

**STUDENT EDUCATION LOAN DEFAULTS IN MALAYSIA**

**HANIESAH RAFIEDAH BINTI AHMAD SHAFUAN**

**FACULTY OF ECONOMICS AND ADMINISTRATION  
UNIVERSITY OF MALAYA  
KUALA LUMPUR**

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**STUDENT EDUCATION LOAN DEFAULTS IN  
MALAYSIA**

**HANIESAH RAFIEDAH BINTI AHMAD  
SHAFUAN**

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Name of Candidate: HANIESAH RAFIEDAH BINTI AHMAD SHAFUAN

Matric No: EGF 150011

Name of Degree: MASTERS IN DEVELOPMENT STUDIES

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# STUDENT EDUCATION LOAN DEFAULT IN MALAYSIA

## ABSTRACT

This study set out to investigate the following research questions: 1. What are the profile demographic of the borrowers and how it effect on defaulting of the student education loan (NHEFC) in Malaysia? 2. How does the socio-economic of the borrowers influencing the defaulting of the student education loan (NHEFC) in Malaysia? 3. How does the personal attitude of the borrowers' effect on defaulting of the student education loan (NHEFC) in Malaysia? 4. How do the social-cultural factors effect on defaulting of the student education loan (NHEFC) in Malaysia? It used a mix method approach (qualitative and quantitative). It mainly employed primary data gathered using questionnaire survey (130 respondents from defaulters of education loan) and interviews (2 respondents from NHEFC staff) methods. It employed two methods of data analysis: descriptive statistical method to analyse the demographic information (i.e. percentage) and the inferential statistical method to analyse the research questions and reliability (i.e. Multiple Regression test and Reliability test). The Cronbach's Alpha ( $\alpha$ ) is used to measure the reliability. The result of the multiple regression are [ $f(4, 125) = 3.460, p < 0.05, R^2 = .100$ ]. It's also show that 3 from 4 factor are statistically significant predicted respectively demographic, socio-economic, and personal attitude. Therefore, the result show the null hypothesis is rejected while the alternative hypothesis of demographic, socio-economic, and personal attitude was accepted. Its mean there is an association between demographic, socio-economic, and personal attitude factor of the borrower and defaulting of the student education loan (NHEFC) in Malaysia. The variable under demographic factor was positive significant association are marital status, type of educational institution, and graduation. The variable under socio-economic factor is other loan commitment, and personal attitude toward loan repayment have a significant

association with loan repayment defaults. The study also found that financial constraints such as a high cost of living, low monthly income and monthly payment management by NHEFC impose difficulties on the borrowers. The study suggests that improvement towards reducing defaults on NHEFC loan can be achieved through the cooperation of three parties involved: the borrower (finding part-time job), NHEFC (improving services), and the government (expanding job market).

**Key words:** Education loan, Student loan, Education loan default, student loan default, Malaysia

## ABSTRAK

Kajian ini bertujuan untuk mengkaji soalan penyelidikan berikut: 1. Apakah profil demografi peminjam dan bagaimanakah ia mempengaruhi kegagalan membayar pinjaman pendidikan pelajar (PTPTN) di Malaysia? 2. Bagaimanakah sosio-ekonomi peminjam mempengaruhi kegagalan membayar pinjaman pendidikan pelajar (PTPTN) di Malaysia? 3. Bagaimanakah sikap peribadi peminjam mempengaruhi kegagalan membayar pinjaman pendidikan pelajar (PTPTN) di Malaysia? 4. Bagaimanakah faktor sosial budaya memberi kesan kepada kegagalan membayar pinjaman pendidikan pelajar (PTPTN) di Malaysia? Ia menggunakan pendekatan kaedah campuran (kualitatif dan kuantitatif). Penggunaan data primer yang dikumpul menggunakan soalan kaji selidik (130 responden dari peminjam pinjaman pendidikan) dan temu ramah (2 responden dari kakitangan PTPTN). Ia menggunakan dua kaedah analisis data: Kaedah Statistik Deskriptif untuk menganalisis maklumat demografi (peratusan) dan Kaedah Statistik Inferensi untuk menganalisis soalan penyelidikan dan kebolehpercayaan (Ujian Regresi Pelbagai, dan Ujian Kebolehpercayaan). Alpha Cronbach ( $\alpha$ ) digunakan untuk mengukur kebolehpercayaan. Keputusan hasil daripada Ujian Regresi Pelbagai [ $f(4, 125) = 3.460$ ,  $p < 0.05$ ,  $R^2 = .100$ ]. Ia juga menunjukkan hubungkait yang signifikan diantara 3 daripada 4 faktor yang dikaji iaitu demografi, sosio-ekonomi, dan sikap peribadi. Oleh itu, keputusan menunjukkan hipotesis nol ditolak sementara hipotesis alternatif diterima. Ini bermaksud terdapat hubungan antara faktor demografi, sosio-ekonomi, dan sikap peribadi dalam mempengaruhi kegagalan membayar pinjaman pendidikan pelajar (PTPTN) di Malaysia. Pembolehubah di bawah faktor demografi yang menunjukkan hubungan yang positif ialah status perkahwinan, jenis institusi pendidikan, dan pengijazahan. Manakala, pembolehubah di bawah faktor sosio-ekonomi adalah komitmen pinjaman lain, dan sikap peribadi terhadap pembayaran balik pinjaman mempunyai hubungan yang signifikan dengan kegagalan membayar pinjaman pendidikan pelajar (PTPTN) di Malaysia. Kajian

itu juga mendapati kekangan kewangan seperti kos sara hidup yang tinggi, pendapatan bulanan yang rendah dan pengurusan pembayaran bulanan oleh PTPTN adalah masalah yang dihadapi oleh peminjam. Kajian ini menunjukkan bahawa penambahbaikan ke arah mengurangkan kadar kegagalan pembayaran pinjaman pendidikan dalam kalangan peminjam PTPTN boleh dicapai melalui kerjasama tiga pihak yang terlibat: peminjam (mencari pekerjaan sambilan), PTPTN (menambahbaikan perkhidmatan), dan kerajaan (mengembangkan pasaran pekerjaan).

**Kata Kunci:** Pinjaman pendidikan, Pinjaman pelajar, Kegagalan pinjaman pendidikan, Kegagalan pinjaman pendidikan, Malaysia

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## LIST OF SYMBOLS AND ABBREVIATIONS

GCE	General Certificate of Education
GCSE	General Certificate of Secondary Education
IPT	Institusi Pengajian Tinggi
IPTA	Institusi Pengajian Tinggi Awam
IPTS	Institusi Pengajian Tinggi Swasta
JPA	Jabatan Perkhidmatan Awam @ the Public Services Department
MoE	Ministry of Education
MoHE	Malaysian of Higher Education
MQA	Malaysian Qualifications Agency
NHEFC	National Higher Education Fund Corporation
NGO	Non-governmental Organization
PMR	Penilaian Menengah Rendah @ Lower Secondary Assessment
PT3	Pentaksiran Tingkatan Tiga @ Form Three Assessment
PTPTN	Perbadanan Tabung Pendidikan Tinggi Nasional
R & D	Research and Development
SPM	Sijil Pelajaran Malaysia @ Certificate of Education examination
SPSS 16.0	Statistical Package for the Social Science 16.0
SRS	Simple Random Sampling
SSPN1M-I	Skim Simpanan Pendidikan Nasional 1 Malaysia
STPM	Sijil Tinggi Persekolahan Malaysia
STAM	Sijil Tinggi Agama Menengah
UPSR	Ujian Pencapaian Sekolah Rendah @ Primary School Achievement Test

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## **Chapter 1**

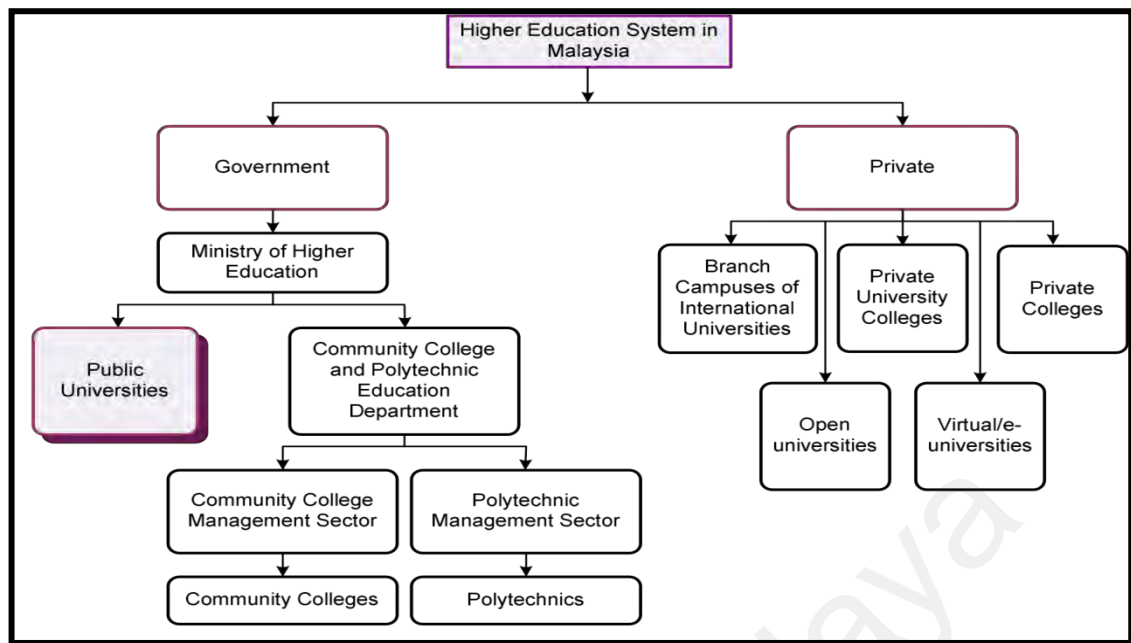
### **Introduction**

#### **1.1 Background of the Study**

Education is very influential in attaining advancement of a country. Lopez et al. (1998) state "no country has achieved economic development without investing in education development." Education's role is not restricted to providing the knowledge and developing the personal skill. Education also enables people to improve the quality of life. Furthermore, education increases the development of a country in the political, economic, and social sphere. Education is known as a principal contributory factor that boosts the productivity of workers by generating skill that raises a working capacity and leading to economic growth (Bloom et al. 2006; Galiani et al. 2008:437). Therefore, many countries including Malaysia have spent a significant amount resources for the education sector, especially the higher education.

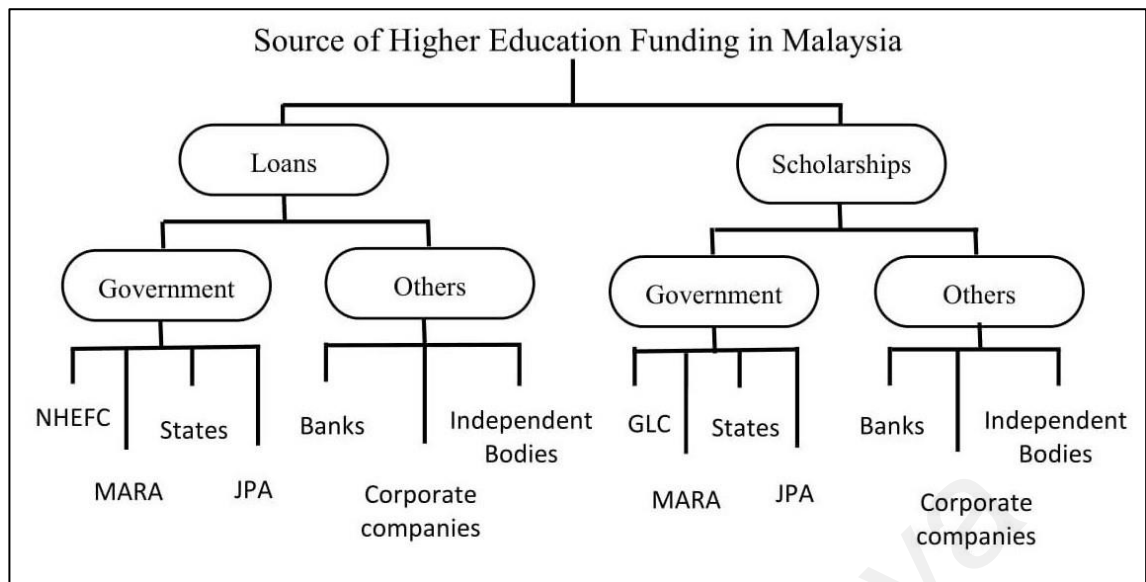
The Malaysian higher education sector has expanded rapidly during the past decade, with the establishment of many public and private universities in Malaysia that created more opportunities for students to pursue further studies at the higher level. There are two type sectors of the higher education system in Malaysia respectively public also known as government, and private. The government sector is controlled by the Ministry of Higher Education, which is divided into public university, and community college and polytechnic. The private education sector is divided into five sub-sectors respectively branch campus of the international university, open university, private university college, virtual or e-university, and private college (see Figure 1.1).





**Figure 1.1: Higher Education System in Malaysia**

A diversity of higher education institution in Malaysia gives a variety of choice for the students to pursue their higher education studies. However, the opportunity to enter local universities depend on limited financial resources from government and private agencies. Some students with excellent results in their pre-university public examinations are able to get scholarships from private companies. However, overall the number of scholarships available is relatively small. The shortage of financial resources provided by the government and private agencies has limited the number of students to pursue further studies at the higher level. Therefore, the Malaysian government started offering many types of financial assistance for those who are qualified (see Figure 1.2).



**Figure 1.2: Source of Higher Education Funding in Malaysia**

The financial assistance enables students to pursue their studies at the semi-professional level that will enhance their skills and thus enable them to venture into the economy more effectively (Website MoHE). For example, the National Higher Education Fund Corporation (NHEFC also known as PTPTN) is one of the financial assistance in Malaysia. On 1<sup>st</sup> July 1997, the NHEFC was set up under the National Higher Education Fund Corporation Act 1997 (566 Act). The objective of NHEFC is to provide loans efficiently to the qualified students to pursue further studies at Higher Education Institutions (IPTs) in line with the government objective that no student should be excluded from attending IPT because of financial reasons.

According to Zainal et al. (2009), “The NHEFC is the largest source of student loans to continue study at the higher level in Malaysia”. However, the establishment of the NHEFC provides both advantage and disadvantage to the individual (student), society, and country. The aim of the NHEFC is assisting underprivileged students and those who are eager to continue their education at the higher level to seek a better life. Besides that, society also gains some benefits from NHEFC, i.e., they can create a pool of people who can complement each other through the skills and knowledge in various areas.

Additionally, the government investment on higher education in Malaysia is worth it as it can help increase the market value from the formation of proficient people with skills, knowledge, and experience as well as competitiveness in various areas.

On the other hand, the NHEFC also creates a disadvantage to the individual (student), society, and country. The disadvantage of the individual (student) who borrows the student loan from NHEFC that he or she is automatically becoming a debtor after graduation because of the burden to repayment of the loan. The student loan becomes a burden to the borrower when the borrower has to face an uncertain situation such as unemployment, inadequate of financial resources, and the increasing cost of living. Besides, society disadvantage could include various issues such as political rebellion, increasing number of debtors, and increasing crime rates. Indirectly, social problems such as an increase in the number of debtors, political rebellion, and the crime rate would give a bad image to the country.

To sum up, investment in education is very worthwhile for a country. The purpose of education is to develop the potential of individuals to play a productive role on the economy. Therefore, the government should find various initiatives to improve the system of financial assistance especially to achieve the educational objectives. While the purpose of financial assistance is to ensuring loans are provided to qualified students efficiently to further their studies which adheres to the Malaysian government's objective that no student fails to attend IPT because of financial reasons. However, the biggest problem faced by the financial aid institutions set up by the government such as the NHEFC is the increasing number of education loan borrowers who default on loan repayment. This research study examines this major problem in Malaysia.

The rest of the chapter is organized as follows: Section 1.2 discusses the problem statement; Section 1.3 sets out the research questions; Section 1.4 discusses the research objective; Sections 1.5 and 1.6 present the hypotheses and briefly of the research methodology respectively; Section 1.7 discusses highlights the significance of the study, Section 1.8 discusses the setting of the study; and finally in Section 1.9, the structure of the study is provided.

## **1.2 Problem Statement**

Education is a process for students' preparation to enhance their self-excellence in the application of knowledge and skills (Stephenson, 1998). Most developing countries including Malaysia have invested a significant amount of resources on education, especially at higher education level. That is because of the perception that higher education will boost the development of individual, society, and country in various ways such as politically, economically, and socially. However, the cost of higher education has been increasing fast and became unfordable for students from low-income and middle-income families. Therefore, many countries have created a student education loan scheme to overcome this problem including Malaysia. However, a student education loan is different in different countries based on the terms of rules and regulation of the countries. In Malaysia, a student education loan can be obtained from institutions either in the public or private sector (see Figure 1.2).

In this study, the NHEFC has been chosen as the case of student loan provider to investigate the problem of increasing number of student loan defaults. The NHEFC defines default on education loan as when a borrower fails to repay the loan within the given period starting six months after their graduation. Based on the increasing number

of borrowers who defaults on student education loans, the biggest concern is the ability of the borrower to repay the student loan. Therefore, the study aims to profile and investigate the factors such as demographic, socio-economic, personal attitude, and social-cultural (the influence of family member and media mass) that affect the defaulting on student education loan.

**Table 1.1: Performance of Default in NHEFC**

<b>CATEGORIES</b>		<b>31/12/2014</b>	<b>31/12/2015</b>	<b>31/12/2016</b>
Total Number of Default	Number of Borrowers	581,181	662,983	679,117
	Total (RM Billion)	4.51	5.41	4.83

Source: Annual Report of NHEFC 2014, 2015, and 2016.

Table 1.1 shows the number of defaults among the borrowers of NHEFC loan over 3 years period, between 2014 and 2016. Based on Table 1.1, the number of the borrowers who defaulted is increasing each year respectively from 581, 181 in 2014 (with RM 4.51 billion), to 662,983 in 2015 (with RM5.41 billion), and to 679,117 in 2016 (with RM 4.83 billion). Although in 2016 the total default loan amount (RM billion) decreased, the number of borrowers who cannot pay has increased. It shows that many borrowers of educational loan are facing some difficulties in repaying their loans. This situation reflects a worrying trend in the higher education loan environment. It is clear that new graduates leave their institutions with both degrees and massive debts.

Therefore, this problem needs a proper investigation in order to understand the complex issues involved and come up with some policies to solve it. In other words, it is imperative to examine the underlying factors contributing to the increasing number of default on education loans in Malaysia and come up with policy alternatives to combat this problem before it becomes irreversible. Hence, the study aims to investigate the complex factors

that affect the education loans repayment, and the reasons for the increasing the number of borrowers who default on repaying their student loans.

### **1.3 Research Questions**

As general, the study aims to investigate question how the factors effecting NHEFC student education loan default in Malaysia. The specific research question can be conclude as follows:

1. What are the profile demographic of the borrowers and how it effect on defaulting of the student education loan (NHEFC) in Malaysia?
2. How does the socio-economic of the borrowers influencing the defaulting of the student education loan (NHEFC) in Malaysia?
3. How does the personal attitude of the borrowers' effect on defaulting of the student education loan (NHEFC) in Malaysia?
4. How do the social-cultural factors effect on defaulting of the student education loan (NHEFC) in Malaysia?

### **1.4 Research Objectives**

Generally, the study want to analyse the factors effecting NHEFC student education loan default in Malaysia. Specifically, the research objective are as follow:

1. To profile and analyse the demographic of the borrowers that influence defaulting of the student education loan (NHEFC) in Malaysia.
2. To analyse the effect of socio-economic of the borrowers that influence defaulting of the student education loan (NHEFC) in Malaysia.

3. To examine how the personal attitude of the borrowers' effect on defaulting of the student education loan (NHEFC) in Malaysia.
4. To investigate how the social-cultural factors (the influence of family member and mass media mass) effect on defaulting of the student education loan (NHEFC) in Malaysia.

By achieving the objectives, the study aims to contribute towards better understanding of the factors that influence the default on education loan in Malaysia, provided by the NHEFC. The findings from this study makes contribution to the literature student education loan in general, and it also aims to come up with recommendations that can help the borrowers, student education loan institutions, and policymakers in Malaysia.

### **1.5 Hypothesis of the Study**

The hypothesis in this study are:

#### **Hypothesis 1: Demographic Factors**

H<sub>0</sub>: There is no association between demographic of the borrowers and defaulting of the student education loan (NHEFC) in Malaysia.

H<sub>1</sub>: There is an association between demographic of the borrowers and defaulting of the student education loan (NHEFC) in Malaysia.

#### **Hypothesis 2: Socio-economic Factors**

H<sub>0</sub>: There is no association between socio-economic of the borrowers and defaulting of the student education loan (NHEFC) in Malaysia.

H1: There is an association between socio-economic of the borrowers and defaulting of the student education loan (NHEFC) in Malaysia.

### **Hypothesis 3: Personal Attitude Factors**

H0: There is no relationship between the personal attitudes of the borrowers' and defaulting of the student education loan (NHEFC).

H1: There is a relationship between the personal attitudes of the borrowers' and defaulting of the student education loan (NHEFC).

### **Hypothesis 4: Social-cultural Factors**

H0: There is no relationship between the social-cultural factors (the influence of family member and media mass) of the borrowers' and defaulting of the student education loan (NHEFC).

H1: There is a relationship between the social-cultural factors (the influence of family member and media mass) of the borrowers' and defaulting of the student education loan (NHEFC).

## **1.6 Research Methodology – Overview**

This section provides an overview of the research methodology used by the study (For detailed discussion of research methodology please see Chapter 3). The study uses a mix method approach, which is a combination of the qualitative and quantitative approaches. The use of the mix method approach in the study helps to reveal potential problems with the data and properly verify the validity of the findings (Baker, 1994). The qualitative method used in the study is an interview and the quantitative method used is the



questionnaire survey. The setting of the study is Malaysia's higher education institutions whether public or private institutions. The researcher uses convenience sampling which is known as non-probability sampling technique where subjects are selected because of their convenient accessibility and proximity to the researcher.

The sampling for this study involves 130 borrowers of student education loan in Malaysia. They are borrowers who took a student education loan from the NHEFC, finished studies with graduation, and they come under the category of 'defaulters' by NHEFC. The respondents for the interview include 4 staff from the NHEFC. There are two phases in the process of data collection respectively qualitative data and quantitative data. The first phase of the study focuses on collecting the qualitative data from student education loan institution namely the NHEFC. The method used for collecting qualitative data is the interview.

The purpose of interviews is to obtain authentic information related to education loans offered, recent statistics of the financial performance on student education loans, especially statistics on default of NHEFC student loans. The second phase involves collecting quantitative data from the borrower of student education loan (NHEFC). The instrument used for collecting quantitative data is the questionnaire survey. The purpose of the questionnaire survey is to gather various information from the respondents (defaulters of student loan) to find answers to the research questions set out by the study.

The quantitative data collection from the questionnaire survey will be analyzed by "Statistical Package for the Social Science for Windows" (SPSS 16.0). In this study, the researcher used two methods of data analysis, respectively descriptive statistical analysis which is used to describe the demographic of the respondents and inferential statistical

analysis to describe the relationship between variable to the generalization of the population sample.

### **1.7 Significant of the Study**

The issue of defaulting on student education loan is often raised, both in literature and in practice. This issue is relevant to study nowadays because it's still happening and getting serious. Previous studies on student education loan default focus on student's demographic, unemployment, income uncertainty, academic achievement, attitude, behavior, and other commitment such as other loans. As mentioned above, the contribution of this study is significant as this study used four sets of factors respectively demographic, socio-economic, personal attitude, and social-cultural factors to analyze the reasons for defaulting of student education loan.

The findings of the study can contribute to both the literature and policy of student education loan and help to improve the student loan system performance. Additionally, the study aims to contribute to better stakeholders' engagement involved in default on student education loans including borrowers, education loan institutions, and policymakers. Therefore, the study can help to improve the student education loan system in Malaysia especially default and repayment aspects to achieve better performance and provide better services for the future generation. The main benefit of the study is to promote an awareness of the importance of education loan repayment and raise consciousness among the borrowers who determine the performance of student education loans system.

Besides, the study also benefits the student education loan institutions because the findings provide a clear picture of their performance and what and how they can improve it to sustain their operations in the future. Through the findings of this study, better policy alternatives can be identified to upgrade the education loan institution's services to be more efficient and systematic. Thus, it will help boost the performance of student education loans repayment and reduce the number of defaulting cases as well as provide more efficient services in the future.

### 1.8 Setting of the Study

Malaysia located in Southeast Asia and consists of thirteen states which are divided into two division respectively West Malaysia or known as Peninsular and East Malaysia, as shown in Figure 1.3. A population in Malaysia is over 30 million and ranked at 44<sup>th</sup> most populous country. Malaysia's population is made up of different types of races, nationalities, and religions. Malaysia practices a relatively open market economy and considered as fast-growing country.



Figure 1.3: Map of Malaysia

### 1.8.1 Education in Malaysia

The system of education in Malaysia is divided under two different ministries respectively Ministry of Education (MoE) which controls education up to school levels and Ministry of Higher Education (MoHE) which is handling higher education. Ismail et al. (2010) state the system of education in Malaysia consists of primary education, secondary education, pre-university education, and university education.

The Ministry of Education (MoE) system is shown in Table 1.2.

**Table 1.2: Ministry of Education System**

<b>Academic Levels</b>	<b>Type Examination</b>	<b>Age Group</b>	<b>Duration of Study</b>
Pre-School	-	4 to 6 years old	1 to 3 years
Primary School	UPSR	7 to 12 years old	6 years
Secondary School	PMR/PT3 (Form Three) and SPM (Form Five)	13 to 17 years old	3 years

The Ministry of Higher Education (MoHE) system can be seen in Table 1.3.

**Table 1.3: Higher Education Qualification System**

<b>Academic Levels</b>	<b>Type of Students</b>	<b>Age Group</b>	<b>Duration of Study</b>
Certificate Level	For students with SPM qualifications	17 years old and above	1 to 1.5 years
Diploma Level	For students with SPM qualifications	17 years old and above	2 to 3 years
Bachelor's Degree Level	For students with post-secondary or pre-university qualifications such as STPM, STAM, GCE A-Levels, etc.	19 years old and above	3 to 5 years
Master's Degree	For students with a bachelor's degree qualifications	Any Adult	1 to 3 years
PhD (Doctor of Philosophy)	For students with a master's degree qualifications	Any Adult	3 to 5 years

### **1.8.2 The National Higher Education Fund Corporation (NHEFC)**

The NHEFC or known as Perbadanan Tabung Pendidikan Tinggi Nasional (PTPTN) was established under the National Higher Education Fund Corporation Act 1997 (Act 566) on 1<sup>st</sup> July 1997. The functions of NHEFC are directing loans for higher education objective and collecting loans, providing scheme savings, managing down payment and implement any other purposes granted to the National Higher Education Fund Corporation (NHEFC) by any written law.

According to Ismail et al. (2010) and NHEFC (2009), the biggest organization providing loans for students for enrolment in higher education is the National Higher Education Fund Corporation (NHEFC). The objective of the NHEFC to provide ensure loans for eligible students following studies at IPTs in accordance with the government wish that no student fails to enter the IPT for financial reasons. However, repayment of education loans should be made by student after graduation (NHEFC, 2009; Ismail et al., 2010). The repayment of education loan start after six months of graduation. The repayment amount of education loan includes the administrative costs, which amount to approximately 1% (NHEFC, 2009; Ismail et al., 2010).

Further, the deferment of repayment of education loan given to students who are still jobless and continue their studies at a higher level, but the administrative costs are charged during the deferment period (NHEFC, 2009). However, if borrowers make full repayment of the loan within six (6) months following graduation, the administrative cost is excluded and the exemption given to a borrower who obtains CGPA first class honors'. Therefore, the borrower may submit a moratorium on repayment of educational loans to NHEFC to restructure the payment scheduling and avoid legal action taken (NHEFC, 2009).

## **1.9 Structure of the Study**

The rest of the dissertation is structured as following:

### **Chapter 2: Literature Review**

The chapter focusing on factors which contribute to education loan defaults. It comprises of six division: Section 2.1 provides introduction of the chapter, Section 2.2 provides an overview of global education loans; Section 2.3 discusses the definition of default in terms of student education loan; Section 2.4 reviews literature on factors affecting education loans comprising demographic, socio-economic, personal attitude factors and social-cultural factors; Section 2.5 discusses the research gaps; and finally Section 2.6 provides a summary of the chapter.

### **Chapter 3: Research Methodology**

This chapter discusses the research methodology and rationale for the research methodology selected for the study. Firstly, Section 3.2 discusses the conceptual framework of the study. Then, Section 3.3 provides a discussion of the research design consist of the sources of data, instruments, and method used for collecting data, sampling of the study, and methods of data analysis, and lastly conclude with the summary in Section 3.4.

### **Chapter 4: Results and Discussion**

This chapter discusses the results of data analysis and the findings from this study. It comprises of seven sections: Section 4.2 discusses the normality test of the sample data, followed by Section 4.3 which discusses the results of the reliability analysis. Section 4.4 profiling the demographic characteristics which consists of the percentage and frequency

of the sample data. Section 4.5 discusses the results of the determinants of defaulting on loan repayment. Chapter 4.6 provides the opinion from the respondent related the issue and lastly Section 4.7 was conclude with the summary.

## **Chapter 5: Conclusions and Recommendations**

This chapter presents the conclusions and recommendations of the study. It comprises of five sections: Section 5.1 presents the conclusions of the study. Section 5.2 discusses the contributions of the study, and Section 5.3 discusses the recommendation for policy while Section 5.4 discusses the recommendations for future research. Finally, Section 5.5 discusses research limitation.

## **Chapter 2**

### **Literature Review**

#### **2.1 Introduction**

The chapter focusing on factors which contribute to education loan defaults. It comprises of six division: Section 2.1 provides introduction of the chapter, Section 2.2 provides an overview of global education loans; Section 2.3 discusses the definition of default in terms of student education loan; Section 2.4 reviews literature on factors affecting education loans comprising demographic, socio-economic, personal attitude factors and social-cultural factors; Section 2.5 discusses the research gaps; and finally Section 2.6 provides a summary of the chapter.

#### **2.2 Education Loans – Global Overview**

Education is a worthwhile investment in political, economic, and social development. Education loan institution is a bank or financial aid agencies to provide loans to students to help them pursue their studies. According to Shen and Ziderman (2009), student education loan schemes are operating in 70 countries across the world but they are different in terms of objective, organization structure, loan allocation procedures, and collection method. However, there is an element which is common to almost all government-sponsored loan schemes, which is they are highly subsidized by the government. According to Ziderman (2004), the purpose of the student education loan is to assist the students who come from low-income and middle-income families of the country who have a right to get a rounded education especially in the highest level.



Generally, the existence of education loans relieves pressure on the state budget (Ziderman, 2004).

As aforementioned, the implementation goals of the education loan schemes vary according to a specific goals of each country. For example, Australia, United Kingdom, New Zealand, and United State of America provide student education loan to all qualified students in order to give them the opportunity to pursue higher education (Ziderman, 2004). However, there are some countries that provide student education loans scheme to help students from low-income and middle-income family backgrounds such as Malaysia, Thailand, China, the Philippines, and the Republic of Korea (Ziderman, 2004). For example, in the case of Malaysia, the government established the NHEFC under the National Higher Education Fund Corporation 1997 to support loans to students has at low-interest rate who are unable to obtain higher education through self-financing.

However, the biggest problem that has facing the education loan schemes in many countries is the low repayment rate which means the number of borrowers who default on education loans is high.

### **2.3 Definition of Default**

Default happens when a borrower fails to repay their loans. While in theory, a single non-repayment is the default. In practice, researchers have defined the term "defaults" with their own objectives. Some researchers use the time period to determine the default. For example, 120 days (Gray, 1985), 180 days, and 240 days (Pedalino et al., 1992). Besides, some researchers define default as debt burden greater than 8% of the income as a deduction point. However, borrowers may experience difficulties in repaying the student

education loan so that the debt burden of up to 8% will be accepted (Price, 2004; King and Bannon, 2002). However, in this study, the researcher defines default based on “the frequency of payments” by a borrower. In the other words, if a borrower fails to repay according to payment schedule that has been arranged by the education loans institution that will be declared as default.

At the same time, this study also aims to find out whether the defaulting of student education loan such as NHEFC occurs because of the borrower taking other types of loans. This study focuses on the NHEFC which is known as the biggest source of student education loans to borrowers who want to continue studies in the higher level of education in Malaysia. According to the provisions of regulations made by the NHEFC, borrowers start to repay their education loan after six months of their graduation. In the other words, the declaration of default status starts when a borrowers fail to repay the education loan after six months of graduation consistently based on the payment schedule set by the NHEFC.

## **2.4 Factors Influencing Education Loan Default**

Previous studies have examined the relationship between borrowers from various aspects including demographic, income, attitude, social-cultural and others with default on education loans. There are various types of results in the prior studies due to differences in terms of respondents, time, region, country, and the goal of the study. The discussion will include the review of research literature on the four sets of factors that have been selected for this study respectively demographic, socio-economic, personal attitude factor, and social-cultural factors. These factors are selected because they are found to have been widely used in the past researches to investigate their influence on defaults of

student education loan. In addition, the demographic characteristics also necessary to know the background of the respondents involved in this study.

#### **2.4.1. Demographic**

Demographic important in understanding the trends of the past and the preparation for future developments and policies. In addition, the understanding of demographic can provide an explanation of the developing economic and social trends. As a result, the demographic becomes essential information in public policy analysis and development. (Legislative Assembly of New Brunswick - Report, 2018). According to BusinessDictionary.com, demographic helps to identify the basic s of the population which need be statistically defined. Demographic includes for example age, gender, ethnic, marital status, level of education, religion, income level, occupation, birth rate, mortality rate, and so on.

Based on previous studies, demographic also shows different types of relationships with defaults of student education loans. For example, Wilms et al. (1987) found that the default rates are linked primarily to the demographic of student backgrounds from institutional features. Besides, Greene (1989) found that student s such as graduation and others have positive relationships with repayments. Moreover, Knapp and Seaks (1992), Volkwein et al. (1998), and Churaman (1992) found that the results of the demographic factors provide different probabilities according to the desired target group. In conclusion, many researchers found that demographic can predict the student repayments and default behavior. **Therefore, this study will discuss eight of the demographic: gender, age, ethnic, marital status, number of dependents, education attainment, educational institutions, and graduation.**

#### **2.4.1.1. Gender**

The previous studies have found gender is a major factor due to the different findings between the sexes of male and female with the default on education loan. The researchers came up with three arguments related to gender. First, the finding shows that a male is found to have a higher probability of default on student education loan than a female (Podgursky et al., 2002). This findings is supported by Flint (1997) who found that for males there is an increased likelihood of defaulting (5.8 percent), and Woo (2002) found in the case of women there is a lowering chances of borrowers defaulting (by 36 percent). According to Moran (1987) and Myers and Sierra (1980), women are expected to default on loans based on the reason responsibility to childcare, family and financial needs. Lastly, Knapp and Seaks (1992) found no relationship between gender and default and it was also supported by Volkwein and Szelest (1995).

#### **2.4.1.2. Age**

According to Podgursky et al. (2002), Harrast (2004), Herr and Burt (2005), Steiner and Teszler (2005), age has been found to affect the defaults on education loans. Based on previous studies, there is a positive correlation between age and education loan default whether older students or younger students. According to Podgursky et al. (2002) older students are more likely to default than younger students. The finding is supported by Herr and Burt (2005), as they also found older students more likely to default because of financial burdens such as increasing number of dependents, other additional loans such as home loan and car loan. Flint (1997) found that each year beyond the age of 21 increases the default probability by 3 percent. This finding is supported by Steiner and Teszler (2003), who found that the younger students expected to default three times than older students for certain reason such as jobless, continuing to pursue study due to the

hardship of finding employment, insufficient financial resources, and less priority given to pay the student education loan.

#### **2.4.1.3. Ethnic**

Studies related to ethnic and racial differences often raised by the possibility of defaulting on repayment of student education loan. For example, Volkwein and Szelest (1995), Volkwein and Cabrera (1998), Christman (2000), and Harrast (2004) state that students of color are expected to default than their Caucasian peers and support by the researchers such Wilms et al. (1987), Greene (1989), Knapp and Seaks (1992), Podgursky et al. (2002), and Herr and Burt (2005) found that African Americans are at the greatest risk of defaulting even after controlling for post-graduation earnings (Boyd, 1997; Lochner and Monge-Naranjo, 2004). In fact, race or ethnicity arise as one of the strongest predictors of student loan default (Harrast, 2004). For example, one study conducted at a traditional four-year public institution found that race or ethnicity explained about 20 percent of the variance in loan default, second only to degree completion (26%) (Herr and Burt, 2005).

#### **2.4.1.4. Marital Status**

The findings of the previous studies have shown that the marital status has affected the default of student education loans (Myers and Siera, 1980, Dynarski, 1994; Volkwein et al., 1998). According to Volkwein and Szelest (1995), marital status as divorced or widowed increases the probability to default more than 7 percent while having children increase the likelihood to be 4.5 percent for each child. Besides, borrowers with married status have a negative impact on their lives such as delaying the desire to have children (Baum and Sounders, 1998; Cofer and Somers, 2000). This finding is supported by research of Boyd (1997) that shows a positive relation between married statuses with a default of education loan. However, there are also findings from previous studies that

showed no relationship between marital status and defaults of education loans (Stockham and Hesselden, 1979, Gray, 1985; and Spencer, 1992).

#### **2.4.1.5. Number of Dependents**

According to Dynarski (1994), the number of dependents showed relationship to the default of education loan. “The higher the number of dependents, the higher the percentage to default on student loans” state by Volkwein and Szelest (1995) and Woo (2002). Based on research conducted by Volkwein and Szelest (1995), the possibility of default on education loans based on the number of dependent members is especially due to sharing limited financial resources to meet the basic needs of the whole family. Besides that, a student who had a supporting family is less expected to default than a student who had no family support (Volkwein et al., 1998; Woo, 2002). Indirectly, the number of dependent members will influence the ability of a borrower to pay education loans.

#### **2.4.1.6. Education Attainment**

Previous studies have shown that educational attainment is associated with the default on student education loan (Volkwein and Szelest, 1995; Flint, 1997; Herr and Burt, 2005). Logically, the higher level of education earned means the higher the number of education loans taken. According to Wright and Walters (2010), graduates from community colleges are more expected to default than graduates from bachelor level university programmes within two years of graduation. The default of education loans also may increase based on different situations Monge-Naranjo (2014). For example, low-level students may have difficulty paying loans due to lower wages than those with higher education levels with higher wages. However, students with high levels of education may also have problems paying for education loan due to limited employment opportunities with a modest salary relative to qualifications, when they must pay high education loans.

#### **2.4.1.7. Educational Institutions**

The type of education institutions attended also can predict the defaults of education loans. Types of education institutions consist of public, private and polytechnic. The types of educational institutions are differentiated through the cost of the study, type of courses and major, duration and effectiveness in learning, and the penetration of students to enter the world of work. Therefore, the allocation of student education loans is different according to the type of education institution selected. The higher cost of the study, the larger the student education loan taken by the borrowers. In such case, longer time is needed for the borrower to finish repay the student education loan.

However, Volkwein et al. (1998), state that the difference in the default rates by school type is more to the nature of a borrower and their achievements to the nature of the institution they are attending. According to Woo (2002) found that students in short-term programs have higher default rates than students in the long-term program. However, other researches show that the enrollment at a prestigious college can increase the probability to default (Pinto and Mansfield, 2006). This finding is supported by Woo (2002), who state that it seems that the students from wealthier institutions are more likely to default.

#### **2.4.1.8. Graduation**

There are various definitions of graduation including the fact that a student has graduated with a degree and a ceremony where the student is declared officially to have completed the program of study. According to Woo (2002), graduation also can determine as one of the reasons for defaults of student education loans. This finding is supported by many researchers including Greene (1989); Volkwein and Szelest (1995); Volkwein et al. (1998); Steiner and Teszler (2005); Herr and Burt (2005); and others. In addition, Wilms

et al. (1987), Dynarski (1994); and Podgursky et al. (2002) state, the borrower who cannot finish their studies and cannot get their degree have a great chance of defaulting on education loan. Steiner and Teszler (2005) support with findings that students completing their studies and obtaining graduation have a 2 percent chance of default compared to 14 percent for those who not complete their studies and fail to graduate.

#### **2.4.2. Socio-economic**

Based on previous studies, it is argued that there is a relationship between defaults on student education loans and socio-economic factors. In this study, socio-economic factors have been selected to see the connection between the social and economic factors and default on student education loans. Socio-economic factors are supported by researchers such as Gross et al. (2009), who state that the default rate of student education loans is influenced by the socio-economic context. Moreover, other researchers who support socio-economic factors affecting defaults on student education loans include Yieh (1996); Flint (1994, 1997); Baum and Sounders (1998); Cofer and Somers (2000); Dynarski (2002); Schwartz and Finnie (2002); and Woo (2002). **Therefore, this study will discuss three important components of socio-economic factors namely employment, income, and other loans.**

##### **2.4.2.1. Employment**

Employment also shows a relationship to determining the default on student education loans. That is because the employment of borrowers can determine the ability of borrowers to repay the student education loan. Woo (2002) states that the employment can affect the rate of default student education loans. In addition, McConnell et al. (2013) also argue that the employed borrower are better chances of paying student education



loans than unemployed borrowers. This is proved by a survey conducted by Woo (2002) which found that unemployed borrowers showed an increase of 83 percent default on education loan compared to those who worked. In addition, the intentions of repaying can be one of the reasons for the borrower to the increasing of the default rate. It is also supported by Flint (1994) and Woo (2002) who state that most students who default in paying student loans are doing so due to the unemployment, low of income per month, and insufficient income to pay education loans. Therefore, the employment aspect is considered in the study.

#### **2.4.2.2. Income**

Income is an essential component of an individual's life to meet needs like food, shelter, clothes, and other expenses. One of the other expenses is student education loan. Past researches show the importance of the relationship between income and default on student education loans (Dynarski, 2002). Greene (1989) shows the positive correlation between high income and repayment of student education loans. Dynarski (2002) argue that borrowers earning high incomes will reduce the amount of education loan default rates. Oosterbeek and Van den Broek (2009) also state that borrowers who have a good income are less likely to face problems with repayment of student education loans.

However, it is a different story with low-income borrowers. According to Dynarski (1994) low earning borrowers are found to be most likely to default on student education loan. The findings are supported by some researchers including Christman (2000) who state that the main reasons to default on student education loans are inadequate of income to repay the loans. Choy and Li (2006) state that the hardship of repaying student education loans can be associated with low incomes and the amount of student education loans. On another hand, some research found another reason for the occurrence of student

education loan defaults. According to Price (2004) the borrower with a debt more than 8 percent is expected to default on student education loans. King and Bannon (2002) found that the borrowers with an education debt of more than 8 percent of their monthly income will most likely fail to repay student education loans. Meanwhile, researchers such as Shen and Ziderman (2009) also said that if the ratio of repayment prescribed is within 10 percent of income, then it will reduce the burden of student loan repayments.

#### **2.4.2.3. Other Loans**

Based on the findings of previous studies there are contentious opinions about the impact of other loans on student education loan borrowers. For example, Baum and Sounders (1998) argue that borrowing education loans will result in the deferment of asset purchases for themselves such as houses, cars and having a child. The findings are supported by Cofer and Somers (2000), who said student education loan repayment leads to postponement of the purchase of personal property such as houses, cars and have a child.

In addition, Hira et al. (2000) state that the amount of student education loans influence many aspects such as period to has a family (getting married and having children) and having an asset (house and car). Schwartz and Finnie (2002) also argue that the burden of student education loan payments will give effect to the purchase of the house, cars, and so influence the decision to move out of their parents' house because of lack of financial resources. A study Baum and O'Malley (2003) finds that repayment of education loans is still a problem of postponement to education loan borrowers to buy houses and cars, get married, and have children. Furthermore, the repayment of education loans also affects the chosen of career due to the lack of time and the addition of debt to be paid if not paid according to the payment schedule arranged with the creditor.

However, other researchers disagree with the finding such as Marks (2009) who argue contrary to the opinions of the above researchers. He believes that the payment of student loans do not have a negative impact on the purchase of personal property such as houses and cars. In addition, it also does not have a negative impact on time to getting married and having children. Finally, he also argue that education loan repayments do not negatively affect the decision to move from their parents' house.

#### **2.4.3. Personal Attitude**

Soetarno (1994) refers attitude as a view or feeling that accompanies a tendency to act on a particular object. In another sense, attitude refers to the approach of a borrower against the loan which would test the tendency of borrowers to default on student education loans. Attitude is the outlook such as positive, negative or neutral towards something. Attitudes come from judgments made by an individual. Attitudes are formed from the ABC model (affect, behavior change, and cognition). In fact, many researchers have investigate the linkage between personal attitude with default on student education loan such as Livingstone and Lunt (1992), Davies and Lea (1995), Volkwein and Szelest (1995), Woo (2002), Baum and O'Malley (2003), McMillion (2004), and Abu Bakar et al. (2006).

There are many knowledge gap between the relationship between personal attitude and default on student education loans for further investigation (Christman, 2000; and Abu Bakar et al. 2006). Orr (1987) and Monteverde (2000) found that “the willingness to repay is more important than the ability to repay and it depends on the personal attitude of the borrower itself”. As mentioned above, personal attitude can lead to positive, negative or neutral effects on defaulting on student education loans and loan repayments. Furthermore, a positive personal attitude towards student education loan repayment is

needed because the highest probability to avoid the defaulting on education loans and vice versa. According to Christman (2000) individual s such as attitudes will affect the probability of default on education loans and support. This is also supported by the research of McMillion (2004).

Meanwhile, Livingstone and Lunt (1992) found that a borrower who repays the student education loan is more concern about their personal achievement and self-direction. In addition, a good personal attitude happens when a borrower knows the importance and benefits of student education loans in their lives (Baum and O'Malley, 2003, Christman, 2000). On the other hand, some studies found that education loans also had a negative impact on a borrower where a borrower felt burdened and less satisfied with the benefits received from education loans. For example, based on finding by Volkwein and Szelest (1995) and Boyd (1997), African American students who come from low-income families feeling very burden with their student education loan.

Furthermore, Abu Bakar et al. (2006) found negative results of a borrower's attitude towards the defaults on education loans. A negative attitude of borrowers can influence the repayment of the education loans after their graduation. The results of the study by Abu Bakar et al. (2006) found 51 percent of the respondents acknowledge with the statements that it was not easy to repay the education loans. While one-quarter of borrowers think that there is no legal punishment for a borrower who defaults on the education loans. On the other hand, 9.8 percent trust that the NHEFC will be unable to track them to collect the education loans and 48.8 percent felt that it was too burdensome for them to make repayments. Additionally, a negative attitude towards the installment loan also has been identified within African American, female, married, and unemployed populations (Yieh, 1996).

Meanwhile, some researchers point out that there are other aspects that influence the change of a borrower's attitude towards the default on education loans. For example, duration of time and programs in university, which do not guarantee the opportunity to getting job after graduation. According to Davies and Lea (1995) borrowers who study at university are more tolerant of education loan because of the increasing length of time spent in university. At the same time, a borrower who took counseling in the university shows a low probability to default on education loan than a borrower who not participate in counseling (Steiner and Teszler, 2003).

Ismail et al. (2010) found that attitude correlate with borrower's delinquency, where the delinquency refers to the neglect of the education loan obligation which means the payment of the education loan is overdue. The delinquency period of the education loan has been found to default by 4.8 percent (Woo, 2002, Ismail et al. 2010). On the other hand, the demographics of a borrower also influence a negative attitude towards default on education loans. For example, the study by Yieh (1996) found that gender, marital status, and occupation shows a negative attitude towards default on education loans. This is also supported by Borden et al. (2008), while Baum and O'Malley (2003) state that the students who are characterized as low income showed a negative attitude towards education loans. Christman (2000) also found the dissatisfaction with the institution brings a negative attitude towards default.

#### **2.4.4. Social-cultural**

Social-cultural means a lifestyle practice of the society that formed from the tendency of society for social development. On the other hand, social-cultural factors are the combination of social and culture which has a larger scale of affecting the thoughts,

feelings, and behaviors of individuals. There are various aspects that have been addressed by previous researchers related to social-cultural factors. **Therefore, this study discusses two components of social-cultural factors namely family member's influence and mass media influence.**

#### **2.4.4.1. Family member's Influence**

Previous studies have shown that the family member's influence such as in academic qualification and total income per/household indirectly influences the default on education loans. The family member's (father, mother, brother, or sister) influence on academic qualification also related to default on student education loan (Steiner and Teszler, 2003). Furthermore, Steiner and Teszler (2005) state that the family member's academic qualification contributes to the default and repayment of education loans. This opinion is supported by Volkwein et al. (1998) who state that the family member's academic qualification predicted the impact on student loan defaults. According to the findings from the previous studies it was found that the higher the academic achievement of a borrower's family is considered less and less likely to default on education loans compared to those borrower's family with low academic achievement (Choy and Li, 2006; Volkwein et al., 1998).

The family member's influence on academic qualification contributes to the fact that educated families are more knowledgeable about student education loans and repayments than less educated families. This view support by Eccles et al. (1993) which found the educated families are better at understanding the loan which will influence the plan for repayment of education loans. Family member's influence on total income per/household has been found in the literature to contribute to the failure of education loans and repayments. Empirical studies have pointed out that the level of family income is

positively related to repayment of education loans (Dynarski, 1994; Knapp and Seaks, 1992; Wilms et al., 1987; Gray, 1985). Furthermore, a borrower who has a high-income family is less likely to default than the one from low-income family (Baum and O'Malley, 2003; Woo, 2002; Volkwein et al., 1998). In addition, borrowers with high-income families have a better performance in education because of the ability to accommodate the needs of the education expenses for their children.

#### **2.4.3.2. Mass Media Influence**

The mass media is the largest source of the latest information and useful deployment worldwide. The diffusion of the information or issues from the mass media effects on individual or audience thought, attitude, and behavior. Nowadays, there are various types of the mass media such as television, radio, internet, newspaper, and so on to get an information across the people. For that reason, some studies found a relationship between the mass media influence towards the education loan repayment, which can contribute to the prevention of a borrower from defaulting. According to Porter et al. (2006), exposure of mass media in spread a right knowledge to attract borrowers to repays student education loan such as discussion and interaction related to financial management, career counselling, and latest information about loans.

To sum up, there is a potentially complex range of factors that contribute to the influencing of student education loan defaults and repayment among borrowers. Most of the factors such as demographic (gender, age, ethnicity, marital status, number of dependents, education attainment, education institutions, and graduation) and socio-economic such as employment, income, and other loans have been found to influence the student educational loan default. Similarly, the influence of personal attitude factors and the social-cultural factors such as the influence of family members on academic

qualification and total income per/household and mass media influence on student education loans defaults have been studied in the previous literature.

However, the knowledge gaps between the existing literature and current study aims to investigate these gaps that have been overlooked in the previous studies or some aspects of the reasons why borrowers default on education loans may not have been explored by previous researchers.

## **2.5. Research Gaps**

The review of literature in the area of education loan default revealed some **research gaps in the literature in terms of body of knowledge and policymaking**. Particularly in the case of Malaysia, there are not many research studies found related to education loan default.

### **2.5.1. Knowledge Gap**

There is no latest empirical study relating to factors contributing to the default on education loan in Malaysia that analyses the increasing student education loan defaults in the country. There is a difference in time period or duration between the previous researches and this study which contributes to the knowledge gap in better understanding of this major problem in Malaysian education sector.

In short, there is a lack of understanding concerning increasing student education loan default and repayment in recent years. In addition, most of the past researches use students who are still studying as the respondents, but this study selected student loan borrowers



who already have completed their study and graduated, and have not received the waiver. This method of selection of the sample respondents for this study brings a new body of knowledge and adds to the existing literature. This study also will help formulate larger research project in this area in future.

### **2.5.2. Policymaking Gap**

This study also makes a significant contribution towards filling knowledge gap in the policymaking related to student education loans default. Through its empirical findings it proposes policy alternatives to address the problem of increasing education loans defaults that have reached unsustainable level in Malaysia. Indirectly, the study can contribute to the policymaking process of education loans default and repayment.

## **2.6 Summary**

Subsequent discussion covered review of literature related to the factors contributing to educational loans defaults. These included demographic such as gender, age, ethnicity, marital status, number of dependents, education attainment, education institutions and graduation, thus the socio-economic factor such as employment, income, and other loans have been present. Then, the effect of social-cultural factors which include the influence of family members on academic qualification and the total income per/household, and mass media have been reviewed. Finally, the research gaps in the literature have been highlighted. The next chapter discusses the research methodology of the study.

## **Chapter 3**

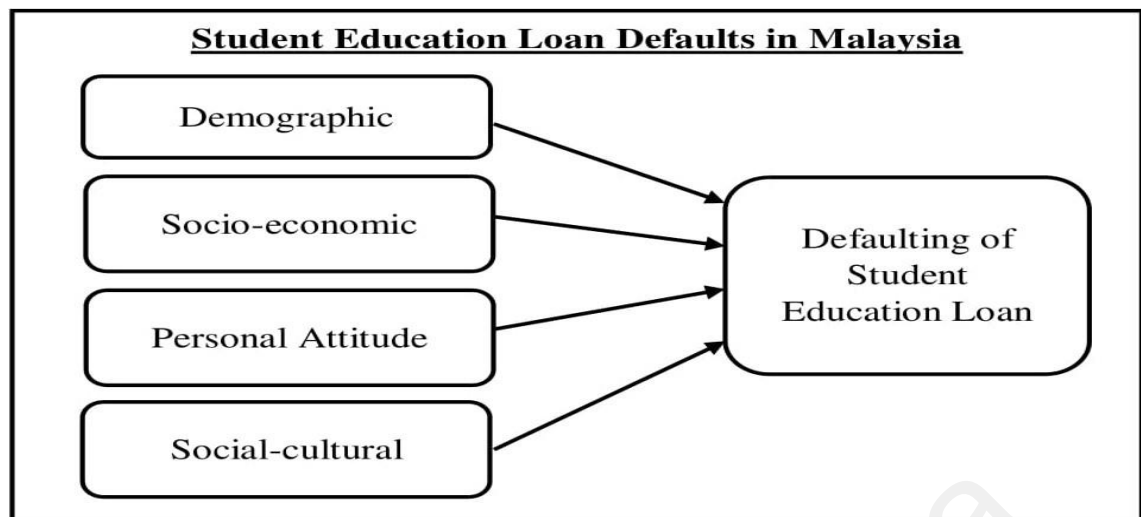
### **Research Methodology**

#### **3.1 Introduction**

This chapter discusses the research methodology and rationale for the research methodology selected for the study. Firstly, Section 3.2 discusses the conceptual framework of the study. Then, Section 3.3 provides a discussion of the research design consist of the sources of data, method used for collecting data, sampling of the study, and methods of data analysis, and lastly conclude with the summary in Section 3.4.

#### **3.2 Conceptual Framework**

The conceptual framework of the study is built based on the objectives of the study to investigate the factors influencing defaulting of student education loan. Therefore, the researcher has narrowed the following factors based on the frequency of use of these factors in previous studies. The selected factors are divided into four categories, respectively demographic, socio-economic, personal attitude, and social-cultural (the influence of family members and mass media). Figure 3.1 illustrates the conceptual framework of this research study.



**Figure 3.1: Student Education Loan Defaults in Malaysia Framework**

Basically the conceptual framework in the study show that defaulting of student education loan which is represent the dependent variable influenced by the four independent variable such as demographic, socio-economic, personal attitude, and social cultural. The conceptual framework build based on the research objective of the study which is generally to analyse the factors effecting NHEFC student education loan default in Malaysia. Specifically, the research objective try to profile and examine the demographic and socio-economic of the borrowers that influence defaulting of the student education loan (NHEFC) in Malaysia. Besides that, to investigate how the personal attitude and social-cultural factors of the borrowers' effect on defaulting of the student education loan (NHEFC) in Malaysia.

### **3.3 Research Design**

The research design serves as a guide in research to address the purpose of the study and find out the answer to the research questions raised. It support by Zikmund et al. (2013) state that the research design is a master plan specifying the methods and procedures for collection and analysing of the needed information. Therefore, the research design of the

study include sources of data, instruments, and method used for collecting data, research methods, samplings, and how to analyses the data. Thus, in this section, all these aspects are discussed in detail.

### **3.3.1 Sources of Data**

Data collection is the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes. This study uses an interview and questionnaire as the source to collect the data.

#### **a) Interview**

The purpose of the interview is to obtain accurate information and recent statistics of the financial performance of a student education loan scheme, especially the statistics of the defaulters of NHEFC loans which is related to the study. Therefore after getting the approval by the NHEFC to obtain and collect data relating to the research, the interview process held at the NHEFC's main office in Kuala Lumpur. The participation who involve in the study consists of 2 officers to provide information and data relating to the research. The uses of information and data from the interview process are to prove the validity and accuracy of the study.

#### **b) Questionnaire**

The purpose of the questionnaire is to gather data of the respondent relating to the research. The format for the question in this questionnaire consists of one of the two ways (i.e.: 'Yes' or 'No'; 'Male' or 'Female'; 'True' or 'False'), and multiple-choice questions which is divide into two type respectively Likert scale (i.e.: strongly disagree, disagree,

neutral, agree, strongly agree) and checklist type, where the respondent needs to make choices from many options that have been stated. However, this questionnaire only can be participated by the respondent who meets with the term and condition of the research as a state at the beginning of the questionnaire form (as shown in Appendix A). The questionnaire design based on the research objective of the study, which are discussed below.

#### **Section A: Demographic**

The demographic information is gathered using eight (8) questions, that is, the basic information of the respondents including gender, ethnic, age, marital status, number of dependents, level of education, type of educational institutions and graduation.

#### **Section B: Socio-economic**

The socioeconomic aspects are covered by six (6) questions and are related to the social lifestyle and economic context of the respondents such as employment, income, and loans.

#### **Section C: Personal Attitude**

The personal attitude aspects consist of four (4) question related to the pattern of behavior, tendency or willingness to anticipate, and adapt to the trend in social situations.

#### **Section D: Social-cultural**

The social-cultural aspects consist of five (5) questions related to the combination of social and culture which are affecting the thoughts, feelings, and behaviours of individuals such as the influence of family member and mass media.

## **Section E: General Questions**

This section consists of two (2) questions relate the difficulties they have to face in order to repay the student education loan and the opinion about the improvement from different parties in order to overcome this problem.

### **3.3.2 Sampling of the Study**

Sampling is the process of selecting units (i.e., people or organization) from a population. The selection of the right sample is important in order to achieve the research objective of the study. The discussion about the selection of the population and the sample of the study as follows:

#### **a) Population**

In the study, the population consists of the defaulters among the borrower of NHEFC loan which is known as the largest student education loan scheme in Malaysia (Zainal et al. (2009). According to the Annual Report of NHEFC until 31 Dec 2016, the total number of defaulters of NHEFC loan is 679,117 borrowers with total RM 4.83 billion. The sample of the study was select through this population.

However, no detailed information can be obtained about the defaulters because it is confidential information. Therefore, the researcher use a convenient sampling method to select the sample. The convenient sampling is non-probability sampling where sample of the population meet certain criteria such as easy accessibility, availability at a given time, or the willingness to participate are include for the purpose of the study (Dörnyei and Griffiee (2010).

## **b) Sample**

Through the online distribution within 3 month, the total number of the respondent who positively joins the study is only 130 of the respondent. However, due to the lack of time for the analysing data has led the researcher to use the 130 respondent even though the results received would be less satisfactory. Therefore, the use of convenient sampling method is suitable in the study based on the easy accessibility, availability at a given time, and the willingness to participate in the study.

### **3.3.3 Method of Collecting Data**

First of all, the implementation of the pilot test for the first time was applied to 10 respondents at University of Malaya (UM) to test the quality, effectiveness, and correspond to the questionnaire. Through the pilot test, many improvements are made based on the feedback of the respondents to make sure the question is clear and consistent with the research objective of the study. After that, the method distribution of the questionnaire is through an online website known as Google Form and linking it through other online services such as Facebooks, WhatsApp, email, and survey communities to the 4 higher education institutions such as University of Malaya (UM), University Putra Malaysia (UPM), The National University of Malaysia (UKM), International Islamic University College Selangor (KUIS).

Selection of public universities such as UM, UPM, and UKM due to its position as Top 5 best universities in Malaysia based on QS World University Ranking 2016/2017 and the selection of KUIS as represent the private universities in the study. In addition, linkage of communication facilities with four universities accelerate the search of respondents to save time, money, and energy in this study.

Selection of online distribution methods is convenient for both respondent and researcher to participate and to collect data. This is due to the constraints of time, energy consumption and financial problems faced by researchers. Therefore, through the use of method online can help researchers to overcome the problem. While, for the respondent, through online method, it can help them as space to express the opinion and thought about this issue by participating in this study regardless of time and place. However, online methods face problems in communicating effectively with respondents regarding their opinions and views on the issue. In addition, it also limits the number of respondent environments due to accessibility (i.e.: internet or Wi-Fi), the time to respond, and the widespread dissemination among respondents. This may be due to lack of acquaintances within the same scope (default).

After the online distribution was carried out for 3 months, the number of respondents who participate in the study is small and not well received as expected by the researchers as the issue is very dear to the people. The total number of the respondent who positively joins the study is 130. To complete the research at the time given, the researcher decides to use all the data received by the questionnaire responses from 130 respondents to analyse and find answers to research questions of the study.

#### **3.3.4 Analysis Data**

The instrument to analysis data is the SPSS 16.0 or known as “Statistical Package for the Social Science for Windows” (SPSS for Window). In this study, the researcher uses two methods of data analysis, respectively the descriptive statistical method to profile the characteristics of respondents’ demographic and summarize into the numerical data (i.e., frequency, mean, median, percentages). While, the use of inferential statistical method



such as multiple regression is to examine the relationship between variable to answer the research question in this study. The level significant use in the study is 5%. Therefore, the model specification of multiple regression is suitable for this study is as follows.

$$y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 \dots\dots\dots n$$

Notes: y = Dependent Variable, X = Independent Variable

The implementation of the model specification is to achieve all the research question in the study. The dependent variable (y) in the study represent the defaulting of student education loan while the independent variable (X) in the study represent the four of factor such as demographic, socio-economic, personal attitude, and social-cultural.

### 3.4 Summary

This chapter presents the research methodology of the study. The first section discusses the methodological design in this study. The sources for collecting data are questionnaire and interview. The sample consists of 130 of the respondent from 679,117 of the defaulters of NHEFC. The tool to analyze data is SPSS 16.0 with the use of method analysis such as the descriptive statistical method and inferential statistical method. There is also model specification which is specially used in this study. The level of significant in the study is 5%. The result of this study is discussed in more detail in the next chapter (Chapter 4).

## Chapter 4

### Results and Discussion

#### 4.1 Introduction

This chapter discusses the results of data analysis and the findings from this study. It comprises of seven sections: Section 4.2 discusses the normality test of the sample data, followed by Section 4.3 which discusses the results of the reliability analysis. Section 4.4 present the demographic characteristics which consists of the percentage and frequency of the sample data. Section 4.5 discusses the results of the determinants of defaulting on loan repayment. Chapter 4.6 provides the opinion from the respondent related the issue and lastly Section 4.7 was conclude with the summary.

#### 4.2 Normality

Before commencing the analysis, data should normally distributed (Tabachnick and Fidell, 2007). The Kolmogorov-Smirnov and Shapiro-Wilks test was also applied to test normality as statistic by Field (2010); Shapiro-Wilks (1965). The result shows that the data are normally distributed as shown in Table 4.1. The Table 4.1 indicates skewness and kurtosis value which within acceptable range.

**Table 4.1: Descriptive statistics**

Items	Mean	SD	Skewness		Kurtosis	
			Statistic	S. E	Statistic	S.E
Gender	1.78	.04	-1.40	.21	-.04	.42
Age	2.98	.07	-.38	.21	.37	.42
Ethnic	1.28	.07	2.79	.21	6.49	.42
Marital Status	1.12	.03	2.44	.21	3.99	.42
Number of Dependent	1.22	.04	1.84	.21	2.56	.42
Level of Education Attainment	1.96	.06	.36	.21	.39	.42

Type of Education Institution	1.11	.03	2.56	.21	4.63	.42
Graduation (Year)	2.50	.07	-.45	.21	-.29	.42
Employment	1.48	.04	.06	.21	-2.03	.42
Occupation	6.34	.21	-.95	.21	-.27	.42
Employment Status	2.94	.11	-.54	.21	-1.46	.42
Monthly Income	2.47	.19	2.69	.21	9.69	.42
Total income per household	6.46	.34	.86	.21	-.89	.42

Notes: SD – Standard Deviation, S. E. – Standard Error

Source: Author Calculation

In addition, the Kolmogorov-Smirnov and Shapiro-Wilks test was also applied to determine data normality. It's also show the data is a normal distribution (see Table 4.2).

**Table 4.2: Tests of Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Gender	.484	130	.000	.506	130	.000
Age	.288	130	.000	.857	130	.000
Ethnic	.508	130	.000	.396	130	.000
Marital Status	.525	130	.000	.371	130	.000
Number of Dependent	.481	130	.000	.519	130	.000
Level of Education Attainment	.308	130	.000	.796	130	.000
Type of Education Institution	.528	130	.000	.357	130	.000
Graduation (Year)	.309	130	.000	.820	130	.000
Employment	.348	130	.000	.636	130	.000
Occupation	.252	130	.000	.838	130	.000
Employment Status	.346	130	.000	.728	130	.000
Monthly Income	.247	130	.000	.668	130	.000
Total income per household	.269	130	.000	.776	130	.000

a. Lilliefors Significance Correction

### 4.3 Reliability Analysis

In order to test internal consistency of the studied variable, the reliability was checked. This study uses Cronbach's Alpha ( $\alpha$ ) to measure reliability or internal consistency. Cronbach's Alpha tests to see if multiple questions such as Likert Scale survey are reliable. Based on the Rule of Thumb, the reliability was accepted at 0.7 and above (Hair et. al, 2010). According to the questionnaire in this study, there are three (3) question in the form of Likert scale and consists of five (5) scale respectively 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. The results of three (3) Likert scale questions for reliability test are as follows:

**Table 4.3: Result of Reliability ( $\alpha$ )**

Item	$\alpha$	Mean	S.D
Personal attitude towards NHEFC loan repayment	.848	56.19	8.96
The family member's influence towards NHEFC loan repayment	.831	33.49	7.56
The awareness of issues highlighted by media related to NHEFC loan repayment	.700	15.89	3.95

Notes:  $\alpha$  - Cronbach's Alpha; S.D – Standard Deviation

Source: Author Calculation

Table 4.3 shows the results of three (3) variables, which is the personal attitude towards NHEFC loan repayment has contains Cronbach's Alpha ( $\alpha$ ) value of 0.85, the family member's influence towards NHEFC loan repayment which shows the value of Cronbach's Alpha ( $\alpha$ ) is 0.83, and the awareness of issues highlighted by media related to NHEFC loan repayment has contains Cronbach's Alpha ( $\alpha$ ) value is 0.70. Based on finding it can be conclude that data is reliable in this study.

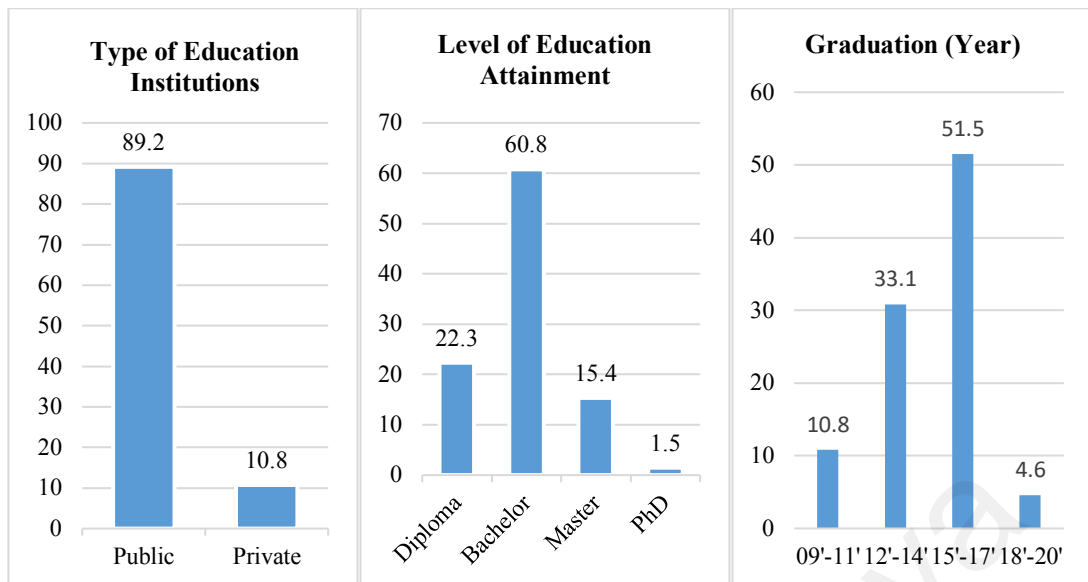
#### 4.4 Demographic Characteristic

**Table 4.4: Demographic Variables of the Respondent**

Variable	Frequency	Percentage (%)
<b>Gender</b>		
Male	28	21.5
Female	102	78.5
<b>Ethnic</b>		
Malay	113	86.9
Chinese	5	3.8
Indian	5	3.8
Other	7	5.4
<b>Age</b>		
18 – 20	7	5.4
21 – 23	22	16.9
24 – 26	70	53.8
27 – 29	29	22.3
30 – 32	2	1.5
<b>Marital Status</b>		
Single	115	88.5
Married	15	11.5
<b>Number of Dependent</b>		
0 – 4	103	79.2
5 – 9	25	19.2
10 – 14	2	1.5

Source: Author Calculation

The demographic characteristics of the respondent shows 21.5% of the respondents are male and 78.5% are female. Across all respondents, 86.9% are Malay, 5.4% are from others ethnic groups, and 3.8% are Indian and Chinese. The majority of the respondents are from the ages group of 24 to 26 (53.8%), followed by 27 to 29 (22.3%), and 21 to 23 with 16.9%. The small group of respondents was from the age group of 30 to 32 (1.5%), followed by the age group of 18 to 20 (5.4%). In terms of marital status among the respondents, the majority (88.5%) are single and 11.5% are married. In terms of the highest number of dependents of the respondents, 0 to 4 (79.2%), followed by 5 to 9 (19.2%), 10 to 14 (1.5%).



**Figure 4.1: Education of the Respondent**

Source: Author Calculation

Statistics show that only 10.8% had studied at private institutions, and the majority of the respondents studied at the public institutions (89.2%). Notably, according to the qualification level of educational attainment, the majority of the respondents hold Bachelor's Degree (60.8%), followed by Diploma (22.3%), Master's Degree (15.4%), and Doctor of Philosophy (Ph.D.) (1.5%). Most of the respondents in this study graduated between 2015 and 2017 (51.5%), followed by 33.1% who graduated between 2012 and 2014, 10.8% who graduated between 2009 and 2011, and 4.6% who graduated in 2018.

**Table 4.5: Employment Status and Monthly Income of the Respondent**

Variable	Frequency	Percentage (%)
<b>Employment</b>		
Yes	67	51.5
No	63	48.5
<b>Occupation</b>		
Government Employee	11	8.5
Professional Grade 41 and above	3	2.3
Non-professional below Grade 41	4	3.1
Private Company Employee	16	12.3
Executive Level	6	4.6
Non-executive level	9	6.9
Self-employed	16	12.3
Student	51	39.2

Unemployed	13	10.0
Other	1	.8
<b>Employment Status</b>		
Permanent Worker	28	21.5
Contract Worker	23	17.7
Part time Worker	8	6.2
Other	71	54.6
<b>Monthly Income</b>		
Less than RM 2000	103	79.2
RM 2001 – RM 4000	21	16.2
RM 4001 – RM 6000	1	.8
RM 6001 – RM 8000	2	1.5
RM 8001 – RM 10 000	1	.8
Others	2	1.5

Source: Author Calculation

Statistics showed that 51.5% of the respondents are employed which comprised of private company employees (12.3%), government employees (10%), non-executive level (6.9%), executive level (4.6%), non-professional below Grade 41 (3.1%), professional Grade 41 and above (2.3%). It also showed that 48.5% are unemployed which consisted of students (39.2%) and unemployed (10%). In terms of employment status, 21.5% are permanent, 17.7% are contract, and 6.2% are part time while 54.6% are other category. In terms of income per/month among the respondents, the largest group belonged to less than RM 2000 (79.2%), followed by RM 2001 to RM 4000 (16.2%), RM 6001 to RM 8000 and others (1.5%), RM 4001 to RM 6000 (0.8%), and the rest belonged to RM 8001 to RM 10000.

#### **4.5 The Determinants of Loan Repayment Default**

The specific objective in the study is to analyse the 4 factors such as demographic, socio-economic, personal attitude and social-cultural effecting NHEFC student education loan

default in Malaysia. The suitable test for 4 factor in the study is multiple regression. The model specification for multiple regression as below.

$$Y_{DSEL} = B_0 + B_1D_1 + B_2SE_2 + B_3PA_3 + B_4SC_4 + \dots n$$

Where  $Y_{DSEL}$  = Defaulting of Student Education Loan (NHEFC)

$D_1$  = Demographic

$SE_2$  = Social Economic

$PA_3$  = Personal Attitude

$SC_4$  = Social-cultural

Therefore by using this model specification, the result of multiple regression test conclude as Table 4.6 below.

**Table 4.6: The Determinant of Loan Repayment**

Factor/Variable	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	B	Std. Error	Beta		
<b>Demographic</b>					
• Marital Status	-.241	.104	-.223	-2.321	.020
• Type of Education Institution	-.281	.097	-.252	-2.898	.000
• Graduation (Year)	-.082	.042	-.177	-1.961	.050
<b>Socio-economic</b>					
• Other loan Commitment	.210	.078	.277	2.699	.000
<b>Personal Attitude</b>					
• Personal Attitude toward Loan Repayment	.007	.003	.192	2.158	.030
<b>R<sup>2</sup></b>	.100				

Source: Author Calculation



Table 4.6 show the determinant of loan repayment. The result of the multiple regression are [ $f(4, 125) = 3.460, p < 0.05, R^2 = .100$ ]. It's also show that 3 from 4 factor are statistically significant predicted respectively demographic, socio-economic, and personal attitude. Therefore, the result show the null hypothesis is rejected while the alternative hypothesis of demographic, socio-economic, and personal attitude was accepted. Its mean there is an association between demographic, socio-economic, and personal attitude factor of the borrower and defaulting of the student education loan (NHEFC) in Malaysia.

The result show that demographics factor is statistically significant on defaulting of the student education loan (NHEFC) in Malaysia. This result support by Wilms et al. (1987) and Greene (1989) which found that the default rate are linked primarily to the characteristics of student background. While Knapp and Seaks (1992), Volkwein et al. (1998), and Churaman (1992) found that the results of the demographic factors provide different probabilities according to the desired target group. Thus, through this study show that positive statistically significant between demographics factor with defaulting of the student education loan (NHEFC) in Malaysia.

The demographic variables show that marital status has significant influence on defaulting on student education loan at 5% of significant value. The previous researcher also found that the marital status has affected the default of student education loans such as Stockham and Hesseldenz (1979), Myers and Siera (1980), Gray (1985), Spencer (1992), Dynarski (1994), and Volkwein et al. (1998). The result of type of education institution also has significant influence on student education loan default at 1% of significant value which is the finding was support by other researcher such as Volkwein et al. (1998), Woo (2002), and Pinto and Mansfield (2006) which is found that the

differentiated of education institution through the cost of the study, type of courses and major, duration and effectiveness in learning, and the penetration of students to enter the world of work predict the defaults of education loans.

The graduation (year) variable show that graduation also has positive significant on defaulting of the student education loan at 5% significant value. This result was support by other researcher such as Greene (1989), Volkwein and Szelest (1995), Volkwein et al. (1998), Woo (2002), and Steiner and Teszler (2005) with findings that students completing their studies and obtaining graduation have a 2 percent chance of default compared to 14 percent for those who not complete their studies and fail to graduate.

The socio-economic factor also show a statistically significant on defaulting of the student education loan (NHEFC) in Malaysia. The result was support the finding from the past researchers such as Yieh (1996); Flint (1994, 1997); Baum and Sounders (1998); Cofer and Somers (2000); Dynarski (2002); Schwartz and Finnie (2002); Woo (2002), Gross et al. (2009) which is found that, there are a connection between the social and economic factors and default on student education loans. Therefore, the finding from this study show a positive statistically significant between socio-economic factors with defaulting of the student education loan (NHEFC) in Malaysia.

Under the socio-economic factor, variable of other loan commitment show a positive significant to the defaulting on student education loan at 1% of significant value. The finding was support by the Baum and Sounders (1998), Cofer and Somers (2000), and Hira et al. (2000) which is the defaulting of student education loan because the other loan commitment such as car, house, and having family. This result also relate to the personal attitude of the borrower toward loan repayment which is show a positive significant

influence on defaulting of student education loan at 1% of significant value. The result was support the finding from Orr (1987) and Monteverde (2000) found that “the willingness to repay is more important than the ability to repay and it depends on the personal attitude of the borrower itself”.

Last but not least, the personal attitude also show a relationship with defaulting of the student education loan (NHEFC) in Malaysia. The result also support by past researchers such as Yieh (1996), Christman (2000), Baum and O’Malley (2003), McMillion (2004), Abu Bakar et al (2006), and others which is found that individual attitude will affect the probability of default on education loans and support. Thus, this study show a positive statistically significant between personal attitude factors with defaulting of the student education loan (NHEFC) in Malaysia.

In conclusion, the result from multiple regression shows that demographic (marital status, type of educational institution, and graduation), socio-economic (other loan commitment), and personal attitude toward loan repayment have a significant association with loan repayment defaults.

#### **4.6 The Opinion from the Respondent**

In order to make the more meaningful research, the researcher provide 2 open question relate the difficulties they have to face in order to repay the student education loan and the opinion about the improvement from different parties in order to overcome this problem. The finding from this question can helps open the mind of the involved parties to find a critical and creative solution to address this issue.

### **1) The Difficulties of Repaying Student Education Loan (NHEFC) in Malaysia.**

Based on the response from the respondents, the difficulties faced by the borrower are the financial constraints, high cost of living, and monthly payment management by NHEFC.

First, the financial constraint is one of the hardships faced by the borrowers to repay the NHEFC loan because of the low-income per month. The study found that such financial constraints are faced by 51.5% of the respondents who are employed but the income per month of the respondents is low. The largest group in terms of income per month of the respondents belongs to less than RM 500 (49.2%), followed by 23.8% of the respondents with income RM 1001 – RM 2000, followed by 13.1% of the respondents with income RM 2001 – RM 3000, and 6.2% of the respondent with income RM 500 – RM 1000. Besides, the status of the employment and unemployed also found to influence repayment of the NHEFC loan. Some example of the responses from the respondents: *“The uncertain salary due to temporary work (contract)”*; *“Since I still study, I do not have any fixed income”*, and *“Salary is not enough”*.

Second, the high cost of living also became a hindrance for the borrowers to repay the NHEFC loan. This is because of the increasing basic expenses such as residence, transportation, food, and other bills. In addition, the difficulties became worse when the respondent has other commitments which need a greater attention than repaying the NHEFC loan. For example, loan for residence, loan for the car and other personal loans. Some example of responses from the respondents include: *“I have low wages and other loans problem”*; *“I have another commitment to repay than NHEFC loan”*; and *“I only have a little income and the cost of living so high for me to repay the loan now.”*

Third, the borrowers feel that the monthly payment management services by NHEFC are inefficient and insensitive. Besides, the difficulty in getting feedback about loan repayment problems slows down the process of education loan repayment by the borrowers. For example some of the loan repayment problems are: payment notice, fast start-up payment, non-updated payment and so on. In other words, the hardship experienced by the borrowers is caused by the management services offered by NHEFC which is inefficient and slow. Some examples of the responses from the respondents include: *"It's hard for me when I was blacklisted, really don't know when I supposed to repay"* and *"Pay period comes very faster. After finishing my study on Dec, on Mac I have started to pay. Honestly, I was disappointed because official letter I got in Dec stating that I must pay the backlog payment."*

## **2) The Improvement Need to Overcome The Defaulting on Student Education Loan (NHEFC) in Malaysia.**

Based on the responses of respondents in the study, the improvements needed to reduce defaults on NHEFC loan can be done with the cooperation of three parties: the borrowers, NHEFC, and the government.

First, it is suggested that the borrowers can reduce the default on NHEFC loan by doing a part-time job. By doing a part-time job, the borrower can increase income per month. With the additional income, he/she can repay the NHEFC loan. Besides that, the borrower also needs to be disciplined in saving money and continue to repay the student education loans even though the payment made is small. Therefore, every borrower should improve the attitude and behaviour towards the repayment of student loan and reduce the default on NHEFC loan.

Second, the suggestion for the NHEFC to improve their service in order to reduce the default on NHEFC loan. This can be done by eliminating the interest rates and reducing the charges for service to the borrowers. Besides that, the respondents also suggested that the NHEFC should extend the gestation period to one year for the borrowers to repay the loan which will help especially the borrowers who want to continue to study as well as providing the unemployed borrowers reasonable time to search and find job. In addition, NHEFC needs to increase awareness about the repayment of student loans using a variety of channels to provide clear and accurate information. Also, NHEFC needs to review its strategic plan to attract borrowers to repay the education loan on time.

Third, the suggestion is for the government to improve and expand job market to young people who have graduated freshly. The respondents predominantly feel that there are limited opportunities both in government and private sectors for the young people to find a job due to various negative conditions. For example, one of the respondents commented: *“The government should believe in young people or new talents to bring about innovation towards enhancing the development for the future generation. It should create more opportunities for young graduates to find jobs both in the public and private sectors to take over long-term work”*.

#### **4.7 Summary**

Overall, 132 respondents participated in this study, 130 in the questionnaire survey and 2 in the interview respectively. The 130 respondents consists of male (21.5%) and female (78.5%), with different race and ethnic groups such as Malay (86.9%), others ethnic groups (5.4%), and Indian and Chinese (3.8%). The majority of the respondents are between the ages of 24 and 26 (53.8%), followed by 27 and 29 (22.3%), 21 - 23 (16.9%), 18 - 20 (5.4%), and 30 - 32 (1.5%). Majority of the respondents is single (88.5%) and

only 11.5% are married. The highest number of the dependents on the respondents was 0 to 4 (79.2%), followed by 5 to 9 (19.2%), and 10 to 14 (1.5%). The data show that only 10.8% of respondents studied in private institutions, and the majority of the respondents studied in public institutions (89.2%). In terms of educational attainment the largest number of respondents are holders of Bachelor's Degree (60.8%), followed by Diploma (22.3%), Master's Degree (15.4%), and Doctor of Philosophy (Ph.D.) (1.5%%).

Most of the respondents in this study graduated between 2015 and 2017 (51.5%), followed by 33.1% who graduated between 2012 and 2014, 10.8% graduated between 2009 and 2011, and only 4.6% graduated around in 2018. Statistics show that 51.5% of the respondents are employed, which comprised of private company employees (12.3%), government employees (8.5%), non-executive level (6.9%), executive level (4.6%), non-professional below Grade 41 (3.1%), professional Grade 41 and above (2.3%) and other .8%. Of the total, 48.5% are unemployed which consists of students (39.2%) and unemployed (10%). The employment status show that 21.5% are permanent, 17.7% are contract, 6.2% are part time, and 54.6% are other categories.

The highest number of respondents' income per/month was less than RM 2000 (79.2%), followed by RM 2001 to RM 4000 (16.2%), RM 6001 to RM 8000 (1.5%), RM 4001 until RM 6000 and RM 8001 to RM 10000 (8%). Cronbach's Alpha ( $\alpha$ ) was used to measure reliability or internal consistency. Based on the Rule of Thumb, the reliability was accepted at 0.7 and above. The result of reliability showed good internal consistency for two questions, respectively about personal attitude towards loan repayment (.85) and family member's influence (.83), but mass media influence did not show internal consistency (.69).

The result from multiple regression shows that demographic (marital status, type of educational institution, and graduation), socio-economic (other loan commitment), and personal attitude toward loan repayment have a significant association with loan repayment defaults. The difficulties faced by the borrower are the financial constraints, high cost of living, and monthly payment management by NHEFC and the improvements needed to reduce defaults on NHEFC loan can be done with the cooperation of three parties: the borrowers, NHEFC, and the government.

University of Malaya



## **Chapter 5**

### **Conclusions and Recommendations**

As general, the study aims to investigate question how the factors effecting NHEFC student education loan default in Malaysia. The specific research question can be conclude as follows: 1. What are the profile demographic of the borrowers and how it effect on defaulting of the student education loan (NHEFC) in Malaysia? 2. How does the socio-economic of the borrowers influencing the defaulting of the student education loan (NHEFC) in Malaysia? 3. How does the personal attitude of the borrowers' effect on defaulting of the student education loan (NHEFC) in Malaysia? 4. How do the social-cultural factors effect on defaulting of the student education loan (NHEFC) in Malaysia?

The study used a mix method approach, which is a combination of the qualitative and quantitative approaches. It employed primary data gathered using questionnaire and interview methods and secondary data gathered from annual reports and official portal. The main instrument used for data collection was questionnaire (130 respondents) which consisted of five sections. The method distribution of the questionnaire is through an online website known as Google Form and linking it through other online services such as Facebooks, WhatsApp, email, and survey communities to the 4 higher education institutions such as University of Malaya (UM), University Putra Malaysia (UPM), The National University of Malaysia (UKM), International Islamic University College Selangor (KUIS).

Besides, interviews (2 respondents) are also conducted to obtain first-hand information related to education loans from NHEFC main office at Kuala Lumpur, including recent statistics of the financial performance on student education loan, especially on loan

default. The sampling of the study consisted of the population (the entire borrowers of the NHEFC in Malaysia) and the sample was selected using a convenient sampling by applying certain conditions such as the respondent should be an individual who borrowed NHEFC loan in Malaysia in order to pursue their studies, must not be among the borrowers who received the waiver from the NHEFC, and the borrower must have completed studies and already graduated. The sample consisted of 130 respondents (questionnaire) and 2 respondents (interview). SPSS 16.0, i.e. "Statistical Package for the Social Science for Windows" (SPSS for Window) was used for data analysis.

The study employed two methods of data analysis: the descriptive statistical method to analyse the demographic information (i.e. percentage) and the inferential statistical method to analyse the research questions and reliability (Multiple Regression test and Reliability test). The significant level value is  $<0.05$  or  $> 0.05$  to hypothesize in this study. The Cronbach's Alpha ( $\alpha$ ) is used to measure the reliability. The major findings, conclusions and recommendations of the study are presented in the following sections.

## **5.1 Major Findings and Conclusions**

Education is known as a principal contributory factor that boosts the productivity of workers by generating skills that raise working capacity and leading to economic growth (Bloom et al. 2006; Galiani et al. 2008:437). This is supported by Lopez et al. (1998), "no country has achieved economic development without investing in education development". That opinion indicates the importance of education that affects a country's development. Thus, developing countries such as Malaysia have expanded infrastructure and related services such as building various types of primary schools, secondary schools,

colleges, public universities, and private universities, as well as providing educational loan services to assist less fortunate students to continue education at a higher level.

According to Zainal et al. (2009), “The NHEFC is the largest source of student loans to continue study at the higher level in Malaysia”. This coincides with the primary objective of the NHEFC to assist disadvantaged students and those who wish to continue their education at a higher level to find a better life. However, according to the Annual Report of NHEFC (2016), 679,117 borrowers defaulted on repayment of student education loan with total outstanding loan of RM4.83 billion. This situation reflects a worrying trend in the higher education loan environment. It is clear that new graduates leave their institutions with massive debts and many of them are facing some difficulties in repaying their loans or unwilling to repay their loans.

Overall, 132 respondents participated in this study, 130 in the questionnaire survey and 2 in the interview respectively. The 130 respondents consists of male (21.5%) and female (78.5%), with different race and ethnic groups such as Malay (86.9%), others ethnic groups (5.4%), and Indian and Chinese (3.8%). The majority of the respondents are between the ages of 24 and 26 (53.8%), followed by 27 and 29 (22.3%), 21 - 23 (16.9%), 18 - 20 (5.4%), and 30 - 32 (1.5%). Majority of the respondents is single (88.5%) and only 11.5% are married. The highest number of the dependents on the respondents was 0 to 4 (79.2%), followed by 5 to 9 (19.2%), and 10 to 14 (1.5%). The data show that only 10.8% of respondents studied in private institutions, and the majority of the respondents studied in public institutions (89.2%). In terms of educational attainment the largest number of respondents are holders of Bachelor’s Degree (60.8%), followed by Diploma (22.3%), Master’s Degree (15.4%), and Doctor of Philosophy (Ph.D.) (1.5%%).

Most of the respondents in this study graduated between 2015 and 2017 (51.5%), followed by 33.1% who graduated between 2012 and 2014, 10.8% graduated between 2009 and 2011, and only 4.6% graduated around in 2018. Statistics show that 51.5% of the respondents are employed, which comprised of private company employees (12.3%), government employees (8.5%), non-executive level (6.9%), executive level (4.6%), non-professional below Grade 41 (3.1%), professional Grade 41 and above (2.3%) and other .8%. Of the total, 48.5% are unemployed which consists of students (39.2%) and unemployed (10%). The employment status show that 21.5% are permanent, 17.7% are contract, 6.2% are part time, and 54.6% are other categories.

The highest number of respondents' income per/month was less than RM 2000 (79.2%), followed by RM 2001 to RM 4000 (16.2%), RM 6001 to RM 8000 (1.5%), RM 4001 until RM 6000 and RM 8001 to RM 10000 (8%). Cronbach's Alpha ( $\alpha$ ) was used to measure reliability or internal consistency. Based on the Rule of Thumb, the reliability was accepted at 0.7 and above. The result of reliability showed good internal consistency for two questions, respectively about personal attitude towards loan repayment (.85) and family member's influence (.83), but mass media influence did not show internal consistency (.69).

The result of the multiple regression are [ $f(4, 125) = 3.460, p < 0.05, R^2 = .100$ ]. It's also show that 3 from 4 factor are statistically significant predicted respectively demographic, socio-economic, and personal attitude. Therefore, the result show the null hypothesis is rejected while the alternative hypothesis of demographic, socio-economic, and personal attitude was accepted. Its mean there is an association between demographic, socio-economic, and personal attitude factor of the borrower and defaulting of the student education loan (NHEFC) in Malaysia. The variable under demographic factor was

positive significant association are marital status, type of educational institution, and graduation. The variable under socio-economic factor is other loan commitment, and personal attitude toward loan repayment have a significant association with loan repayment defaults.

The study also found that financial constraints such as a high cost of living and monthly payment management by NHEFC are difficulties faced by the borrowers. The financial constraint is one of the hardships faced by the borrowers to repay the NHEFC loan because of the low-income per month. The study found that such financial constraints are faced by 51.5% of the respondents who are employed but the income per month of the respondents is low.

The high cost of living also became a hindrance for the borrowers to repay the NHEFC loan. This is because of the increasing basic expenses such as residence, transportation, food, and other bills. In addition, the difficulties became worse when the respondent has other commitments which need a greater attention than repaying the NHEFC loan. For example, loan for residence, loan for the car and other personal loans. The borrowers feel that the monthly payment management services by NHEFC are inefficient and insensitive. Besides, the difficulty in getting feedback about loan repayment problems slows down the process of education loan repayment by the borrowers.

The study suggests that improvement towards reducing defaults on NHEFC loan can be achieved through the cooperation of three parties involved: the borrower (finding part-time job), NHEFC (improving services), and the government (expanding job market).

## **5.2 Contribution of the Study**

The study investigated the loan repayment default in Malaysia and the findings of the study makes an important contribution to filling the gaps in the literature on defaulting of student loan repayment in Malaysia. This study has identified the factors (socio-economic, personal attitude, and social-cultural) that influence and have effect on the defaulting of student education loan. Furthermore, the finding from this study can help both the policy and practice of student education loan in Malaysia. It also contributes towards improving the current student education loan policy in the country in order to achieve better performance of education loan repayments thereby enhancing student education loan services for the future generation. Based on research findings from this study, some policy suggestions are proposed below.

### **5.3. Recommendations for Policy**

First, the establishment of a special group to work full-time under the research and development (R & D) group to review and re-evaluate the roles and the uses of the systems of student education loan, especially the National Higher Education Fund Corporation (NHEFC). Then, better policy alternatives can be identified to upgrade the education loan institution's services to be more efficient and systematic. This group should act as a qualified consultant for providing flexible proposals or plans for all parties concerned (especially individuals, organizations and the public). The members of the R & D group must be made up of intellectuals from various fields such as economics, administration, information technology, finance and so on.

Second, campaigns and seminars related to student education loans should be organized regularly. Based on the findings, it is evident the exposure of Malaysians in general to student education loans is very limited. Basic knowledge related to student education loans will provide accurate information and promote an awareness of the importance of education loan repayment and raise the level of consciousness especially among borrowers who play a big role in determining the performance of education loan, i.e. avoiding loan default. Campaigns and seminars should be conducted more frequently so that the student borrowers are constantly exposed to the importance of not defaulting on student loans. Long-run campaigns through print and electronic media should be intensified, especially to borrowers and potential borrowers of education loan. It is desirable that this initiative is started at the school level.

#### **5.4 Recommendations for Future Research**

There are two types of recommendations for future research in this area. Firstly, future research can extend generalizability to a broader population by conducting the interviews and questionnaire survey with larger samples. It is possible to conduct the future research including the borrowers of the NHEFC loan who are still studying in order to examine the use of loan funds provided during the period of their learning. This can help educational lenders to review the loan amount granted by courses and types of educational institutions so as to reduce the loan amount for the purpose of using the loan only for studies. This future research can help both sides whether the lender and the student borrower by reducing the amount of loan and the service fee.

Secondly, future research can focus on the services provided by the educational loan institution itself. It will be useful to examine the relationship between the services

provided by the educational loan institution and the repayment made by the borrower. The future research can focus on services such as repayment method, counseling session related to financial issues, and other issues to examine the effectiveness of the services provided to the borrower. At the same time, it can help produce new initiatives and improve the current system to deliver better performance.

## **5.5 Research Limitation**

Throughout this research, the researcher faced many hardships to collect reliable and accurate data. For example, the study required a lot of time and use of large fund. This posed serious problems, especially when the researcher didn't have an income and large funding. Furthermore, the hardship became worse when The National Higher Education Fund Corporation (NHEFC) has taken a lot of time to give the approval required to conduct interviews with their staff. The collecting data (questionnaire survey) involved a lot of time and high cost for transportation. During conducting the questionnaire survey, the researcher also faced difficulties to find respondents who are willing to participate in this study. Additionally, the number of respondents who volunteered to participate in this study was limited, although the researcher used various distribution methods to attract the respondent to get involved in the study. The difficulty in finding the respondents for this study caused severe delay to the project. Despite these constraints faced by the researcher the study produced results which make significant contribution to the literature in this area and the policy world.



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