

## The Determinants of Income towards Brain Drain – The Case of Malaysians in New Zealand

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### Abstract

Over the recent years, the globalization has created people to become increasing mobile within and across borders in response to the social and economic challenges. Employment has been regarded as the heart of most human movement in the 21st century and has allowed host countries led by organizations to seek foreign professionals to overcome shortfall of among competent professionals. The demand for efficiency in production and services as well as with global competition has geared greater professionals' mobility. As a result most of the developing countries have regarded this outflow or professional mobility that explains the departure or emigration of their competent professionals from their country to another country as brain drain. Similarly, Malaysia is one of the developing country from South East Asia has not been spared from this phenomenon. There are various socioeconomic factors that have been associated with the recent brain drain of Malaysians. However, it has been argued that the dominant factor of the recent brain drain in Malaysia would be the level of income in Malaysia. In recent years, Malaysians professionals have favored New Zealand as proven from the growth rate of Malaysians migrating to New Zealand. The high incomes and quality lifestyle in New Zealand as well as other factors have urged many Malaysians to move to New Zealand. Thus, this paper explores the determinants of income towards brain drain of Malaysians from the perspectives of Malaysians in New Zealand.

**Keywords:** Brain drain; income; socioeconomic; migration; Malaysia; New Zealand.

### Introduction

Malaysia is located in South East Asia, bordering Thailand to the north, Singapore and Indonesia to South as well as Indonesia to the west and to the east. Due to her strategic location, historically Malaysia has brought in trade and foreign influences. The Malaysian

history was dominated by Hindu cultures from India. There were several early kingdoms in Malaysia as Srivijaya was notable one, which reached their peak civilisation socioeconomically between 7<sup>th</sup> to 14<sup>th</sup> centuries. Due to her socioeconomic success and strategic location the Portuguese were the first colonial power to establish in Malaysia in 1511 and later succeeded by the British. Malaysia gained her independence in 1957 from the British government after several attempts including confronting the Second World War with the Japanese. Since gaining her independence Malaysia have dramatically increased living standards of her people by enhancing the socioeconomic level. The socioeconomic status among Malaysians in Malaysia transformed well as Malaysia move from agriculture based nation in 1950s into industrial in 1980s and service-based nation in year 2000s.

As the socioeconomic level in Malaysia prospered the nation since her independent had positive economic growth. The real gross domestic product (GDP) grew by an average of 6.5% per year from 1957 to 2005. The performance peaked in the early 1980s through the mid-1990s, as the economy experienced sustained rapid growth averaging almost 8% annually. Malaysia, which was agriculture country, is now employs skilled employees in various industries. Evidently, Malaysia is one of the world's largest exporters of semiconductor components and devices, electrical goods, solar panels, and information and communication technology products. With such growth Malaysia today is a middle-income country with a multi-sector economy supported with the booming education sector which has been generating thousands of fresh graduates into the market annually.

Over the recent years Malaysia through globalization managed to boost up international trading partners and figures and has done remarkable achievements. However, it somehow has negatively affected the human resource sector. Unavoidably the globalization has caused shortage of human resources in Malaysia as many businesses around the world have also increased their effort in attracting professionals from Malaysia. Some countries entice foreign professionals or labour to fulfil their countries needs in order to avoid economic shortfalls. World Bank (2011) reported approximately almost 1 million Malaysians are currently residing outside of Malaysia. Unfortunately, most of these represent brain drain especially those with tertiary education. Winters et al (2007) stated about 40 % of them are currently residing in Singapore; 30% in member countries of the Organisation for Economic Cooperation and Development such as the United States, Canada, Australia, New Zealand and United Kingdom; 20% in other ASEAN countries including Brunei, Indonesia, Vietnam and the Philippines and 10% in other regions of the world.

New Zealand in other hand being a member of Organisation for Economic Cooperation and Development is an island country in Pacific Ocean with great socioeconomic cooperation with various countries including Malaysia. New Zealand is mainly of two main islands, which is known as the North Island and South Island. New Zealand is located to east of Australia and south of the pacific areas such as Fiji and Tonga. Due to her remoteness New Zealand was one of the last lands to be occupied by humans. Since then New Zealand has been progressing well socioeconomically. Traditionally, New Zealand's economy was built on a narrow range of primary products, such as wool, meat and dairy products. Malcolm (1997) reported due to high demand of these primary products New Zealand faced her "wool boom" in 1951. As a result, since then New Zealand people have been enjoying a high standard of living compared to other nations in the pacific region. The primary product success in 1950s also allowed New

Zealand to participate greatly on international trade with other nations. The Doing Business Project (2014) reported New Zealand as being the third most business-friendly country in the world and acknowledged that the her free market reforms over decades have removed many obstacles to foreign investment despite having a small population. New Zealand has been always known for her focus on agriculture and services industries such as tourism and education.

New Zealand and Malaysia has long standing ties in various industries since 1950s which originally from the commonwealth ties. In fact Malaysia is New Zealand's second largest trade partner in ASEAN and 9th largest export market globally. Meanwhile, Malaysia is the 7th largest source of imports of New Zealand with crude oil and electronic products representing over 40% of imports (ASEAN FTA, 2014).

Due to her economic success and stability New Zealand has been the choice for people to migrate including professionals from Malaysia. Initially in 1950s many Malaysians moved to New Zealand first as students but then few found New Zealand was a lively to stay. As years pass by there have been changes on New Zealand immigration regulations and in 1980s many Malaysians arrived in New Zealand started to stay permanently. Walrond (2008) stated thousands of Malaysians arrived following changes to immigration regulations, which allowed entry to any person who could fulfil criteria based on skills and income.

Based on the statistics the number of Malaysians moving to New Zealand and have been accepted as residence has been increasing significantly. The total number New Zealand residents from Malaysia in 1976 were 4101 and it took 25 years to reach 11,463 in 2001, which could be translated as increase of 7,362. However, within the next 5 years, which is between the 2001 to 2006 the immigration department of New Zealand witnessed a huge increase of 3,084 New Zealand residents from Malaysia. Thus in 2006 there were 14,547 New Zealand residents born from Malaysia as 3,540 were Malay Malaysian and most of the rest were Chinese Malaysian (Walrond, 2008). World Bank (2011) reported that in 2010 there were 22,703 Malaysians residing in New Zealand as residents.

Evidently it is proven that over the recent years many Malaysians especially professionals have found that the pasture is greener on New Zealand and leaved their home country in pursuit of better life conditions. The movement or migration of Malaysians especially skilled professionals to other countries such as New Zealand has been regarded as brain drain. Schellekens (2011) reported that brain drain as an impact on Malaysia's aspiration to become a high-income nation, as the human capital is the bedrock of the high-income economy. He mentioned that for Malaysia to be successful Malaysia would need to develop, attract and retain talent.

Brain drain is commonly known as the migration of talent across borders. Tansel & Güngör (2003) defined brain drain as the movement of highly-skilled individuals, sometimes referred to as knowledge workers, from their home countries to countries that offer them greater opportunities in their area of specialty as well as in terms of living conditions and lifestyles. In 2005, Haylock defined brain drain as the flow of human capital out of a country, particularly skilled individuals and tertiary graduates. Recently, Wild, Wild and Han (2010) defined brain

drain as the departure of highly educated people from one profession, geographic region, or nation to another.

### **The Determinants of Income**

The debate on the brain drain, or the emigration of skilled workers, is not new but it has taken on greater urgency in the context of globalizing economy and ageing societies. The Star (2007) reported that Malaysia is facing a severe brain drain in its workforce, especially in the area of skilled labor and professionals. According to Asian Strategy & Leadership Institute director Ramon V. Navaratnam, the loss of quality and skilled workforce was due to higher pay and better perks offered by companies overseas (The Star, 2007). Income has been associated as one of the determinant factor in urging professionals to seek greater opportunities abroad. Income can be generally defined as the consumption and savings opportunity gained by an entity within a specified time frame, which is expressed in monetary terms such as cash or non-monetary terms such as stocks or properties. Case and Fair (2007) defined that income are sum of all the wages, salaries, profits, interests payments, rents and other forms of earnings received in a given period of time.

Since her independent the Malaysian economy has been growing and has been relatively open to local and foreign investors. The economy of Malaysia was the 3<sup>rd</sup> largest in South East Asia and 29<sup>th</sup> largest economy in the world during 2007 (CIA, 2012). In line with the achievements the Malaysia government has set to become high income nation with goal to achieve GNI per capita USD 15,000 by year 2020. The former Malaysian Prime Minister Mahathir Mohamad introduced the vision 2020 or “Wawasan 2020” during tabling the 6<sup>th</sup> Malaysian plan in 1991. However, the current GNI per capita incomes of Malaysians are USD 9,820, which significantly low from the targeted figure (The Star, 2013). Furthermore, most of the households in Malaysia are on average in the bottom 40% rung of Malaysian households. Many experts view that it would be difficult for most of the Malaysians to achieve the target USD15,000 income. Meanwhile, figure 1 explains that the Malaysian per capita GDP is relatively low compared to other economic powers in Asia such as Japan, Singapore and South Korea. The figure further indicates that all these four nations were facing similar economic situation back in 1970s with less than USD 3,000 per capita. However, as years pass by Japan, Singapore as well as South Korea progressed well leaving Malaysia far behind from the perspective of per capita GDP. Currently, Japan and Singapore exceed USD 40,000 per capita followed by South Korea USD 20,000 per capita and Malaysia less than USD 10,000 per capita.

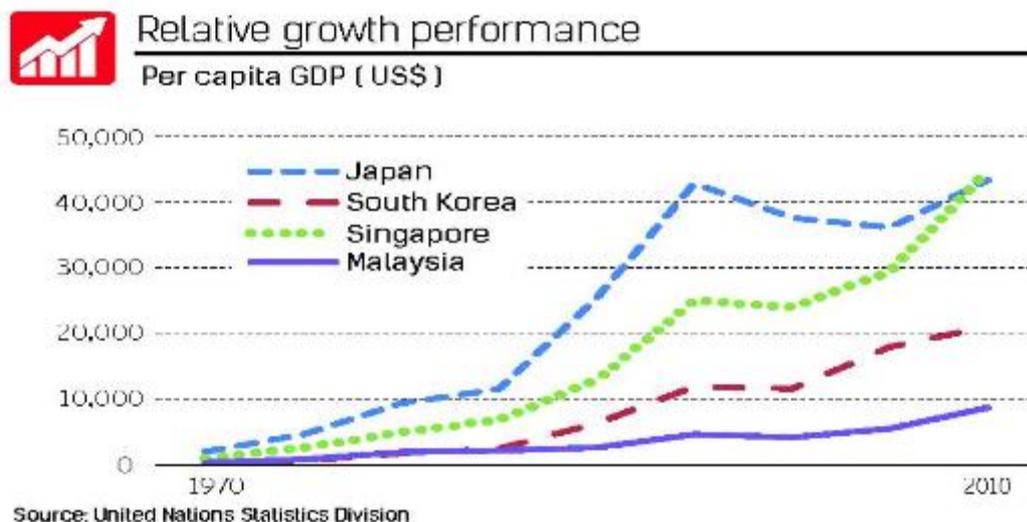


Figure 1: Relative Growth Performance  
Source – United Nations (2010)

Meanwhile, due to low GDP per capita the gap between rich and the poor are quite significant in Malaysia compared to other South East Asia countries. The report from United Nation (2010) indicates the disparity ratio between the poorest 10% and the richest 10% in Malaysia is about 22.1 compared to Singapore 17.7, Philippines 16.5, Thailand 13.4, Vietnam 8.4 and Indonesia 7.8. The huge income disparity could effect Malaysia in many ways. Among the effects would that could lead would include higher crime rates and other social problems. It also would lead the society to focus less on high end consumption due to their limited resources. As a result of this phenomenon there is possibilities that high unemployment rate especially among the skilled graduates. According to Ismail (2011) the Malaysian economy had been growing at an annual rate of 6.6% for the past three decades but yet unemployment rates have increased from 2.6% in 1996 to 3.6% in 2003 (Department of Statistics, Malaysia, 1996–2003). She further mentioned that young graduates in particular experience are currently facing difficulties in securing their first job and a high proportion of graduates hold a job that does not correspond to their education and expectations. As results the unemployment among these graduates have harm the economy growth, as they are unable to generate sufficient income possess low purchasing power. This further generates more pressure among the skilled workforce in Malaysia, which leads into economic pressure and urges them to seek job opportunities abroad.

**The gap between rich and poor**

Country	Poorest 10%	Richest 10%	Disparity Ratio
Malaysia	1.7	38.4	22.1
Singapore	1.9	32.8	17.7
Philippines	2.2	36.3	16.5
Thailand	2.5	33.8	13.4
Vietnam	3.6	29.9	8.4
Indonesia	3.6	28.5	7.8

Source: UN

Figure 2: The Gap between Rich and Poor  
Source – United Nations (2010)

The low-income factor among skilled workforce in Malaysia has directly led them to be a debtor at a very young age. For example, fresh graduates entering the workforce find difficult to cope with high living cost in Malaysia. As a result they tend to borrow money from the relevant agencies including bank to pursue and accomplish their daily task. The average fresh graduate salary in Malaysia is about RM 2000 (USD 602) per month and they unable survive with the major expenses such as transportation (public transport or car loan installment), accommodation (housing loan installment or rental), food, entertainment and education loan (Imoney, 2013). Imoney (2013) further reported that the major financial burdens for fresh graduates purchasing and maintaining their new car as the official statistics from the Malaysian government had shown that at the end of last year, 20 per cent of Malaysian household debts were due to cars, an asset which depreciates over time. Most of these graduates have no choice to purchase new cars because the transport system in the city is not fully reliable as most them requires cars to commute to work daily including during odd hours if they are on shift jobs. Currently, a cheapest new local car in Malaysia cost about RM 25,000 (USD 7,530) and takes RM 400 (USD 121) of a person monthly salary for 9 years which can be calculated as 20% of their monthly income. Besides purchasing the maintenance cost for the car such as refueling, servicing and paying taxes as well as insurances also takes major portion of their income.

According to the Malaysia Department of Insolvency (2014), car loans, if not managed properly, can lead to bankruptcy. Between 2005 and 2012 it caused 25 per cent of bankruptcy in Malaysia. Figure 3 evidently proves that Malaysia has the highest household debt / disposable income in 2010 compared to other Asian countries such as Singapore, South Korea, Thailand and Indonesia. As a result, with high living cost and huge debt many Malaysians tend to seek opportunities abroad. Income has been associated as the pull and push factor for many Malaysians to move aboard. The pull factors are those conditions that have attracted Malaysians to leave the country and the push factors are conditions which normally a forced has pushed Malaysians to other countries. Nevertheless either pull or push factors the current phenomena have created a mass brain drain in Malaysia, which need to be addressed accordingly.

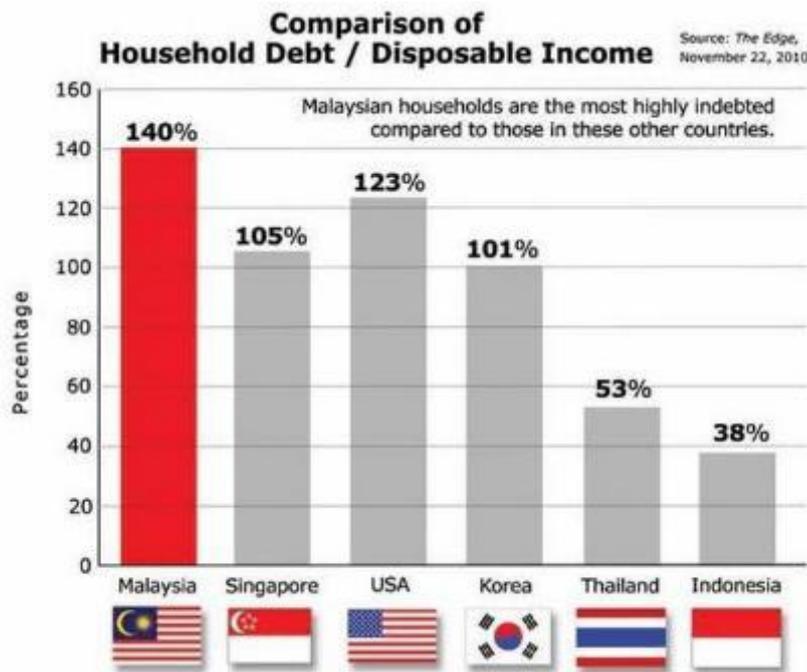


Figure 3: Comparison of Household Debt / Disposable Income  
Source – The Edge (2010)

### Brain Drain

Brain drain is a term for a significant emigration of educated or talented individuals from one region to another. As mentioned previously brain drain can cause from various socioeconomic turmoil within a nation. Brain drains normally cause countries to lose valuable professionals. For example, brain drain is normally used to describe the departure of doctors, scientists, engineers or financial professionals from a country. Thus, when these professionals leave, their country faces normally two common issues. Firstly, the loss of these professionals would reduce the supply of professionals in that country. Unlike developed countries such as New Zealand developing countries such as Malaysia will even face greater challenges to if their professionals leave the country as it could stop or hinder their economic development. Secondly the country's economy is also affected as normally professional represents surplus spending units in most of the nation. So, if professionals who generally earn large salaries leave their country then there is huge possibility reduction of consumer spending in the country. For example, United Nations Development Programme (UNDP) estimated that India loses USD 2 billion in a year because of the emigration of computer experts to the United States. According to the report the Indian institutes train people at a very small cost such as between USD 15,000 to USD 20,000 but they end up losing highly qualified professionals to other developed countries such as United States ((British Broadcasting Corporation, 2001). India is not the only country in Asia that has to deal with a growing brain drain. Most of the developing countries such as Malaysia in the same continent are facing similar difficulties. The best and the brightest often find opportunities elsewhere and are lured to those opportunities by higher pay. Over the years Malaysia besides being known as a sending country it is also known receiving country, as many foreigners tend to go to Malaysia every year for long-term employment. Romann (2013) reported there are about 1.4 million Indonesia born migrant in Malaysia and making Indonesia-Malaysia migrant corridor as one of the busiest in the world. Unfortunately, most of these migrants are low skilled labourers

with lack education qualifications and skills. At the same time, the number of skilled Malaysians living abroad has tripled in the last two decades (World Bank, 2011). World Bank (2011) reported currently, two out of every ten Malaysians with higher education seeks employment elsewhere-resulting about 305,000 immigrants in 2009. The figure 4 states currently there are almost 1 million Malaysians are leaving abroad and most of them are staying at Organisation for Economic Cooperation and Development countries (OECD) or Singapore. The figure indicates further most of the Malaysians are currently staying in Singapore followed by Australia, United States, United Kingdom, Canada, Brunei and New Zealand.

Size of the diaspora (age 0+) and brain drain (age 25+), by country of destination and over time, numbers

	Diaspora		Brain drain	
	2000	2010	2000	2010
Balanced sample total	639,896	808,018	184,014	276,558
Unbalanced sample total	657,574	827,387	..	..
Singapore (residents only)	303,828	385,979	66,452	121,662
Australia	78,858	101,522	38,620	51,556
United States	51,510	61,160	24,085	34,045
United Kingdom	49,886	65,498	12,898	16,609
Canada	20,420	24,063	12,170	12,807
Brunei	60,401	76,567	6,438	10,208
New Zealand	11,460	15,995	4,221	6,708
Other countries	81,211	96,602	19,130	22,962

Figure 4: Size of the Diaspora and Brain Drain of Malaysians by Country of Destination  
Source – World Bank (2011)

Figure 5 meanwhile indicates the estimated annualized growth over 2000 to 2010 in total diaspora and skilled migrants from Malaysia. The average percentage for estimated annualized growth over 2000 to 2010 in total diaspora is 2.4% in whereby New Zealand leads with 3.4%, United Kingdom 2.8%, Australia 2.6%, Singapore 2.4%, Brunei 2.4%, United States 1.7% and Canada 1.7%. Meanwhile, average percentage for estimated annualized growth over 2000 to 2010 in skilled migrant stocks are 4.2% in which Singapore leads with 6.2%, New Zealand 4.7%, Brunei 4.7%, United States 3.5%, Australia 2.9%, United Kingdom 2.6% and Canada 0.5%. Overall it can be seen that New Zealand is one the favorite destination for most of the Malaysians as it records top two positions in both categories. New Zealand has been favorite destination for many Malaysians due to the New Zealand migration skills based policy, which enable entry of person who have skills that New Zealand, wants. Thus, the most common path is the “Skilled Migrant Category” (or SMC”) also commonly known as the “Points System” because the success will depend on “points” scored on a scale designed to give some applicants priority over others. There are other, known categories that apply to people with particular talent such as sports people and for those who are employed by accredited employers such as huge multinationals corporations and universities (New Zealand Immigration, 2014).

Meanwhile, it is proven that brain drain in Malaysia has been steadily worsening especially between the years of 2000 to 2010 as stated by World Bank. The World Bank has projected the brain drain in Malaysia will intensify and increase in numbers over the next few years as

Malaysia has made big economic strides in the 90s but growth has been halved in the past decade which has slow down from 7.2% to just 4.6%. World Bank (2011) concluded in their report the slowdown in the economic growth are largely due to brain drain undoubtedly the nation is currently facing severe brain drain would be enough to jeopardize the Malaysia's development prospects throughout this decade. The report also cautioned that the nation could see serious economic issues if fails to encourage professionals to return work to their home country.

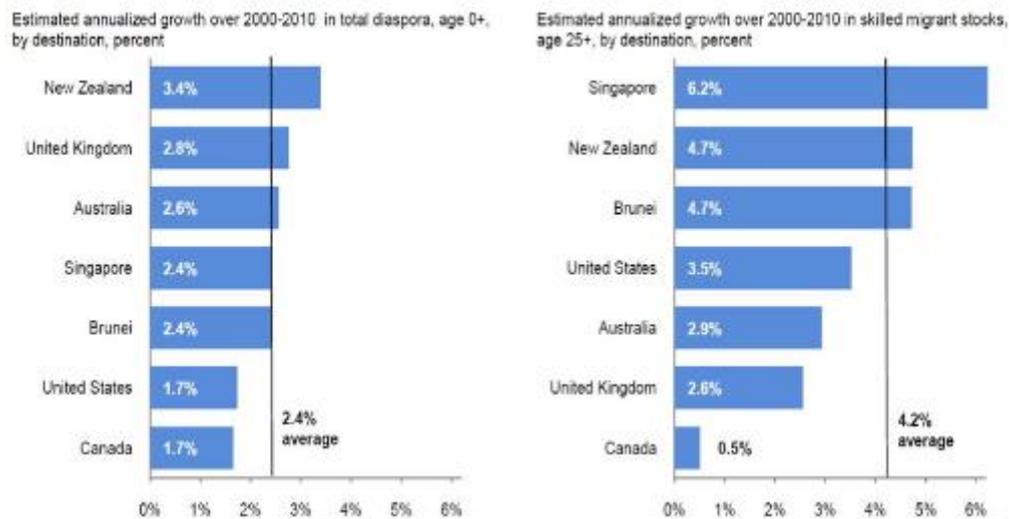


Figure 5: Estimated Annualized Growth of Diaspora and Brain Drain of Malaysians by Country of Destination

Source – World Bank (2011)

The World Bank identified that the factors of the Malaysian brain drain is attributed to the less attractive salary and benefits offered in the country. Over the recent years skilled employees especially fresh graduates tend face difficulties in gaining appropriate salary. For example, the starting salary for a fresh graduate with bachelors in computer science in Malaysia does not exceed \$10,000 per annum but in the United States graduates with similar qualification tend to earn \$50,000 per annum. Despite adjusting the cost of living, the starting salary in Malaysia is nowhere as attractive as developed countries. Moreover, the purchasing power for fresh graduates is much lesser compared to the graduates in other developed countries due to the value of Malaysian currency as well as taxes imposed by the Malaysian government on necessity products such as cars. Figure 6 indicates the approximate salary for professionals' especially fresh graduates with 1 to 3 years working experience. The highest paid job for fresh graduates in Malaysia is dentist and doctor followed by mechanical engineer, finance, risk and recovery, IT programmer and accountant. However, as can be seen the disparity of salaries earn by graduates earn in New Zealand are huge. For example a graduate doctor in New Zealand earns USD 58,000 per annum compared to USD 17,000 in Malaysia. Even after analyzing the living cost and common expenses of the graduates in Malaysia it is proven that the graduates in Malaysia are seems to be having lesser salary and purchasing power compared to the graduates in New Zealand. Evidently, the IMF ranked Malaysia in 59<sup>th</sup> and New Zealand in 31<sup>st</sup> in terms of the purchasing power per capita (United Nations, 2010).

Fresh Graduate 1-3 years' experience Salary		
	Malaysia	New Zealand
	USD (per annum)	
Dentist	17,000	60,000
Doctor	17,000	58,000
Mechanical Engineer	9,000	35,200
Finance	9,000	37,200
Banking - Risk and Recovery	9,000	37,200
IT Programmer	7,950	45,500
Accountant – Audit / Tax	7,230	38,000

Figure 6: Fresh Graduate Salary in Malaysia and New Zealand  
Source – Jobstreet Malaysia and Careers NZ (2014)

In 2010, the Association of Commonwealth Universities conducted a salary survey for all academician salary scales in 7 countries. As stated in figure 7, the result was significant for Malaysia as it was proven that the academician in Malaysia generally earn much lesser than their counterparts in other selected commonwealth countries. Based on their findings academician in Singapore earns highest salary followed by Australia, South Africa, Canada, United Kingdom, New Zealand and Malaysia. The findings also revealed that differences on the overall midpoint salary level between an academician in New Zealand compared to Malaysia is USD 33, 895 per annum.

	Overall midpoint average salary level per annum (USD)
Singapore	108,518
Australia	83,670
South Africa	78,653
Canada	76,594
United Kingdom	76,377
New Zealand	68,863
Malaysia	34,968

Figure 7: Midpoint Salary for an Academician  
Source - Association of Commonwealth Universities (2010)

Overall, it can be seen that income is one of the major factor which is encouraging many Malaysians to move abroad and seek further opportunities. Malaysian Employers Federation reported that there are approximately 785,000 Malaysian workers working outside Malaysia, and it is estimated that two out of three workers are professionals. The demand of Malaysian professional is considerably high in the market because of their environmental adaption is strong, multi-lingual, and reasonably wage rate (Jauhar et al., 2011). However, the more serious phenomenon of brain drain occurred when these talents leave Malaysia after finishing their education at home and work for other countries. It is because Malaysia has invested various resources such as energy, time and human resource to cultivate and educate them

but home country is failed to reap the dividends of their human capital investment (Foo, 2011). Thus despite understanding income as the primary objective of this issues it is vital for the Malaysian government to understand the actual reason behind this brain drain and the forces as well as push and pull factors encouraging their move to countries such as New Zealand.

### Conclusions

The Malaysian government is fully aware of the debacle facing them and has taken many efforts to try to overcome the issue. They identify productivity and inclusiveness as the key factors to solve emigration and have established the Government Transformation Programme (GTP) and Economic Transformation Programme (ETP) to tackle the issue from these perspectives. Thus the authors suggest that more in depth research needs to be done in order to identify the accurate push and pull factors from the perspective of income that encouraging brain drain towards Malaysians in New Zealand. Thus, this paper sets out as an initial contribution to the current discourse of brain drain in Malaysia particularly analyzing Malaysians in New Zealand from the income aspect. Addressing these issues is vital for Malaysia as it would ensure her to take the necessary step towards facing the challenges of globalization as well as achieving the vision 2020.

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