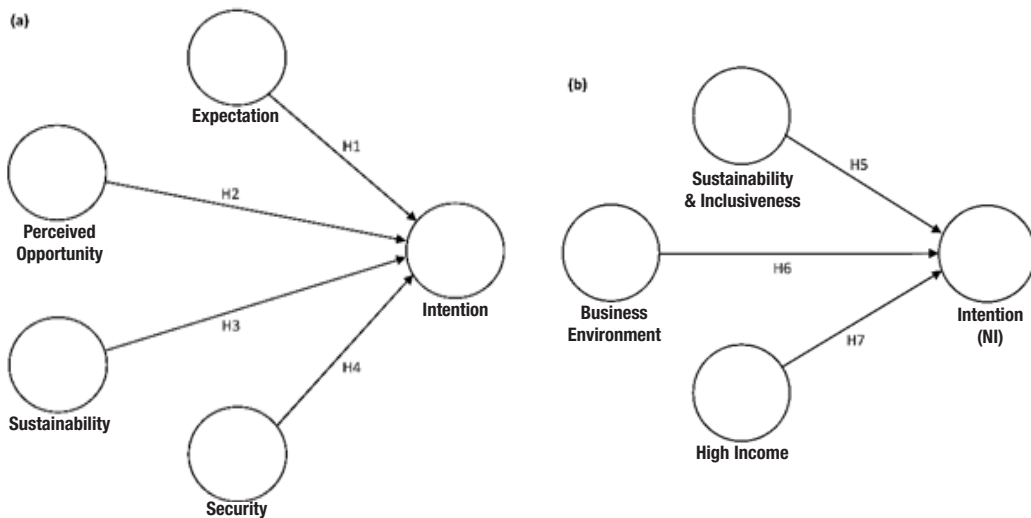

Figure 2: Conceptual Research Framework

Hypotheses Development

The 'expectation' in Figure 2a is defined as an individual's belief on the future and prospect that he or she predicts to happen neither optimistic nor pessimistic ways. Jauhar and Yusoff (2011) investigated the factors contributing to brain drain issue among accountants in Malaysia. In line with Khoo *et al.* (2011), they found that the main reason for most of the skilled workers to leave the home country is to get better promotion and higher salary abroad. Many other studies have also reported that higher pay for working abroad is considered as the most influential factors for professionals to migrate (Tansel & Gungor, 2003; Connell *et al.,* 2007; Carr *et al.,*

2005; Dahl & Sorenson, 2010; Hendel & Kagan, 2011). Besides low salary, lack of personal growth opportunity and the various barriers to career advancement also influence the highly intellectual and skilled workers to migrate (Oosthuizen & Ehlers, 2007). Accordingly, the following hypothesis is developed:

Hypothesis 1: Malaysian residents' expectations has a positive relationship with their intention to leave Malaysia to work abroad.

'Perceived opportunity' may be defined in this study as an individual perception that he or she has a better chance to gain something. Although many researchers have investigated the link

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between perceived opportunity and intention to go abroad in developed countries, empirical research about this matter is limited in developing countries, especially in South East Asian region. Khoo *et al.* (2011) and Tansel and Gungor (2003) have reported that working experience abroad affects the individual's intention to reside abroad. Furthermore, Connell *et al.* (2007) stated that individual intention to migrate abroad is caused by their intention to upgrade academic qualification, to gain experience, lack of career advancement opportunity, and heavy work load in the country of origin. Thus, the following hypothesis is developed:

Hypothesis 2: Malaysian residents' perceived opportunity has a positive relationship with their intention to leave Malaysia to work abroad.

The 'perceived sustainability' refers to the long-term concern about economic and social aspects. In this article, sustainability includes concern about social support, economic and political stability abroad. The socio-economic factors have been recognized as the push factor toward migration (Kazlauskiene & Rinkevieius, 2006). Hence, Serour (2009) suggested that by improving the working conditions, the brain drain issue can be significantly addressed. Political and economic stability are also important in talent retention. It includes the government policy on taxation, minimum pay, and the freedom of movement (Carr *et al.,* 2005). Therefore, the following hypothesis is proposed:

Hypothesis 3: Malaysian residents' perceived sustainability has a positive relationship with their intention to leave Malaysia to work abroad.

In addition to political and economic stability, growth of a country is highly dependent on the level of security. Therefore, the government should ensure that everyone in a country is protected. Research has shown that, there is a link between national security and migration rate (Hendel & Kagan, 2011; Tansel & Gungor, 2003). In Malaysia, there are concerns about the levels of crime and violence that has led the intent to go abroad increased. According

to Oosthuizen and Ehlers (2007), a work environment that is not secure can also lead to migration. Therefore, it is believed that:

Hypothesis 4: Malaysian residents' perceived security has a positive relationship with their intention to leave Malaysia to work abroad.

Since Malaysia is not among the world top performing economies, majority of its people are stucked in the middle-income group. The present economic growth has not benefited most of the population, even though it has come with considerable environmental cost. For that reason, the NEM was designed to unleash potential growth of the country and drive Malaysia forward from the present stagnant situation into high income nation with both inclusive and sustainable (National Economic Advisory Council, 2010a). The main aim of the Malaysia NEM is to create a sustainable and high-in come country by the year 2020. The NEM sets the goals such as reducing crime, fighting corruption, improving students' outcome, strengthening the public sector, improving urban public sector, becoming higher income group, raising living standards of low-income households. These goals were classified into three main constructs namely; sustainability and inclusiveness policy, environment policy, and high-income policy.

'Sustainability and inclusiveness' construct in the present conceptual model refers to the aim to meet the present needs without compromising future generation and wealth of the country are shared by all communities. The NEM also consists of strategies to transform private sector to make Malaysia globally competitive for investors. "Business environment' construct refers to the needs to reform the private sector, to boost private investment by removing distortions and the high costs of doing business, and to rebalance the roles of the public and private sectors. It aims to uphold a level playing field and fair business environment. Finally, in the 'high income' economy, the people of Malaysia can expect for more choices and higher purchasing power, better quality of life,

opportunities for upward mobility, reward for innovation and creativity, and greater confidence in the robustness of the economy. Based on these discussion, the following hypotheses are developed to investigate the influence of NEM policies conceptualized in the conceptual model on the intention of Malaysian intellectuals to work abroad or to remain in the country. Accordingly, this study hypothesizes that:

Hypothesis 5: Sustainability and inclusiveness policy of NEM has negative relationship with the intention to leave Malaysia to work abroad.

Hypothesis 6: Business environment has negative relationship with the intention to leave Malaysia to work abroad.

Hypothesis 7: High income has negative relationship with the intention to leave Malaysia to work abroad.

Methodology

The study employed a quantitative research with a primary survey. A structured questionnaire has been used with each question item is measured on a 5-point Likert scale. Scale 1 means strongly disagree and scale 5 means strongly agree. The content validity was considered in the study to measure the representativeness and comprehensiveness of the measurement items used to measure the models' constructs. To ensure content validity is established, a literature review was carried out to identify the dimensions for each construct. The items for the constructs were developed based on Akl *et al.* (2007), Baruch *et al.* (2007), Mansour (2008), and National Economic Advisory Council (2010a), thus satisfying content validity. In addition, the subject experts in the areas of brain drain and NEM were contacted for face validity of the developed survey questionnaire. The comments and suggestions provided by the experts were used to enhance the survey questionnaire. Following Viechtbauer (2015), a pilot study and an exploratory factor analysis (EFA) were carried out to identify the possible factor structure. Fifty-six respondents participated in the pilot study and the principal component method with varimax rotation was used in the analysis. Based on the EFA, two measurement items were deleted, and the remaining items were categorized into three constructs namely sustainability and inclusiveness policy, business environment policies, and high-income policy. The main study was then, conducted in Malaysia by administering the questionnaire in the hard copy and emails to the Malaysian citizens who are currently studying either undergraduates or have minimum qualification of degree and above in local universities. Out of 275 questionnaires distributed, 105 respondents from different parts of Malaysia have correctly filled in the questionnaire and were used for data analysis. The response rate reported was 38.2%.

The study applies Partial Least Squares (PLS) method of analysis using Smart PLS 3.0 software (Ringle *et al.,* 2014). Nonparametric bootstrapping (Wetzels *et al.,* 2009) was applied to 5,000 resamples as suggested by Hair *et al.* (2014). This technique has been applied to investigate the appropriateness to the exploratory nature of the study where some of the hypothesised relationships between the variables have not been previously tested. Furthermore, PLS is an appropriate method to overcome the limitations of covariance-based SEM with respect to sample size, measurement model and model complexity, (Wetzels *et al.,* 2009). The sample size needed for the study depends on the number of studied variables and the number of questions in the questionnaire. Barclay *et al.* (1995), postulated by Chin (1998), suggested that the sample size depends on the number of predictors that are involved in the multiple regression models. Consequently, one must look for (a) the largest number of formative indicators (b) the largest number of independent variables, and (c) the maximum of both the numbers in (a) and (b) multiplied by 10 to get the minimum sample size. In the present study the intention to go abroad has the largest number of predictors in both models (four indicators in the first model and three indicators in the second) and consequently, 105 samples need to be more than sufficient.

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Results

Table 2 presents demographic profile of the respondents. The final sample has 50 (47.62%) males and 55 (52.38%) females. The respondents' age ranged from 20 to 50 years old. However, majority of the respondents were under 30 years old (71.42%). The ethnic group of the respondents consisted of 48 (45.71%) Malays, 41 (39.04%) Chinese, and 16 (15.23%) Indians. Regarding educational status, 74.28% of the respondents hold bachelor degree, 18.10% had master degree 14.29%, and 7.62% hold doctorate degree.

Table 2: Demographic profile of the respondents

Demographic	Frequency (n=105)	Percentage
Gender		
Male	50	47.62%
Female	55	52.38%
Age		
20 – 30 years	75	71.42%
31 – 40 years	18	17.14%
41 – 50 years	7	6.67%
Ethnic group		
Malay	48	45.71%
Chinese	41	39.04%
Indian	16	15.23%
Education level		
Doctorate degree	8	7.62%
Master degree	19	18.10%
Bachelor degree	78	74.28%

Podsakoff and Organ (1986) have claimed that common method bias can be problematic towards respondent's bias especially when a single latent variable represents most the explained variance. In the present study, results of the un-rotated factor analysis show that the first normalized linear combination accounts for 28.61% out of 62.00% total variance in the first model and 36.86% from 67.99% of total variance in the second model. The results indicate that there is no serious issue of common method bias exist in the present research. Hence, the respondent's bias on the understanding of the questionnaire items was at a minimum level.

Measurement Model

The measurement model needs to be measured for reliability and validity such as main loading, cross loadings, composite reliability (CR) and average variance extracted (AVE). Igbaria *et al.* (1995) recommend that a question item can be retained for further analysis if it has a loading of at least 0.5. As presented in Table 3, all loadings for the scales used in this study were larger than 0.5, suggesting that individual item validity was clearly demonstrated. With regards to the reliability test to determine a construct's internal consistency, Cronbach's Alpha values must be determined. Recently, however, scholars have recommended the use of Composite Reliability (CR) as a better estimate of Cronbach's Alpha (Henseler *et al.,* 2009). Thus, the CR values were provided in Table 2, which ranging from 0.772 to 0.882 for the economic model before NEM and from 0.814 to 0.896 for new economic model. Therefore, they are well above the threshold

value of 0.7 (Straub *et al.,* 2004). To establish the convergent validity, the average variance extracted (AVE) for all constructs exceed the 0.5 threshold value (Fornell & Larcker, 1981). Both discriminant validity and convergent validity determine the construct validity.

In order to verify that all constructs in the research framework have differed from each other, discriminant validity was tested. As recommended by Gefen and Straub (2005), the measurement items for each construct must an order of magnitude larger than their loadings on other constructs which have to be satisfied to examine the discriminant validity. Fornell and Larcker (1981) claimed the correlations between

items in any two constructs must be lower than the square root of the average variance shared by items within a construct. As depicted in Table 4, the square root of the variance shared between a construct and its items appearing in bold along the diagonal is greater than the correlations between the construct and any other construct in the model, confirming to Fornell and Larcker's (1981) criteria for discriminant validity. Thus, given the above analysis, the scales used to measure the constructs in this study demonstrated sufficient evidence of construct validity, internal consistency, and discriminant validity to ensure that the measurement model of the data has been well established.

Table 3: Measurement model evaluation for the proposed research model

Construct	Items	Loadings	CR	AVE
Economic Model (before NEM)				
I chose to work abroad to…….				
Expectation (E)	earn higher income	0.811	0.847	0.583
	get a job with a well-paid salary	0.642		
	take opportunity for personal growth and development	0.792		
	search for better career advancement	0.797		
Perceived Opportunity (PO)	get better working conditions	0.770	0.857	0.600
	search for better job opportunity	0.755		
	get access to better research facilities	0.782		
	experience better scientific training	0.791		
Sustainability (S)	enjoy family benefit	0.922	0.803	0.582
	experience higher living standard	0.637		
	experience better social support	0.699		
Security (SE)	I am safer in abroad	0.595	0.772	0.537
	relative social security	0.675		
	lower crime rate	0.896		
Intention to go abroad (I)	I am looking forward to go abroad to work	0.814	0.882	0.651
	I have intentions to work abroad	0.839		
	There is a likelihood that I will go abroad to work	0.812		
	I am confident that I will work abroad	0.759		

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New Economic Model (NEM)				
I prefer to stay in Malaysia to……..				
Sustainability and Inclusiveness (SI)	achieve its goal of fighting for corruption	0.774	0.867	0.525
	achieve its goal for reducing crime	0.746		
	enhance the sources of growth	0.525		
	achieve its goal of inclusiveness	0.721		
	ensure sustainability of growth	0.801		
	build the knowledge base and infrastructure	0.745		
Business Environment (BE)	build a viable, market-friendly and favorable position	0.786	0.896	0.682
	improve the public sector	0.806		
	create a competitive domestic economy	0.836		
	reform the private sector	0.874		
High Income (HI)	raise standard of living among low-income earners	0.853	0.814	0.687
	achieves its goal of becoming higher income group	0.803		
Intention to go abroad in the light of NEM (NI)	There is a likelihood that I will work abroad	0.831	0.855	0.597
	I am confident that I will work abroad	0.728		
	I have intention to go abroad to work	0.817		
	I am sure that I will be going abroad to work	0.709		

Note : CR= Composite Reliability; AVE= Average Variance Extracted

Table 4: Summary of the Discriminant Validity

	Economic model (before NEM)						New economic model			
	E	I	PO	S	SE		SI	BE	HI	NI
E	0.763					SI	0.724			
I	0.708	0.807				BE	0.381	0.826		
PO	0.601	0.628	0.775			HI	0.378	0.466	0.829	
S	-0.017	0.098	0.008	0.763		NI	-0.427	-0.662	-0.560	0.773
SE	0.434	0.601	0.498	0.014	0.733					

Note: Diagonals represent the square root of the AVE and the off-diagonals represent the correlations.

Structural Model

Since results of the measurement model have been satisfied, the next step is the evaluation of the structural model to determine whether the proposed hypotheses in the present study are supported. Therefore, by using Smart PLS method, the explanatory power of the research model was examined. It was found that total explainable variation (R^2) was 64.1% for the first model, thus highly significant statistically. Besides, 53.5% of the variance in Malaysian intention to go abroad has been explained in the light of NEM and was found to be highly statistically significant. Other than estimating the R^2, scholars have proposed the measurement of predictive relevance as an additional model fit assessment (Stone, 1974). This estimate represents the model adequacy, which is to predict the manifest indicators of each construct. Using the blindfolding procedure, the cross-validated redundancy (Stone-Geisser Q^2) was determined to identify the predictive relevance. Based on Chin (2010) recommendation, a model has predictive relevance if the Q^2 value is greater than zero. In the present study, a value of 0.390 (for the first model) and 0.257 (for the second model) were obtained which are greater than zero fulfilling the criteria. The non-parametric bootstrapping (Wetzels *et al.,* 2009) using 5,000 resamples were used to evaluate the structural model. The significance and relative strength of the pull factors in host countries were evaluated (Figure 3a). The results reveal that expectation (β=0.457, p<0.001), perceived opportunities (β=0.203, p<0.01), and security (β=0.300, p<0.001) have significantly and positively influence on Malaysian intellectuals' intention to go abroad for work. Hence, H1, H2, and H4 are supported whereas H3 is not supported. Furthermore, the analysis of the second proposed model (Figure 3b) reveals that sustainability and inclusiveness (β=-0.137, p<0.05), business environment (β=-0.477, p<0.001), and high income (β=-0.286, p<0.01) have significantly and negatively influence on intention to go abroad. Therefore, H5, H6, and H7 are all supported.
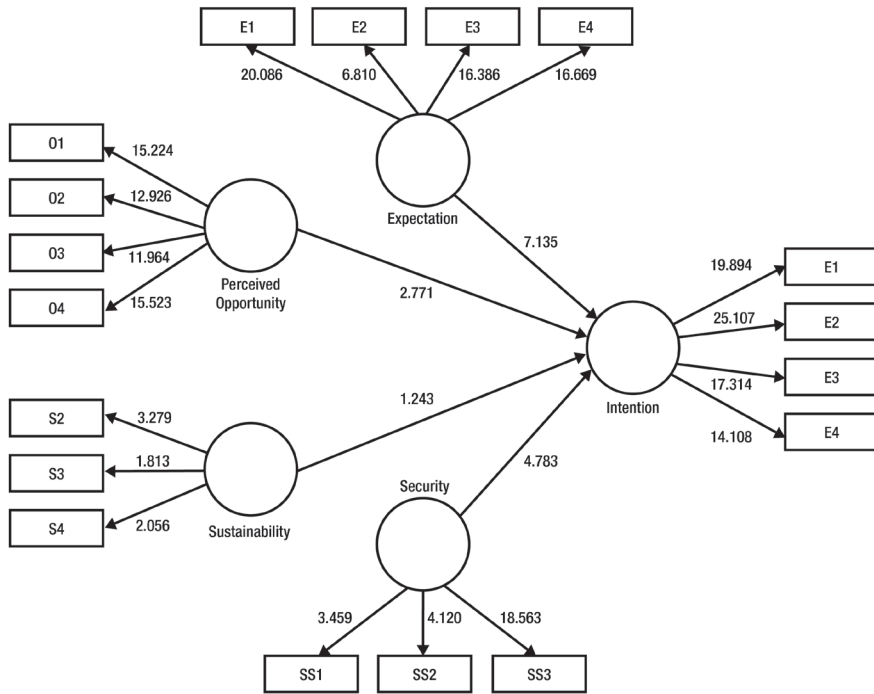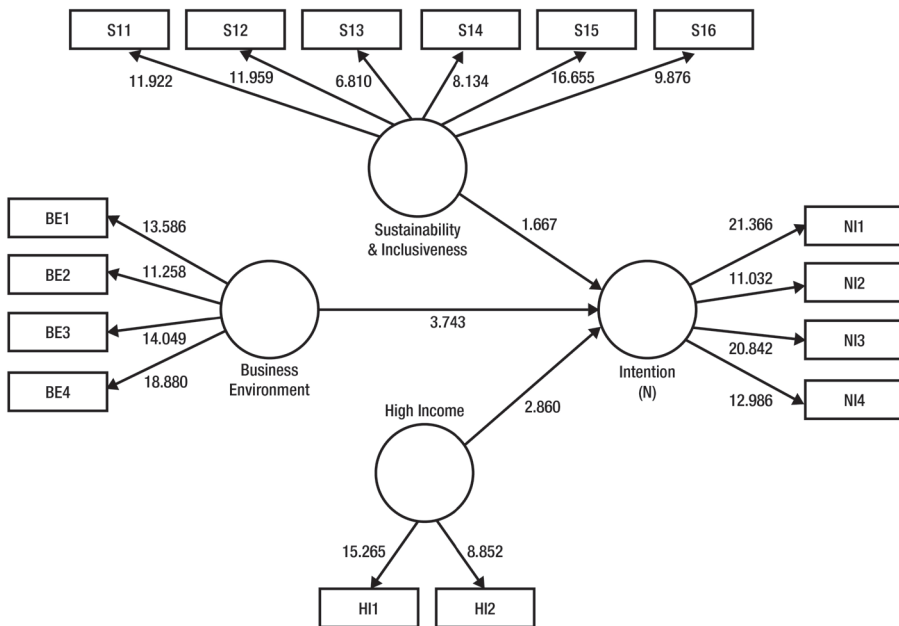
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Figure 3a

Figure 3b

	Path	Beta	t-value	Decision
H1	E → I	0.457	7.135***	Supported
H2	O → I	0.203	2.771**	Supported
H3	S → I	0.100	1.243	Not Supported
H4	SE → I	0.300	4.783***	Supported
H5	SI → NI	- 0.137	1.667*	Supported
H6	BE → NI	- 0.477	3.743***	Supported
H7	HI → NI	- 0.286	2.860**	Supported

Note ; *$p<0.05$, **$p<0.01$, ***$p<0.001$

Figure 3: Results of path analysis

Discussions and Implications

About one million Malaysian citizens are working abroad for better opportunities, lifestyle and higher standard of living. For instance, most of the educated intellectuals were in Singapore since Singapore has been doing well in currency rate as compared to Malaysia. Furthermore, the sustainable growth in terms of economy, social and environment are brighter at Singapore. The various measures taken by the government in Malaysia do not prevent people to go abroad mainly due to insufficient opportunities for highly trained professionals and skilled executives in Malaysia. In addition, those Malaysian citizens staying abroad may not wish to come back to their mother land as they enjoy multiple benefits outside. One of the primary objectives of NEM is to bring Malaysian workforce to a higher income group and retain the highly talented professionals and intellectuals within Malaysia.

The main aim of the present research is to examine the factors influencing Malaysian intellectuals' intention to leave Malaysia for work abroad. Results of the PLS analysis suggest a significant positive relationship between higher expectations such as higher pay, greater personal growth opportunity, or better career advancement and Malaysian intellectuals' intention to go abroad for work. Malaysian intellectuals remarked that the lack of opportunity and low wages in Malaysia

were the reasons to work abroad. Besides, lack of opportunity for career advancement in Malaysia has influenced them to migrate abroad. As expected, findings of the present study are consistent with the literature (Kangasniemi *et al.,* 2007). As one of the implications, like other developed nation, Malaysian government and private sector can consider seriously to invest more in high-tech industries and put greater effort on research and development to boost the Malaysia economy. Thus, income of the people can be increased and number of people looking forward to work abroad can be reduced.

Finding of the present study also shows a significant and positive relationship between perceived opportunities abroad such as better working conditions, better job opportunity, better training opportunity and intention to work abroad. The multinationals companies (MNCs) are dominating in Malaysia as compared to local Malaysian companies. Undoubtedly, it fetches more FDI to Malaysia, but the FDI has been considerably reducing in the recent years, which is a real concern to Malaysia. Furthermore, there is a wide gap in the tax structure for MNCs and local Malaysian companies, which makes local business more difficult. Hence, the time has come to concentrate and enhance the local Malaysian business to sustain self-contended economic growth. At the same time, more effort needs to be given to attract FDI and offer good packages to the incoming professionals in future. Besides, to retain

real talents in the home country, government agencies and private sector need to offer the appropriate trainings to enhance the knowledge and skill of Malaysian intellectuals by offering them competitive remuneration and incentives. In addition, the government may encourage entrepreneurs and small and medium enterprise (SMEs) by giving some special subsidy in the tax structure. Although Malaysia is a peace-loving country with relatively stable political and economic situation, there is a significant positive relationship between security situations of other visiting countries and resulted in the intention of professionals to leave Malaysia. These findings are consistent with the previous study by Oosthuizen and Ehlers (2007).

Regardless of the influence on the pull factors that have been discussed earlier, the result also indicates that the NEM has negative influence on the intention to work abroad among Malaysian intellectuals. The result suggested that Malaysians have shown a significant level of confidence in the government. They believe that the NEM will be able to transform Malaysia into a higher income economy, which can finally be turned into higher income nation, improved business environment, better management and preservation of resources, and fair distribution of wealth among its people. Therefore, for the people to feel involved in a developed and high-income economy, they would expect to live and work in safe surrounding, have an equal and easy access to information, practice mutual respect and hold to individual dignity. On the other hand, the people should expect that the various benefits of the NEM policy will only be realized when the policy measures are consistently and fully implemented over a period of time. In the meantime, some segments of the population may perceive greater negative impact than benefit, or that they are receiving less benefits than others. The government must be able to convey the ultimate equity of the benefits over time, urge a commitment to the process, and create a vision of the long-term common good. Once the full benefits of the NEM policy have been realized, brain drain issue would be able to be managed.

Conclusions

The emergence of NEM in Malaysia during the year 2010 is not only a boom to most Malaysian nationals but also to the country in terms of prospects and progress. The factor analysis for the components of NEM splits the model into three factors namely; business environment, sustainability and inclusiveness, and high-income policy. All these factors were found to be statistically significant which reveal that the Malaysian intellectuals have confidence in NEM and have intention to remain in the home country to work for better prospects. The long-term effect of NEM can be seen in the light of brain gain to Malaysia since it supports the government efforts to transform the Malaysians, especially the middle class socio-economic group into higher income group. However, other than retaining the existing intellectuals in the home country, future studies are recommended to investigate whether NEM can influence some of the Malaysian intellectuals and professionals staying abroad to go back and work in the home country.

Acknowledgement

References

Akl, E.A., Maroun, N., Major, S., Afif, C., Chahoud, B., Choucair, J., Sakr, M. & Schunemann, H.J. (2007). Why are you draining your brain? Factors underlying decisions of graduating Lebanese medical students to migrate. *Social Science and Medicine,* 64(6): 1278-1284.

Azman, N., Sirat, M., & Pang, V. (2016). Managing and mobilizing talent in Malaysia: Issues, challenges and policy and implications for Malaysian universities. *Journal of Higher Education Policy and Management,* 38(3): 316-332.

Barclay, D., Thompson, R., & Higgins, C. (1995). The Partial Least Squares (PLS) approach to causal modeling: Personal computer adoption and use an illustration. *Technology Studies,* 2(2): 285-309.

Barrett, A., & Goggin, J., (2010). Returning to the question of a wage premium for returning migrants. *National Institute Economic Review,* 213(1): R43-R51.

Baruch, Y. (1995). Business globalization: The human resource management aspect. *Human Resource Management,* 14(4): 313-326.

Baruch, Y., Budhwar, P. S., & Khatri, N. (2007). Brain drain: Inclination to stay abroad after studies. *Journal of World Business,* 42(1): 99-112.

Beine, M., Docquier, F., & Rapoport, H. (2001). Brain drain and economic growth: Theory and evidence. *Journal of Development Economics,* 64(1): 275–289.

Bushnell, P. and Choy, W. (2001). 'Go West, Young Man, Go West!'. *People and Place,* 9(3): 66-83.

Carr, S. C., Inkson, K., & Thorn, K. (2005). From global careers to talent flow: Reinterpreting "brain drain". *Journal of World Business,* 40(4): 386-398.

Chin, W. W. (1998). The partial least squares approach to structural equation modelling. In A. G. Marcoulides (Eds.), *Modern Methods for Business Research* (pp. 295-336). New York : Psychology Press.

Chin, W. W. (2010). How to write up and report PLS analyses. In V. E. Vinzi, W. W. Chin, J. Henseler, & H. Wang (Eds.), *Handbook of partial least squares: Concepts, methods and applications in marketing and related fields* (pp. 655–690). Berlin : Springer.

Clark, P. F., Stewart, J. B., & Clark, D. A. (2006). The globalization of the labor market for healthcare professionals. *International Labour Review,* 15(1-2): 37-64.

Connell, J., Zurn, P., Stilwell, B., Awases, M., & Braichet, J. M. (2007). Sub-Saharan Africa: Beyond the health worker migration crisis? *Social Sciences & Medicine,* 64(9): 1876-1891.

Dadson, I., & Kato, R. R. (2016). International remittances and brain drain in Ghana. *Journal of Economics and Political Economy,* 3(2): 211-241.

Dahl, M. S., & Sorenson, O. (2010). The migration of technical workers. *Journal of Urban Economics,* 67(1): 33-45.

Dustmann, C., & Kirchkamp, O. (2002). The optimal migration duration and activity choice after re-migration. *Journal of Development Economics,* 67(2): 351 – 372.

Fornell, C. & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research,* 18(1): 39-50.

Gaiduk, R., Gaiduk, J., & Fields, D. (2009). Limiting the brain drain: Determinants of employee organizational attachment in Lithuania. *Baltic Journal of Management,* 4(2): 149–168.

Gefen, D. & Straub, D. (2005). A practical guide to factorial validity using PLS-graph: Tutorial and annotated example. *Communications of the AIS,* 16: 91-109.

Ha, W., Yi, J., & Zhang, J. (2016). Brain drain, brain gain, and economic growth in China. *China Economic Review,* 38: 322-337.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). *A primer on partial least squares structural equation modelling (PLS-SEM).* Sage, Thousand Oaks, California. 384 pp.

Hendel, T., & Kagan, I. (2011). Professional image and intention to emigrate among

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Israeli nurses and nursing students. *Nurse Education Today,* 31(3): 259-262.

Henseler, J., Ringle, C.M. & Sinkovics, R.R. (2009). The use of partial least squares path modeling in international marketing. *Advances in International Marketing,* 20: 277-320.

Hildebrandt, N., & McKenzie, D. (2005). *The effects of migration on child health in Mexico. World Bank Policy Working Paper No. 3573.* Washington, USA: World Bank.

Imran, N., Azeem, Z., Haider, I., Amjad, N., & Bhatti, M. (2011). Brain drain: Post graduation migration intentions and the influencing factors among medical graduates from Lahore, Pakistan. *BMC Res. Notes,* 4: 417.

Jauhar, J., Ghani, A. B. A., Joarder, M. H. R., Subhan, M., & Islam, R. (2015). Brain drain to Singapore: A conceptual framework of Malaysian's diaspora. *The Social Sciences,* 10(6): 702-711.

Jauhar, J., & Yusoff, Y. M. (2011). Brain drain: Propensity to leave by Malaysian professionals. *International Journal of Innovation, Management and Technology,* 2(2): 119-122.

Kangasniemi, M., Winters, L. A., & Commander, S. (2007). Is the medical brain drain beneficial? Evidence from overseas doctors in the UK. *Social Science and Medicine,* 65(5): 915-923.

Kazlauskiene, A., & Rinkevieius, L. (2006). Lithuanian "brain drain" causes: Push and pull factors. *Engineering Economic,* 1(46): 27-37.

Khoo, S. E., Hugo, G., & McDonald, P. (2011). Skilled migration from Europe to Australia. *Population, Space and Place,* 17(5): 550-566.

Kugler, M., & Rapoport, H. (2007). International labor and capital flows: Complements or substitutes? *Economics Letters,* 94(2): 155-162.

Lowell, B. L., & Findlay, A. M. (2002). *Migration of highly skilled persons from developing countries: Impact and policy responses (Synthesis report).* International Labour Office, Department for International Development, United Kingdom. 41 pp.

Lu, Y., Zong, L., & Schissel, B. (2009). To stay or return: Migration intentions of students from People's Republic of China in Saskatchewan, Canada. *Journal of International Migration and Integration,* 10(3): 283-310.

Mansour, A. Y. (2008). Factors affecting locational decisions of Saudi health care professionals. Thesis of Doctoral Degree. University of Illinois.

Mesnard, A., & Ravallion, M. (2001). *Wealth distribution and self-employment in a developing country. CEPR Discussion Paper No. DP3026.* London, United Kingdom: Centre for Economic Policy Research.

Mpinganjira, M. (2009). Comparative analysis of factors influencing the decision to study abroad. *African Journal of Business Management,* 3(8): 358-365.

Nadaraj, V. (2016). Malaysia's brain drain reaching critical stage. Retrieved from http://www.aseantoday.com/2016/03/malaysias-brain-drain/, 9 January 2017.

National Economic Advisory Council (2010a). *New Economic Model for Malaysia. Part 1: Strategic Policy Directions.* Putrajaya, Malaysia: National Economic Advisory Council.

National Economic Advisory Council (2010b). *New Economic Model for Malaysia: Concluding Part.* Putrajaya, Malaysia: National Economic Advisory Council.

Nelson, M., Judith, O., Okurut, D., Ewk, N.,

Metto, E., Sammy, K., Gracie, C., & Makewa, L. N. (2016). Brain drain in private universities in Kenya: Seeking for an innovative solution. *Journal of Advance in Social Science and Humanities,* 2(12): 20171-20785.

Numbeo (2013). Crime comparison between Malaysia and Singapore. Retrieved from https://www.numbeo.com/crime/compare_countries_result.jsp?country1=Malaysia&country2=Singapore, 9 January 2016.

Oosthuizen, M., & Ehlers, V. (2007). Factors that may influence South African nurses' decision to emigrate. *Health SA Gesondheid,* 12(2): 14-26.

Podsakoff, P. M., & Organ, D. W. (1986). Self reports in organizational and prospects. *Journal of Management,* 12(4): 531-544.

Ringle, C. M., Wende, S., & Becker, J. (2015). SmartPLS 3. Bönningstedt: SmartPLS. Retrieved from http://www.smartpls.com, 23 August 2016.

Serour, G. I. (2009). Healthcare workers and the brain drain. *International Journal of Gynecology and Obstetrics,* 106(2): 175-178.

Sidebotham, M., & Ahern, K. (2011). Factors influencing midwery migration from the United Kingdom to Australia. *International Nursing Review,* 58(4): 498-50.

Stark, O. (2004). Rethinking the brain drain. *World Development,* 32(1): 15-22.

Stone, M. (1974). Cross-validatory choice and assessment of statistical predictions. *Journal of the Royal Statistical Society. Series B (Methodological),* 36(2): 111-147.

Straub, D., Boudreau, M.C. & Gefen, D. (2004). Validation guidelines for IS positivist research. *Communications of the Association for Information Systems,* 13(24): 380-426.

Tahir, M. W., Kauser, R., & Tahir, M. A. (2011). Brain drain of doctors: Causes and consequences in Pakistan. *World Academic of Science, Engineering and Technology,* 51: 406-412.

Tansel, A., & Gungor, N. D. (2003). "Brain drain" from Turkey: Survey evidence of student non-return. *Career Development International,* 8(2): 52-69.

Tessema, M. (2010). Causes, challenges and prospects of brain drain: The case of Eritrea. *International Migration,* 48(3): 131–157.

Viechtbauer, W., Smits, L., Kotz, D., Budé, L., Spigt, M., Serroyen, J., & Crutzen, R. (2015). A simple formula for the calculation of sample size in pilot studies. *Journal of Clinical Epidemiology,* 68(11): 1375-1379.

Walton-Roberts, M. (2015). International migration of health professionals and the marketization and privatization of health education in India: From push-pull to global political economy. *Social Science and Medicine,* 124: 374-382.

Wetzels, M., Odekerken-Schroder, G., & van Oppen, C. (2009). Using PLS path modeling for assessing hierarchical construct models: Guidelines and empirical illustration. *MIS Quarterly,* 33(1): 177-195.

World Bank (2011). *Malaysia economic monitor: Brain drain.* Washington, USA: World Bank.