

## **Data Analysis**

### **Introduction**

The survey was conducted in between January and February 2012 with the aim to achieve at least 200 responses from individual professional Malaysians living in Malaysia or abroad.

A total of 190 (95%) responses were collected, mainly 146 (77%) from Malaysians living in Malaysia and 44 (23%) from Malaysians abroad.

The optimal rate of response from individual was achieved as many expressed their interest to this research topic even though some may not be aware or fully understand the topic but it did shed some lights to Malaysians.

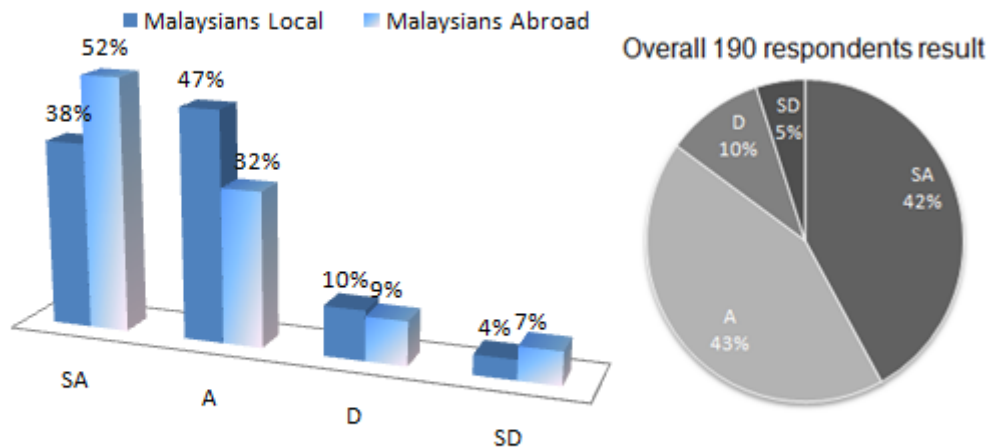
For section 2, questions 1 and 5, respondents have the option to select the same ranking more than once if they feel that the factors are equally or least causes to Malaysia's brain drain. Therefore, the total respondents will not be equal to 190 or 100%.

## Analysis and Interpretation of questions

### Section 1 - Brain drain and Malaysia Government initiatives

Section 1 of the questionnaire consists of four questions. This section aims to find out whether Malaysians in general do understand and have any confidence towards the government initiatives to stem brain drain.

**Figure 4.1 (Q1) Shortages of highly skilled workers in Malaysia**

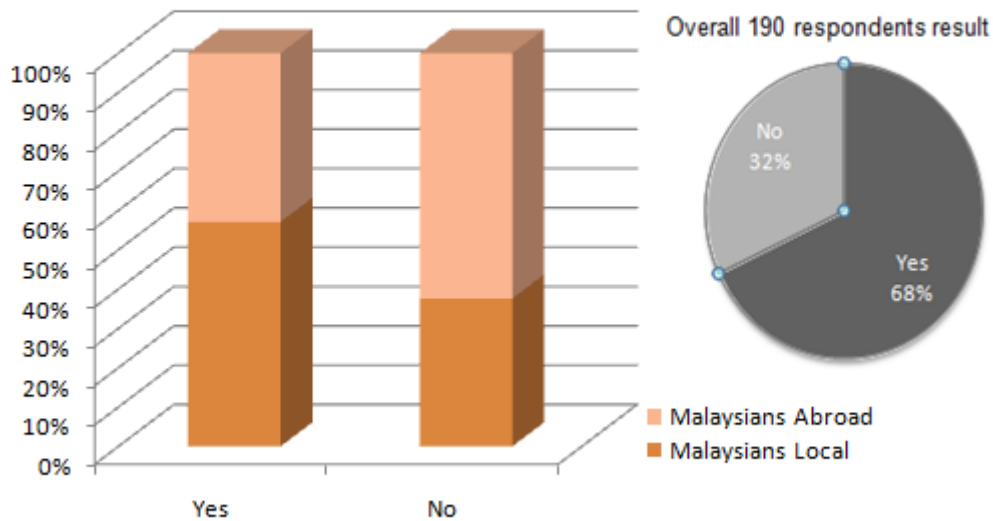


Source: Survey responses, 2012

Note: SA(Strongly Agree) A(Agree) D(Disagree) SD(Strongly Disagree)

Figure 4.1 shown that 162 (85%) of the respondents do agree and strongly agree that Malaysia were short of highly skilled professions that may affect the country's economic development. Mostly are local Malaysians (125-85%), Malaysians abroad (37-84%) with a working experience range of 10-20 years (77-40%) and attached with the private sector (87-54%).

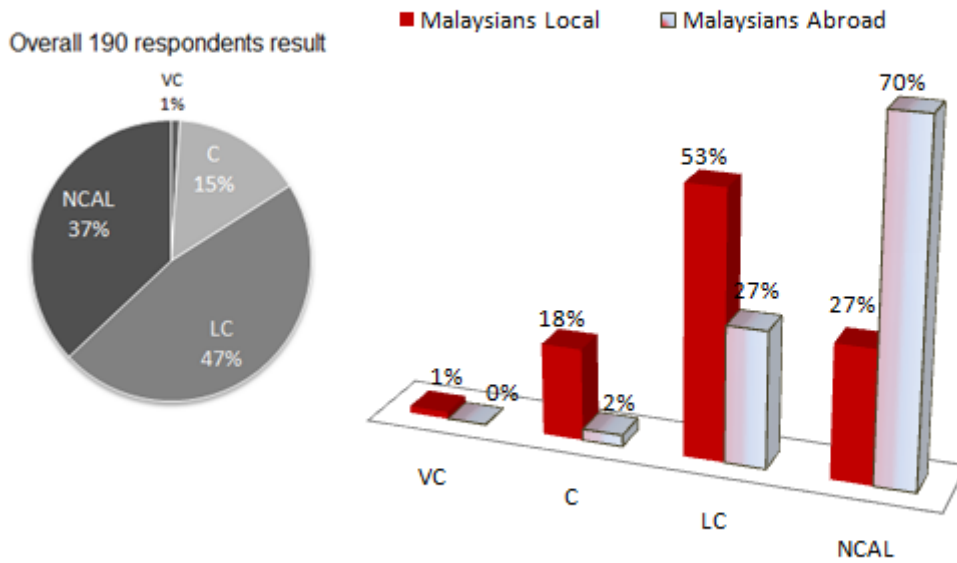
**Figure 4.2 (Q2) I understand the purpose of the Malaysian Government initiatives related to human capital development.**



Source: Survey responses, 2012

As shown in Figure 4.2, majority of the Malaysians do understand the government initiatives. However, there were 60 (32%) of Malaysians who didn't understand these initiatives. Why is this so? Is it because of the ignorant attitude of our Malaysians or the Malaysia government has not done enough to inform the nation or no proper implementation being established? This will affect the accuracy of information gathered to this research study due to the sampling frame error. Majority of these respondents were from the private sector who 1/3 of the 60 respondents were residing outside of Malaysia. They were mainly from Australia and USA. This result shows a significant effect on how the Malaysia government should seriously consider better ways to reach out to Malaysians on all important initiatives implementation.

**4.3 (Q3) Malaysians confidence level towards the goveremnt programmes to stem brain drain.**

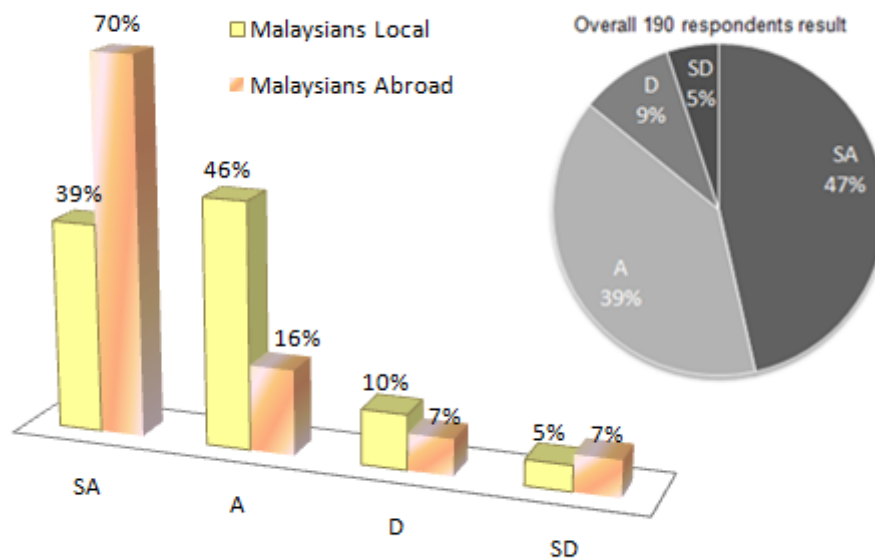


Source: Survey responses, 2012

Note: VC (Very Confident) C(Confident) LC(Low Confidence) NCAL(No Confidence At All)

Only 30(16%) respondents were very confident/ confident with the government initiatives to reduce the current escalating brain drain rate (Figure 4.3). Majority of the respondents were from the public sector -13(43%) and all do understand the purpose of the government initiatives identified from question 2 above. Overall 29 out of the 30 respondents were residing in Malaysia, only one from Singapore and 23(77%) were Malays.

**Figure 4.4 (Q4) The escalating rate of brain drain in Malaysia will affect the country's Vision 2020 of becoming a developed nation.**



Source: Survey responses, 2012

Note: SA (Strongly Agree) A (Agree) D (Disagree) SD(Strongly Disagree)

In Figure 4.4, most of the respondents (162-85%) do agree the escalating brain drain effect in Malaysia will affect the country's objective to become a high income nation. This result do co-relates to question 1 above, a consistent response that due to the impact of shortages in highly skilled workforce, the country's economic development will be affected. The demographic data were also quite similar to question 1 and 88 (54%) were Chinese respondents.

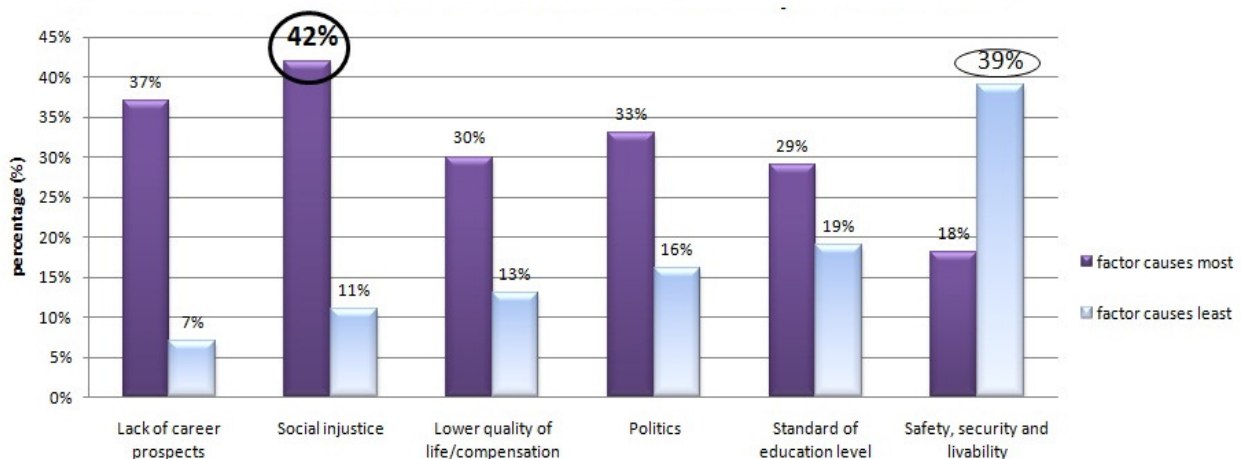
## Section 2 The push and pull factors

This section aims to identify the drivers to Malaysia's brain drain. How would Malaysians view brain drain affecting the country economic growth?

### Factors that may have caused Malaysia brain drain

For the purpose of this analysis, I will compare the response results from rank 1 (causes most) and rank 5 (causes least) among the six factors listed in the survey. From the chart (Figure 4.5), the result suggested that social injustice (overall 42%) and lack of career prospect (37%) matter most. Safety, security and livability (18% verses 39%) were least causes why Malaysians left the country. Probably this is true as according to Sidhu (2011), Malaysian workers are unique as they are able to adapt well to any environment.

**Figure 4.5 - Respondents feedback - Factors to Malaysia's brain drain**



**Source : Survey responses, 2012**

Most of the responses were non Malay ethnic (69-87%) who think that social injustice which discriminates against these people make them moved out from their homeland. 59% of the respondents were residing in Malaysia of which 41% were Malaysians abroad. In overall from

the total of 44 Malaysian overseas respondents (23%) who have participated in this survey, this represents more than 70% of the Malaysians who left the country due to social injustice. The top occupations from these respondents were lecturer, engineer, finance and IT specialist.

The open-ended question (Table 4.1) summarised 21 respondents suggestion on other causes to Malaysia brain drain:

<b>Table 4.1 - Suggestions from respondents (Q1-section 2)</b>			
<b>Category</b>	<b>Respondents</b>	<b>%</b>	<b>Some comments from respondents</b>
Racist	15	71.44	<ul style="list-style-type: none"> <li>institutionalised discrimination against non-Malays</li> <li>extremist pro-Malay organisations engaged in fear mongering; very restricted entry to universities open to non-Malays</li> <li>the country is run by politicians like it's their own business and not held accountable, intolerance on non-Islam religions, the use of racial and religious issues for political benefits.</li> </ul>
Corruption	3	14.28	<ul style="list-style-type: none"> <li>rampant corruption at top political level</li> <li>compromised judiciary injustice</li> <li>probably some government ministries need to go for reorientation to learn the basics on practical plans to run the country.</li> </ul>
Gender bias	1	4.76	<ul style="list-style-type: none"> <li>sexual discrimination</li> </ul>
Social	1	4.76	<ul style="list-style-type: none"> <li>no confidence in the police-general crime; bad transportation.</li> </ul>
Global environment	1	4.76	<ul style="list-style-type: none"> <li>international mobility that caused brain drain</li> </ul>
<b>Total</b>	<b>21</b>	<b>100</b>	

*Source: Survey responses, 2012*

This result indicates majority of the respondents believe that social injustice mainly due to racism on religion, education and doing business in Malaysia have pushed many Malaysians away. Mostly Malaysians abroad from Australia have expressed their opinions.

### **Are working Malaysians satisfied with their current working environment?**

Table 4.2 summarised how Malaysians in Malaysia and abroad voiced their satisfaction level in a working place in terms of credibility and job security/benefits.

**Table 4.2 - Are working Malaysians satisfied with their current working environment? Question 2, 3, 4**

In Malaysia - 146 responses (76.8% of 190)							Malaysians overseas - 44 responses(23.2% of 190)							
Employment sector -Q2	No of responses	%	Number of responses				Question 3	Number of responses				%	No of responses	Employment sector -Q2
			SA	A	D	SD		SA	A	D	SD			
Public	25	17	2	18	5	0	My current employer recognises and acknowledges my contribution.	4	4	1	0	21	9	Public
Private	79	54	14	45	17	3		13	5	1	1	45	20	Private
MNC	30	21	9	16	3	2		5	6	1	0	27	12	MNC
Others	12	8	1	5	6	0		1	2	0	0	7	3	Others
<b>Total</b>	<b>146</b>	<b>100</b>	<b>26</b>	<b>84</b>	<b>31</b>	<b>5</b>		<b>23</b>	<b>17</b>	<b>3</b>	<b>1</b>	<b>100</b>	<b>44</b>	<b>Total</b>
18% 58% 21% 3%							52% 39% 7% 2%							

In Malaysia - 146 responses (76.8% of 190)							Malaysians overseas - 44 responses(23.2% of 190)							
Employment sector -Q2	No of responses	%	Number of responses				Question 4	Number of responses				%	No of responses	Employment sector -Q2
			SA	A	D	SD		SA	A	D	SD			
Public	25	17	0	21	4	0	There is job security, career development, increment, benefits, good environment.	3	5	1	0	21	9	Public
Private	79	54	5	47	20	7		11	7	2	0	45	20	Private
MNC	30	21	7	14	9	0		3	8	1	0	27	12	MNC
Others	12	8	1	7	4	0		1	2	0	0	7	3	Others
<b>Total</b>	<b>146</b>	<b>100</b>	<b>13</b>	<b>89</b>	<b>37</b>	<b>7</b>		<b>18</b>	<b>22</b>	<b>4</b>	<b>0</b>	<b>100</b>	<b>44</b>	<b>Total</b>
9% 61% 25% 5%							41% 50% 9% 0%							

Source: Survey responses, 2012

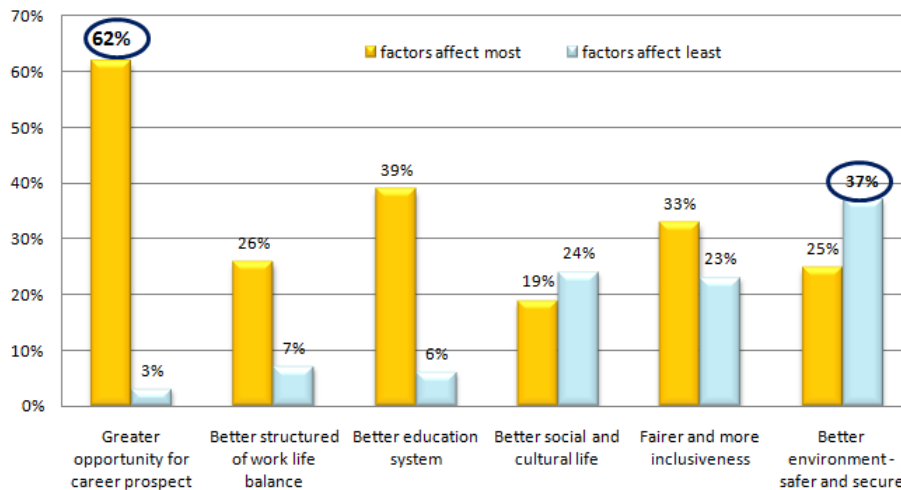
Note: SA (Strongly Agree) A(Agree) D(Disagree) SD(Strongly Disagree)

The result shows that Malaysians abroad were very satisfied/satisfied with their employers and overall working conditions and environment, with a percentage above 90% compared to working Malaysians in Malaysia an average of 73%. Probably the pull factors from the more advanced countries are able to provide greater comfort in their current country of residence.

### What factors may affect Malaysians to migrate?

For the purpose of this analysis, I will compare the response results from rank 1 (affect most) and rank 5 (affect least) among the six factors listed in the survey. From the chart (Figure 4.6), we can identified that greater career opportunity/prospect (62%) influenced most Malaysians to migrate, followed by better education system (39%), fairer and more inclusiveness (33%).

Figure 4.6 - Respondents feedback - Factors affect Malaysians to migrate



Source : Survey responses, 2012

Most respondents were young (26-35 years old) married Chinese female Malaysians with a degree and working experience of 10 -20 years of salary range between MYR50,000 to MYR100,000 opted career prospect as their reason for migration. Whereas for education reason, most respondents were married Chinese male of (26-45 years old) with a degree and working experience of 10 and 20 years and above. The respondents occupations as listed in the survey form were equally spread for these rankings that affect their decisions to leave Malaysia.

There were only 10 respondents to the open-ended question (Table 4.3) who suggested other factors influencing Malaysians migration.

<b>Table 4.3 - Suggestion of other factors to Malaysian migration (Q5 section 2)</b>			
<b>Category</b>	<b>Respondents</b>	<b>%</b>	<b>Some comments from respondents</b>
Racist	5	50	<ul style="list-style-type: none"> <li>• Racism and religious discrimination in Malaysia are getting intolerable. They are now in all levels.</li> <li>• Unfair treatment - quotas and education, grant and scholarships</li> <li>• no racial segregation, reward base on meritocracy, work satisfaction, being fairly and equally treated by the country</li> </ul>
Equal rights	3	30	<ul style="list-style-type: none"> <li>• Government attitude towards equal opportunities to all Malaysians</li> <li>• Basic human rights need to be safeguarded here.</li> </ul>
Improve social systems.	2	20	<ul style="list-style-type: none"> <li>• Malaysian driving conditions are so dangerous. I want to live in a place with good public transport infrastructure where I don't have to drive.</li> <li>• Better social services</li> </ul>



<b>Total</b>	<b>10</b>	<b>100</b>
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Source: Survey responses, 2012

From the result above, we can correlate the respondents' opinions which caused Malaysian brain drain in question 1 of section 2. There is a significant reliability and validity of views, as majority Malaysians considered leaving the country if the social disincentives remain unresolved.

### Education background

Will different education background have different consideration relating to migration?

Question /Answer	Q6 Overseas educated? %	Q8 Residing Malaysia? %	Q9 Intention to leave Malaysia? %	Q10 Plan to return to Malaysia? %
Yes	84 44%	48 57%	Yes 72 49.3% No 72 49.3% Maybe 2 1.4%	6 13.6% 35 79.5% 3 6.8%
No		36 43%		
No	106 56%	8 8%		
Yes		98 92%		
<b>Total</b>	<b>190</b>	<b>190</b>	<b>146</b>	<b>44</b>
Yes		146		
No		44		
<i>Note: Question 7 - Education obtained from:</i>				
Majority	United Kingdom (33-39.3%), United States (21-25%), Australia (11-13.1%)			
Others	Canada (4-4.8%), France (2-2.4%), less than 2% -Singapore, New Zealand, Ireland, Japan, Switzerland.			

Source: Survey responses, 2012

The results showed that there are quite a fair percentage of locally and overseas educated respondents. However there were many overseas graduate Malaysians (57%) who were still in Malaysia, mainly Chinese, attached with the private and MNC employment sector, majority have the intention to leave Malaysia in order to obtain a better education for future career prospect and

their resentment towards the political situation in Malaysia. Some comments extracted from the open-ended question 9:

- *Yes. For better structure of work life balance/family and better education system / opportunity for the future.*
- *Yes, the education system here is crap and working life is terrible -no balanced life.*
- *Yes, dislike the disparity between races and the fact that job opportunities etc are not based on merit.*
- *Yes, leaving because of the unfair treatment towards the minority races and biased benefits given to citizens.*
- *Yes, disappointed with the current government of the unfair ruling.*

Majority of the Malaysians studied locally have no intention to leave Malaysia mainly due to family commitments.

Whereas for Malaysians abroad, 35(80%) out of the 44 total respondents, of 68% Chinese, majority have no plans to return to Malaysia as they were disappointed with our Malaysia Government in running the country. Some comments expressed from question 10:

- *No, only if ever the racial issues are settled in Malaysia.*
- *No. Not in this current climate where racism and religious discrimination is so rampant.*
- *No for now. I may return for my retirement. In fact, if the political situation does not improve in the next 3 years, I am strongly leaning towards surrendering my citizenship.*

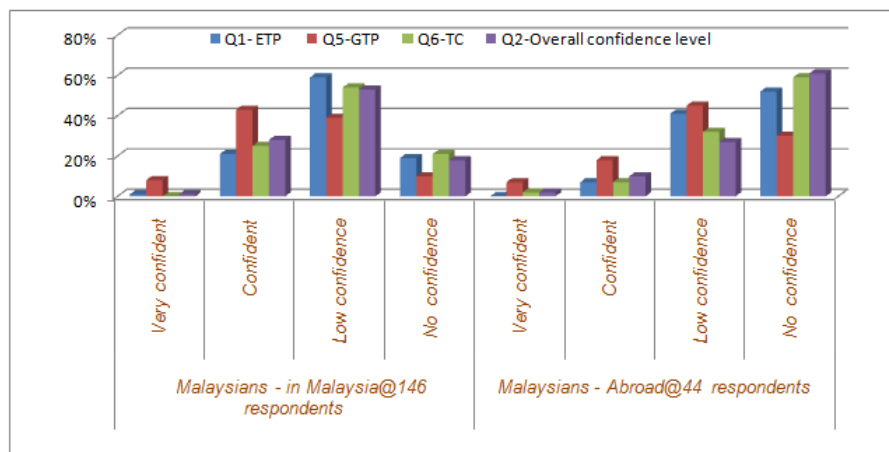
Some chooses “maybe” to be in Malaysia due to family attachments (parents to take care, children in Malaysia).

**Section 3 Malaysians confidence level towards the Government and its initiatives –ETP, GTP, TC to develop, attract and retain Malaysian talents against brain drain.**

The descriptive table below (Figure 4.7) shows that Malaysians in general irrespective if they are in or outside of Malaysia have low and no confidence (above 70%) toward the Malaysia Government initiatives to attract talented Malaysians to work in Malaysia.

**Figure 4.7 - Malaysians confidence level towards Malaysia Government Initiatives to stem brain drain**

Question	Malaysians - in Malaysia@146 respondents				Malaysians - Abroad@44 respondents			
	Very confident	Confident	Low confidence	No confidence	Very confident	Confident	Low confidence	No confidence
Q1- ETP	1%	21%	59%	19%	0%	7%	41%	52%
Q5-GTP	8%	43%	39%	10%	7%	18%	45%	30%
Q6-TC	0%	25%	54%	21%	2%	7%	32%	59%
Q2-Overall confidence level	1%	28%	53%	18%	2%	10%	27%	61%



**Source : Survey responses, 2012**

Even though the Malaysia Government has spend millions of ringgit to boost the country’s economy through ETP (new creation of all skills level of jobs), GTP (enhancement of education system) and TC (outreach programmes to bring back Malaysian talents and retain them), unfortunately these initiatives have yet to show any proof of success to the Malaysians. This may take a long while before Malaysians place their trust to the government in running the country.

Overall, more than 70% of young ethnic Chinese (26-35 years old) with a degree and working experience more than 10 years have low and no confidence towards the government initiatives except for the GTP. However, there were 62 respondents (42%) of Malaysians residing in Malaysia, average of ethnic Malays of degree holders, did put some confidence to the government initiatives that the education system can be enhanced to match with the global standard by 2020.

There were 142 respondents (75%) expressed their disagreement towards the government initiatives due to the following reasons (Table 4.5).

Category	Table 4.5 - Comments of disagreement from respondents (Q3- section 3)		
	Respondents	%	Comments
Compensation packages not attractive.	23	16.20	<ul style="list-style-type: none"> <li>• Government package isn't better than what they earn /benefits received from overseas.</li> <li>• Many Malaysians are attracted to opportunities in the private sector. The ETP and other government initiatives focus on job creation in GLCs (government-linked companies), which are structurally tied to the government. These do not offer the same sort of career and remuneration advancement opportunities that Malaysians tend to see in private companies and MNCs. Most Malaysians who live outside the country also tend to have a liberal socio-political orientation, and they may not regard the idea of working for organizations that are closely connected to the Malaysian government (irrespective of the dominating party) is as being particularly attractive or ethical.</li> </ul>
Education	14	9.86	<ul style="list-style-type: none"> <li>• Education in Malaysia is hardly recognised. The syllabus keeps changing. The Government can't make up their mind in choosing which language medium to use. All these factors affect people lives.</li> <li>• Other factors such as their children's education, lifestyle and language may affect their decisions.</li> </ul>
Politics	35	24.65	<ul style="list-style-type: none"> <li>• Though government has worked out some sorts of initiatives to attract M'sian return to homeland, yet there may be no fair treatment given after they have returned, due to the external environment (in terms of political stability) is changing.</li> <li>• Because I don't think people are working abroad solely for better compensation. Politics and social unfairness is also a reason why people leave this country.</li> <li>• The root cause of Malaysia politics, social injustice still can't be solved. Nobody likes to live in an immature government ruled country!!!</li> </ul>
Social	23	16.20	<ul style="list-style-type: none"> <li>• Talented professionals will face difficulty to adapt themselves to the local working culture and environment.</li> <li>• I cannot imagine a Malaysian returning to Malaysia from a developed country, where living conditions and social services are</li> </ul>

			<p>generally better.</p> <ul style="list-style-type: none"> <li>• However, Malaysians who find they cannot adapt overseas may return. This may be for cultural religious reasons or because they don't have the level of education, skills or language to be able to succeed.</li> <li>• Government must provide equal opportunity to everyone regardless of race or culture, and create an environment where meritocracy is allowed to operate.</li> </ul>
No confidence as no transparency.	27	19.01	<ul style="list-style-type: none"> <li>• Malaysia needs to find out the root cause of the brain drain as they left few years before the Government initiatives....</li> <li>• The initiatives are not sincere (or at least do not appear to be so) in terms of the substance and implementation. It is questionable as to its integrity to gain my confidence. The government has not taken any appropriate actions to rectify or even work towards strengthening them for true meaningfulness. They appear to be tokenistic political ploys with sinister intentions.</li> </ul>
No proper plans	20	14.08	<ul style="list-style-type: none"> <li>• Poor execution as many people still do not understand fully these initiatives. I doubt many Malaysians abroad able to fully understand the purposes of these initiatives.</li> <li>• No market or promotion of these programmes neither by the Malaysian Embassy nor the Consulate General of Malaysia.</li> </ul>
<b>Total</b>	<b>142</b>	<b>100</b>	

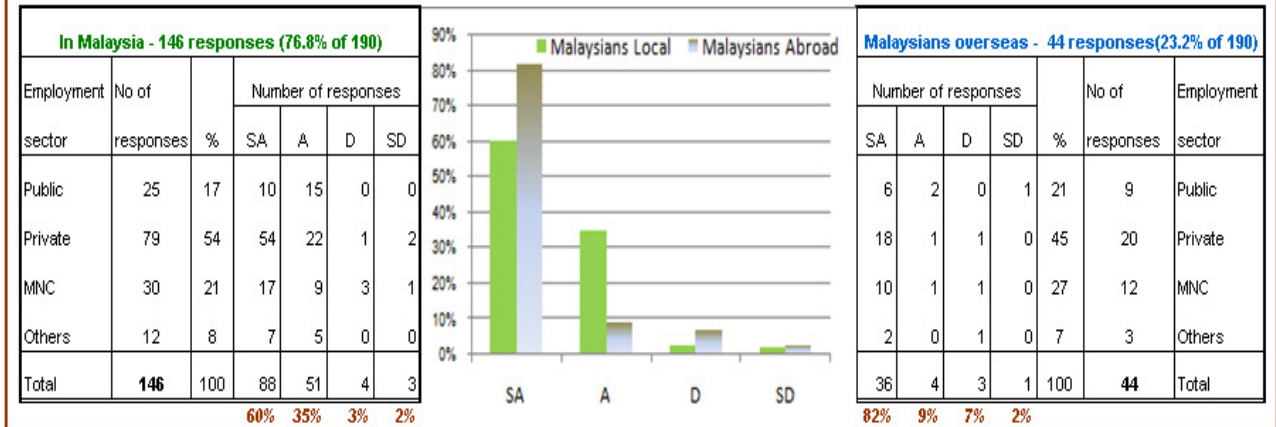
*Source: Survey responses, 2012*

### **Factors which may safe brain drain (Q4,7, 8)**

From the Figure 4.8 below, it was found that 139 (95%) local Malaysians and 40 (90%) Malaysians abroad with an evenly spread of demographic background strongly agree/agree that the foundation to a country's economic success lies in the quality of education. The only way to develop the people is to instill positive values for a better future for Malaysians to serve the nation through proper education in quest for knowledge. There were 9.86% respondents believe that low level of education standards will drift away Malaysian talents as education system is heavily politicized in Malaysia which will affect the younger generation future.

Malaysia Government should seriously consider to de-politised the education system for the benefit of the nation and country by offering good, simple and advancing education for all citizens.

**Figure 4.8 - Importance of education to a country economic success**



Source: Survey responses, 2012

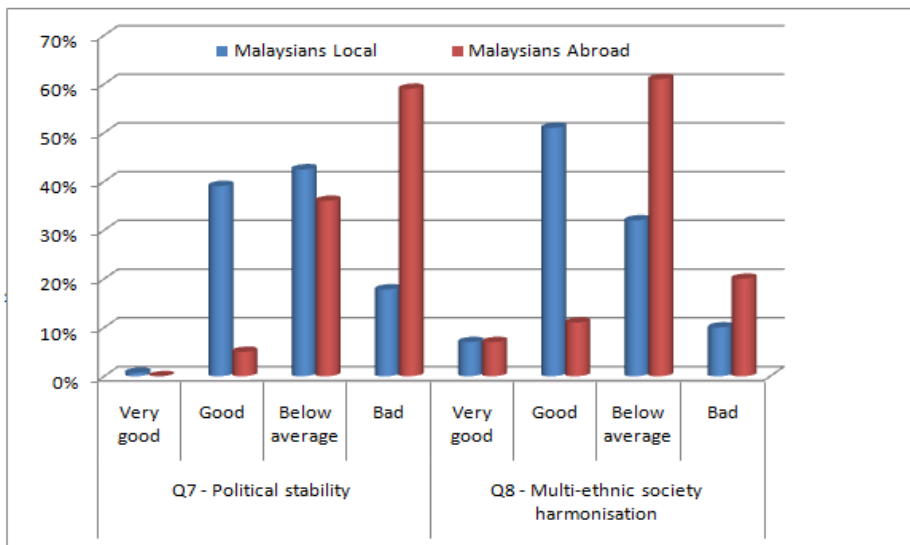
Note: SA (Strongly Agree) A (Agree) D (Disagree) SD (Strongly Disagree)

Probably the minority percentage of not agreeing to the importance of education function may have overlooked the question.

From education, now we move on to see how Malaysians view on the political stability and multi-ethnic society harmonization in Malaysia.

**Figure 4.9 - Malaysian's view**

Question/ Malaysians / scale	Q7 - Political stability				Q8 - Multi-ethnic society harmonisation			
	Local	%	Abroad	%	Local	%	Abroad	%
Very good	1	1%	0	0%	10	7%	3	7%
Good	57	39%	2	5%	75	51%	5	11%
Below average	62	42%	16	36%	47	32%	27	61%
Bad	26	18%	26	59%	14	10%	9	20%
<b>Total</b>	<b>146</b>	<b>100%</b>	<b>44</b>	<b>100%</b>	<b>146</b>	<b>100%</b>	<b>44</b>	<b>100%</b>



Source : Survey responses, 2012

From the result generated in Figure 4.9, it seems that local Malaysians (average 41%) are more modest towards the political stability and multi-ethnic harmonization in Malaysia compared to Malaysians abroad ( average 21%).

As expressed in previous questions by respondents, the factor that might influence them most to leave is racism (50%) which has not been resolved for many years. Due to this, many of the rules and economic models are so political which only favours the Malays in terms of education, scholarships, purchase of properties and any related government contracts. This leads to policy discrimination against other races.

There were 111 respondents (58%) who expressed their opinions on other factors which are important for Malaysia to attract, retain local talents as well as attract foreign talents to work and stay in Malaysia as categorised in Table 4.6.

Category	Table 4.6 – Respondents opinion on other factors to stem Malaysia’s brain drain		
	Respondents	%	Remarks
Equal rights	30	27.02	<ul style="list-style-type: none"> <li>• Parity reward and equal opportunities to all Malaysians, lack of government willingness to look into policy deficiencies and provide a platform for talent career development.</li> <li>• Government initiative must be implemented thoroughly from the top to ground officers. Talents contributions to country need to be appreciated and recognized, despite of the color of skin. Colourness and result oriented policies need to be implemented in order to foster competency in economic and education environment.</li> </ul>
Limited career progress and development.	18	16.22	<ul style="list-style-type: none"> <li>• Many Malaysians work / migrate overseas and have equal / fair opportunities are these managers who are potentially expatriates in Malaysia.</li> <li>• A better working environment and career prospect rather than offering incentives. Talents are more concern about their career development.</li> <li>• Malaysia needs to increase work force productivity, both private and public services. In addition, the government must have political will to eradicate corruption and to channel fund to development Malaysia Human capital. On top of this, the per capita income must raise to an</li> </ul>

			acceptable level in order to attract the lost talent. Malaysia per capita income is still a big gap if compare with develop countries.
Education system	10	9.01	<ul style="list-style-type: none"> <li>The government first and foremost needs to have a stable education system. Secondly, the corruption and cronyism have to be genuinely addressed and continuously driven to elimination. Malaysia Boleh??</li> <li>All schools should be secular. No religious schools. ( religious classes can be held outside the school time and curriculum) All schools should adopt a three/four language model - as in Singapore from primary level, with all learning English, Malay and Chinese as well as Tamil if requested - . Students must pass three languages. Higher education must be in English to ensure standards of knowledge and encourage innovation.</li> </ul>
Higher compensation/ Working conditions	7	6.31	<ul style="list-style-type: none"> <li>Companies in Malaysia has to make the compensation plans more attractive for local talents and also has to look into flexible working hours as people have other commitments as well.</li> </ul>
Improve social benefits to citizens	9	8.10	<ul style="list-style-type: none"> <li>Quality of life in terms of daily activity - poor infrastructure especially on the road, congestion everywhere during the day and night.</li> <li>More stimulating working environment with good facilities, better health care system and public transport.</li> </ul>
Meritocracy practice	20	18.02	<ul style="list-style-type: none"> <li>The main attraction to retain talents is usually better prospect and Malaysia has yet to show that to attract talents. I understand some of the talents that stay abroad and has no plan returning to Malaysia for good is not only they have better work opportunity but they have got use to the overseas lifestyle. Some express that one will be recognized and rewarded for the effort made in work but in Malaysia, there is always a quota system and opportunity is given to selected ethnic group.</li> <li>University enrollment and career advancement must be based on Meritocracy. Dismantle everything which is raced based. Help the poor and disadvantaged, regardless of ethnic origin.</li> </ul>
Reluctant to embrace	10	9.01	<ul style="list-style-type: none"> <li>The locals (Corporate - Govt-linked entity and Govt Sector) are not OPENED</li> </ul>



change			<p>to accept ideas from others/foreign talents even from TCM. The issue is always "we do not do it this way!!" Issue closed. How does one improve?</p> <ul style="list-style-type: none"> <li>• Talent is in demand in today's highly competitive and fast-paced environment. Malaysia must realised this and not attracting low skilled immigrants instead.</li> <li>• Politicians are the biggest stumbling block. Mentality of politicians, as well as their education level is lacking in maturity. Cannot separate national development policy from race politics.</li> </ul>
Lack of transparency	7	6.31	<ul style="list-style-type: none"> <li>• Alignment of initiatives from federal to state to council. To which level this benefits and where is the weakest area?</li> <li>• A political situation of a country shall also be considered to attract and retain talents. Businesses are depending on the government legislation and so many factors, investors will pull back if the political situation gets stirred. The talents will lose their job and feel insecure.</li> </ul>
<b>Total</b>	<b>111</b>	<b>100</b>	

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*Source: Survey responses, 2012*

#### **Section 4 Demographic**

There were 190 professional Malaysians responded to this survey. There were 146 (77%) respondents residing in Malaysia and 44 (23%) respondents from overseas.

Table 4.7 summarized the respondents' demographic characteristics and remarks to the respondents' backgrounds which may determine the quality of inputs collected for this research.

There may be an over-representation of Chinese respondents to this research which may cause some bias view to this study. A small percentage of respondents from Malaysians abroad (23%) would give some actual insights of why Malaysians left their homeland and their confidence level towards the Malaysia Government initiatives to stem brain drain.

**Table 4.7 -Remarks to demographic data.**

No of respondents	Malaysians			Remarks			
	Local	%	Abroad				
<b>Demographic</b>	146	77%	44	23%	190		
<b>Age Group</b>						Majority of respondents from : Local =26 to 45 years old (76%) : Abroad =36 to 55 years old (55%) in average, majority respondents age range falls between 26-45 (70%), the key group of people who can transform a country.	
<25	7	5%	3	7%	10		5%
26-35	58	40%	9	20%	67		35%
36-45	53	36%	13	30%	66		35%
46-55	23	16%	11	25%	34		18%
>55	5	3%	8	18%	13	7%	
<b>Gender</b>						Overall, there was a balance of gender respondents.	
Male	64	44%	26	59%	90		47%
Female	82	56%	18	41%	100	53%	
<b>Ethnicity</b>						Chinese ethnic (55%) account the most which may lead to some bias view from this research results.	
Malay	48	33%	9	20%	57		30%
Chinese	75	51%	30	68%	105		55%
Indian	19	13%	5	11%	24		13%
Others	4	3%	0	0%	4	2%	
<b>Highest Education</b>						Majority of participants holds a Degree which mainly from local Malaysians. Malaysians overseas participants have a higher qualification background. Other education consists of Masters and Profesional certificates.	
Degree	86	59%	20	45%	106		56%
MBA	49	34%	9	20%	58		31%
PhD	1	1%	9	20%	10		5%
Others	10	7%	6	14%	16	8%	
<b>Marital Status</b>						Majority participants were married, both balance between local and abroad. This may give a better view to brain drain in terms of the push and pull factors.	
Single	51	35%	15	34%	66		35%
Married	87	60%	28	64%	115		61%
Divorce	6	4%	1	2%	7		4%
Widow	2	1%	0	0%	2	1%	
<b>Occupation</b>						The occupation category has been spreaded into too wide. There were more than 20 positions stated. For the convenience of this research, the occupation title as stated here will be used as reference.	
Administrator	28	19%	3	7%	31		16%
Finance Specialist	18	12%	2	5%	20		11%
IT Specialist	15	10%	3	7%	18		9%
Lecturer	3	2%	5	11%	8		4%
Engineer	26	18%	7	16%	33		17%
Nurse	18	12%	2	5%	20		11%
Doctor	0	0%	2	5%	2		1%
Lawyer	2	1%	1	2%	3		2%
Others	36	25%	19	43%	55	29%	
<b>Years of working experience</b>						Majority of respondents from : Local =7 -20 years of working experience (69%) : Abroad =above 10 and 20 years of working experience (70%) This may indicate the respondents understanding to this research topic is satisfactory.	
1-3	10	7%	10	23%	20		11%
4-6	12	8%	2	5%	14		7%
7-10	39	27%	1	2%	40		21%
11-20	62	42%	15	34%	77		40%
>20	23	16%	16	36%	39	21%	
<b>Salary range (MYR)</b>						Majority of respondents from : Local =earnings between 50,000 to 100,000 per annum. : Abroad =earnings between 150,001 and above 200,000 per annum. This may indicate local remuneration package is not competitive which pushes away some Malaysian talents to other countries.	
≤50,000	40	27%	6	14%	46		11%
≤100,000	58	40%	5	11%	62		7%
≤150,000	20	14%	6	14%	26		21%
≤200,000	9	6%	11	25%	20		40%
>200,000	19	13%	16	36%	35	21%	

Source: Survey responses, 2012

## Application of Theoretical Framework

The analysis findings shown that majority professional Malaysians with overseas education (57%) have the intention to leave Malaysia to obtain better education for future career prospect. On the other hand, the push factors mainly of social injustice and lack of career prospect have also proven Malaysia has yet to improve on its national progress which have driven many talents away.

It was surprising that safety, security and livability (39%) have not much significance in causing the brain drain. It seems that the higher a respondent rated social injustice and lack of career prospect for the push factor, the lesser confidence level of these respondents toward the Malaysia government initiatives to stem brain drain. In addition, the higher the education level of a respondent, the less likelihood these respondents will stay, work and contribute to the country's vision 2020 in becoming a high income nation.

There were some respondents with no plans to leave Malaysia, mainly local educated and residing in Malaysia (92%) due to family commitments. It seems that the higher a respondent rated better social/cultural life and better environment, safer and secure condition for the pull factors, a more idealistic level of confidence level of these respondents toward the Malaysia government initiatives to stem brain drain.

Even though political, career prospect and education are important to Malaysians professional, it was proven that family commitments/concerns also has an impact on Malaysian brain drain. Many felt that greater career prospect and education can be found abroad, others felt Malaysia is still their first home.

In conclusion, the more important career prospects, education, political situation in a country to the respondent, the higher impact of Malaysia brain drain and lesser confidence level towards the Malaysia government initiatives can be expected. In general, younger respondents were more idealistic, which Malaysia still has the opportunity to build up trust into these young Malaysians by practicing equal rights, merit system, better transparency to stem the brain drain.

The decisions of many Malaysians whether to leave or stay in Malaysia to contribute, support the Malaysia Government initiatives to turn Malaysia into a developed nation by 2020 will depend on how the government manage to improve the country's well being (education, economy, politics).

## **Conclusion and Recommendations**

### **Conclusion**

The overall aim of this research study has been answered. Brain drain is a symptom, individual's response to the push and pull factors that drive migration decisions. The three segments of research questions concluded that Malaysians believed that brain drain in Malaysia will continue to intensify in the future as most highly educated Malaysians have low/no confidence towards the government initiatives /programmes to stem brain drain.

The main push factor of Malaysia brain drain was economic incentives (social injustice, low career prospects). The discontentment among non-Malays concerning Malaysia's inclusiveness policies constitute the bulk of brain drain. This also corresponds to the pull factor to start a new life abroad by having greater opportunity for career prospects and better education system.

Most of the Malaysians abroad have no intention to return to Malaysia as they have good career prospects of equal opportunity, higher income and most importantly, they like the overseas lifestyle and political systems. Malaysia will not only lose talents of now but also future talents as children who leave with their parents and live abroad are less likely to return.

On the other hand, brain drain in Malaysia will continue to intensify as most inflow were low skills immigrants without any compensation for the outflow of highly skilled talents. Productivity growth would be slow as the labour market is confined to lower-skilled sets.

The most valuable asset a country has is its people. Although having plenty natural resources in a country is good, but without skillful people to manage them, the country cannot develop. For instance, a country without natural resources like Singapore, is able to grow into leaps and bounce economically as many highly skilled talents from around the world have settled and contributed to Singapore's economic success. To date, about 47% of all skilled foreign-born residents in Singapore were Malaysians (World Bank, 2011). Therefore, brain drain has not much impacted Singapore's economy as it has been compensated by the high inflow of skilled immigrants by the attraction of the country's knowledge economic driven initiatives.

For Malaysia to achieve its objective to become a high income nation, it first needs to understand the root cause to brain drain, understand the needs of the people, reach out to the nations, before drawing up any initiatives to develop and retain local talents. It is not just issues of salaries, tax incentives, comfortable living that Malaysians intent to leave or left the country. If the underlying deterrents are not addressed comprehensively, any initiatives or programmes implemented will only have a marginal impact to stem brain drain.

## **Recommendations**

The challenge for Malaysia to overcome the brain drain as for many other countries, is to embrace the global mobility of talents. As Malaysia needs talent, it will need to turn the brain drain to its advantage in transforming Malaysia into a high income nation by 2020.

To attract talent, Malaysia needs to be able to match the high income, lifestyle and political processes equivalent to global standard. The Government initiatives should have a framework of structures, systems and standard to support, develop talents and leaders. For example, meritocracy, best person will be rewarded regardless of skin-colour or political background.

The development of an economy should be based on innovation and creativity, which has been lacking in our education system. The education system here is too politicised and exam orientated which affect the country's economic progress

Malaysia needs to address the fundamental issues of productivity and inclusiveness which will help to mitigate the negative effects of brain drain. Productivity improvement will require a revamp of the education system by supplying quality skilled professionals which will raise productivity, generate higher income and ensuring that the skills being produced match the needs of the market. Malaysia should also need to participate in the global competition for talents by creating trade councils to get inputs from Malaysians abroad for policy making for instance.

Malaysia should urgently look into the issue of inclusiveness and sharpen the focus on competitiveness, meritocracy, good governance and productivity in both the public and private sector. If the primary issues have been resolved, Malaysians will not have the intentions to leave the country and may be considering to return to Malaysia.

Malaysians in general still have a deep sense to call Malaysia their home. It is not too late for Malaysia Government to stem the brain drain. There is still opportunity to address many issues properly and make up the shortfall with new achievements and win the nation's trust and confidence. The country's economic success depends on how Malaysia can move up the value chain by embracing the globalisation of talents and turning brain drain into brain gain just like the case of India, China and Singapore.

### **Limitations and Future Research**

The limitation to this research was just confined to Malaysians with tertiary education. There were only 44 (23%) respondents from Malaysians abroad which belonged to the brain drain category. And only 7 local recruiters have responded to the survey. Therefore the overall result to this survey is thus considered as the major limitation.

Future research is required in order to reinforce the findings. This could be achieved by extending the research framework to other sample population or locations. Furthermore, limitations could be reduced by choosing a larger number of participants especially for Malaysians abroad, recruitment agencies and data sources as well as study the questions raised on a more quantitative level. By extending the sample to multiple respondents with different backgrounds, socio-economic characteristics and locations, various perspectives could be included to enhance the validity of the findings. Further research is also required to test and validate the concepts developed in this study.

It would be interesting to further explore the brain drain in Malaysia and consider the different views, aspects related to this topic especially on social disincentives, career prospects, or any other push factors. It will also be great future importance to study for Malaysia Government to reform the respective policies, systems that benefit all Malaysian citizens.