

FINANCIAL LITERACY: A POSSIBLE SHORTCOMING OF THE ECONOMICS  
CURRICULUM IN LEBANESE SCHOOLS

A Thesis

Submitted in partial fulfillment

of the requirements for the degree of

Master of Arts in Education: Educational Management School Leaders Program

by

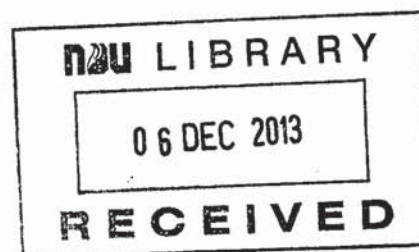
Pascale E. El Hayek Bassil

Department of English, Translation, and Education

Notre Dame University - Louaize

Lebanon

Fall 2013



FINANCIAL LITERACY: A POSSIBLE SHORTCOMING OF THE ECONOMICS  
CURRICULUM IN LEBANESE SCHOOLS

A Thesis

Submitted in partial fulfillment

of the requirements for the degree of

Master of Arts in Education: Educational Management School Leaders Program

by

Pascale E. El Hayek Bassil

Department of English, Translation, and Education

Notre Dame University - Louaize

Lebanon

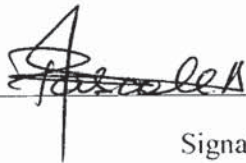
Fall 2013

**Thesis Committee:**

<i>Name</i>	<i>Signature of Approval</i>	<i>Date</i>
<u>Dr. Christine Sabieh</u>	<u>CSabieh</u>	<u>Oct. 29. 2013</u>
Dr. Christine Sabieh, Professor Advisor		
<u>Bassel Akar</u>	<u>B. Akar</u>	<u>30 Oct. 2013</u>
Dr. Bassel Akar, Assistant Professor First Reader		
<u>Dr. Mohamed Hamadeh</u>	<u>MHamadeh</u>	<u>Oct 30, 13</u>
Dr. Mohamad Hamadeh, Professor Second Reader		

I, Pascale El Hayek, authorize Notre Dame University –  
Louaize to supply copies of my thesis to libraries or individuals on request.

I, \_\_\_\_\_, do not authorize Notre Dame  
University – Louaize to supply copies of my thesis to libraries or individuals on request.

  
Signature

12/11/2013  
Date

This thesis is dedicated to my father, a great educator whose legacy lives on through us.

He believed that education is the only weapon that should be used to improve any society.

## ACKNOWLEDGMENTS

This thesis would not have been possible without the help, guidance, and insightful criticisms of my Advisor, Dr. Christine Sabieh. She has taught us not to settle for what is good, but thrive for what is best. The good advice and support of Dr. Mohamad Hamadeh and Dr. Bassel Akar have been invaluable. I would like to acknowledge the support of the Department of English, Translation, and Education at Notre Dame University, in particular Dr. Sami Samra and Dr. Carol Kfoury.

I would also like to thank Jesus & Mary School and Fr. Tannous for giving me the opportunity to pursue graduate studies in education, especially Dr. Rita Zgheib for believing in me.

The friendship of Hani Hachem and Sara Dunya Chemali, my classmates, is much appreciated. Our research related discussions gave me the required motivation.

Mere expression of thanks are not enough to say how grateful I am for the patience and encouragement of my husband George, my sister Stephanie, my mom and siblings.

Many thanks to all JM Graduates who made my study possible.

# FINANCIAL LITERACY: A POSSIBLE SHORTCOMING OF THE ECONOMICS CURRICULUM IN LEBANESE SCHOOLS

Pascale E. El Hayek

## **Abstract**

The purpose of the mixed method research was to determine the level of financial literacy among third secondary students of a private catholic school in Lebanon and determine whether such skills were being acquired from the economics program at this school or from university, work experience or family life. The qualitative study measured the financial literacy of 54 third secondary students and 49 graduates of that same school using a standardized survey. Results showed that: 1) the mean core of third secondary students was below the passing grade, 2) the mean score of third secondary sociology and economics section was significantly higher that of the sciences sections, 3) the mean score of graduates was significantly different that of third secondary students, 4) the mean score of graduates who pursued business studies was not significantly higher than those who pursued non-business studies, 5) there existed a correlation between scores and level of education of parents. The qualitative study featured a curriculum mapping which revealed that not many financial literacy concepts were integrated in the economics curriculum and focus group discussions with teachers and adults who confirmed the low levels of financial literacy among students and peers and their reliance on parents for financial advice. It was concluded that the Lebanese Economics curriculum did not provide the required financial literacy education. Its integration was recommended.

## TABLE OF CONTENTS

	Page
List of Tables .....	xii
List of Figures .....	xiii
Abstract .....	vi
Chapter 1: Introduction .....	1
Statement of the Problem .....	5
Purpose of the Study .....	7
Variables .....	7
Hypotheses and Research Questions .....	8
Hypothesis 1 .....	8
Question 1 .....	8
Hypothesis 2 .....	8
Question 2 .....	8
Hypothesis 3 .....	8
Question 3 .....	8
Hypothesis 4 .....	8
Conclusion .....	9
Chapter 2: Review of Related Literature .....	11
Introduction .....	11
The International Scene: Initiatives and Evaluation .....	11
Developed Countries .....	13
Canada .....	13

Australia .....	16
New Zealand .....	18
Developing Countries .....	21
Zambia .....	22
Turkey .....	23
India .....	25
Financial Literacy in Lebanon .....	27
Financial Literacy Initiatives in Lebanon .....	30
Conclusion .....	30
Chapter 3: Methodology .....	32
Introduction .....	32
Design .....	32
Participants .....	33
Survey Participants .....	33
Group 1 .....	33
Group 2 .....	34
Economics Curriculum .....	34
Teachers .....	35
Adults .....	35
Ethical Considerations .....	35
Instruments .....	36
Survey .....	36



Survey 1: The 2008 Survey of Personal Financial Literacy among High School Students.....	36
Survey 2: The 2008 Survey Personal Financial Literacy among College Students.....	37
Survey 3: 2012 Survey of Personal Financial Literacy among Third Secondary Students: Customized version of the 2008 Questionnaire created by the Jump\$tart Coalition .....	37
Survey 4: 2012 Survey of Personal Financial Literacy among College Students: Customized version of the 2008 Questionnaire created by the Jump\$tart Coalition .....	40
Discussion Questions with Teachers .....	41
Discussion Questions with Adults .....	41
Curriculum Checklist .....	42
Procedure .....	42
Data Analysis .....	44
Conclusion .....	45
Chapter 4: Results .....	46
Research Question 1 .....	46
Hypothesis 1 .....	46
Survey 3 Results .....	46
Research Question 2 .....	47
Personal financial concepts .....	50
Financial products and services concepts .....	50

Consumer rights and responsibilities concepts .....	50
Hypothesis 2 .....	51
Focus Group Discussions with Economics Teachers .....	52
Question 1 .....	53
Question 2, 3, 5 .....	53
Question 4, 6 .....	53
Research Question 3 .....	54
Hypothesis 3 .....	55
Hypothesis 4 .....	57
Focus Group Discussion with Adults .....	59
Question 1, 2 .....	60
Question 3, 4 .....	60
Question 5, 6 .....	60
Conclusion .....	61
Chapter 5: Conclusion .....	63
Interpretations .....	64
Research Question 1 .....	64
Research Question 2 .....	65
Research Question 3 .....	67
Conclusion .....	71
Limitations .....	72
Recommendations .....	75
References .....	78

## APPENDICES

Appendix A – Financial Literacy Concepts of Australian Framework for Financial Literacy .....	101
Appendix B - Financial Literacy Concepts of Indian Framework for Financial Literacy .....	102
Appendix C – Economics Curriculum Standards of a Lebanese Private School .....	105
Appendix D – General Objectives of Teaching Sociology and Economics in Secondary Classes .....	113
Appendix E – Economics Curriculum Specific Objectives .....	114
Appendix F – 2008 Survey of Personal Financial Literacy Among High School Students .....	120
Appendix G - 2008 Survey of Personal Financial Literacy Among College Students .....	130
Appendix H – 2012 Survey of Personal Financial Literacy Among Third Secondary Students .....	135
Appendix I - 2012 Survey of Personal Financial Literacy Among Former Graduates .....	142
Appendix J – Focus Group Questions for Economics Teachers .....	149
Appendix K – Adults Focus Group Questions .....	150

## LIST OF TABLES

Table	Page
Table 1. Conceptual Definitions of Financial Literacy .....	89
Table 2. Financial Literacy of Lebanese Women Compared to those in the MENA Region .....	90
Table 3. Distribution of Economics Period per Week/Year .....	91
Table 4. Descriptive Statistics for Third Secondary Students and Graduates Samples ...	47
Table 5. Curriculum Mapping of the Economics Program Implemented at a Private School .....	48
Table 6. <i>T</i> Test Comparing the Means between Subgroups of Group I .....	52
Table 7. <i>T</i> Test Comparing Mean Scores between Group 1 and Group 2 .....	55
Table 8. Survey Score Percentages of both Group 1 and Group 2 .....	57
Table 9. Survey Response Rates .....	92
Table 10. <i>T</i> Test Comparing Mean Scores between Group 2A and Group 2B .....	58
Table 11 Correlation – Education level of parents .....	59

LIST OF FIGURES

Figure	Page
Figure 1. Economic Growth in Lebanon .....	100

## **Chapter One**

### **Introduction**

A very important topic in the field of Economics is the growth rate of economies that marks either an improvement or a deterioration of the economic situation. Generated income, measured by GDP per capita, is the motor of growth of any economy and is affected by its poverty rate, the soundness of its financial system, and bankruptcy challenges which have become very common terms around the world right after the latest financial crisis in 2008.

According to Banque Audi's Economic Report on Lebanon (2012), the economy has been witnessing a steady decrease in growth since 2008, the year marked by the beginning of the financial crisis (see Figure 1). The declining Real GDP growth numbers after the year 2008 clearly showed that the Lebanese economy was affected by the global financial crisis. Thus the educator-researcher chose to tackle financial literacy in her research because of its direct effect on consumers' financial behaviors, management of their current and future income, and accordingly growth or recession of the Lebanese economy because it prepares them to better face the financial challenges of the modern economy.

The world we live in today has become financially, extremely sophisticated leaving cash holders, who might not have received any form of financial education, with diverse decisions to take regarding their financial survival. While financial education concerns all ages, the International Network on Financial Education (2011) as published in the final draft entitled the Guidelines on Financial Education at School and Guidance on Learning Framework considered that the education of the younger generation on

financial issues has become all the more important since they will likely bear more financial risks and be faced with increasingly complex and sophisticated financial products than their parents. The young have access to, and are being offered, financial services at ever earlier ages (through pocket money, cell phones, bank accounts, or even credit cards). The Credit Union National Association estimated the purchasing power of young people between the ages of 5 and 19 in the United States was \$150 billion annually (Kelly, 2002). Yet, most recent surveys showed worrying low levels of youth financial literacy and capability and, in many cases, significantly lower levels than older generations (International Network on Financial Education, 2011).

Financial literacy had been characterized by its relevance to all consumers regardless of their wealth or income and described as a broad concept that included both information and behavior (Miller, Godfrey, Levesque & Stark, 2009). As a topic, financial literacy has gained the growing attention of policy makers, financial authorities, and consumer groups since its deficiency can affect consumers' day-to-day money management (Braunstein & Welch, 2002). Kelly (2002) argued,

There is considerable evidence that financial illiteracy has reached record proportions, and its impact has contributed significantly to rising levels of bankruptcy and to lowering the standard of living in general for many American families. (p. 3)

The ease of access to financial instruments, increasing purchasing power of the young, the young age of consumers of financial services, and its direct relation with income generation, pointed at the importance of discussing the status of financial literacy.

There is no universal definition of financial literacy. The definition varies among countries and organizations. Table 1 summarizes the breadth of conceptual definitions of financial literacy (Hung, Parker & Yoong, 2009).

The definitions listed in Table 1 were either too broad, such as the first three, or too specific, such as the fourth one, or lacking any objective such as the last five.

For the purpose of this study the educator-researcher chose the following definition: *financial literacy*, as defined by the National Financial Educators Council (2007), is “possessing the skills and knowledge on financial matters to confidently take effective action that best fulfills an individual's personal, family and global community goals”.

The definition used simple wording and has a renowned author, since NFEC provided financial education solution to individuals, schools, businesses, families, government and nonprofit organizations around the globe to improve financial literacy (NFCE, 2007). Most importantly, the NFEC highlighted financial literacy as a skill that enhanced the well-being of a community as a whole. In other words, the well-being of a community would address the macroeconomic goal of real income growth. Also, the chosen definition described financial literacy as a ‘skill’ needed for effective financial decision making rather than another type of knowledge.

Amidst the growing international focus on financial literacy education, there was a division over the best implementation strategy that yielded the desirable change in consumer behavior. A study concerning the effectiveness of financial literacy in improving consumers’ personal financial management showed mixed results in the



United States (Braunstein & Welch, 2002). Some programs were found successful in improving financial management behavior such as maintaining a mortgage, increasing savings, or participating in employer-sponsored benefit plans, whereas others, such as the 2002 study whose subjects were students who had received an entire semester of training scored a bit worse on the test than those who had not. Students in states having a statewide training requirement scored worse than those in states having no requirement (Braunstein & Welch, 2002). It is also worthy to note, that in that same study, students who had participated in an interactive stock market game scored higher than both groups. In its *Guidelines on Financial Education at School and Guidance on Learning Framework*, the International Network on Financial Education (2011) found that the successful integration of financial education in school curricula showed to be challenging influenced by many factors such as the lack of resources and time, already packed curricula, insufficient expertise, and lack of quality materials.

On the other hand, the National Endowment for Financial Education believed that as few as ten teaching hours of financial education at school can improve the money management skills of a student (Education World, n.d.). The Credit Union National Association associated offering financial education to adults since its initiation in 1908 in the United States through free seminars, as part of their mission, with lower bankruptcy declaration by their members than the general public (Kelly, 2002). Moreover, Fadel (2011) found that financial literacy may be effective when integrated into other subject matter but teaching it as a stand-alone core subject was preferable and had significantly higher chances of affecting behavior. Also, Brown (2009) suggested a positive correlation between financial literacy education and financial decision making in the

areas of credit reports and credit scores and discovered that financial training had an effect on students' lifestyle choices, such as what they spent on groceries.

Thus the significance of financial literacy and the origin of its acquisition remain debatable to this date which is what this paper intended to explore at the level of one school in Lebanon.

### **Statement of the Problem**

The lack of financial education or financial literacy among consumers has been widely discussed during the last decade in conferences (l'Education Financiere des Francais in 2004, OECD-Banque du Liban International Conference on Building Financial Education in 2010, International Conference on Financial Education and Financial Awareness: Challenges, Opportunities and Strategies, Istanbul, 10 March 2011) and workshops, consultation and policy papers (Guidelines on Financial Education at School and Guidance on Learning Framework, A Sound Investment: Financial Literacy Education in Ontario Schools, The Case for Financial Literacy in Developing Countries, Providing and Funding Financial Literacy Programs for Low-income Adults and Youth, Financial Education: A Review of Existing Provision in the UK, Financial Literacy: Australians Understanding Money, Australian National Consumer and Financial Literacy Framework, ASIC Consultation Paper 45: Financial Literacy in Schools, Financial Literacy: A Federal Certification Process for Providers Would Pose a Challenge, Working Paper 0803 Do Financial Education Programs Work?, Policy Research Working Paper 5326 Consumer Protection and Financial Literacy: Lessons from Nine Country Studies) around the world. The Australian Securities and Investments Commission in its Consultation Paper regarding financial literacy in schools reported that the costs of

financial illiteracy were enormous and difficult to quantify giving the example of prospectuses and scams which have revealed losses to Australian consumers of up to \$800 million from the year 2000 (ASIC, 2003).

Many policy makers around the world modified their educational policies to integrate or introduce financial education in schools after the results of specialized task forces who were responsible of assessing the situation of financial literacy locally. Some of those countries were India, Lithuania, Zambia, Australia, Canada, United States, and New Zealand. Fadel (2011) has identified financial literacy as an essential 21<sup>st</sup> Century interdisciplinary theme that should be taught in schools alongside core subjects. Among contexts teaching financial literacy, Austria, Australia, Japan and the state of Wisconsin developed four of the best financial education curricula for schools. It is worth noting that in Lebanon, to the date this research was published, no policy calling for the integration or introduction of formal financial literacy education had been proposed or ratified.

The educator-researcher believed that a study, similar to the one conducted by the specialized Canadian Task Force, should be conducted in Lebanon to examine the need for integrating financial literacy in the Lebanese school curricula. The educator-researcher taught economics to secondary students for seven years and has strongly felt the need to integrate financial literacy in the Economics Curriculum in Lebanese schools. However she realized that a diagnostic study was required first to examine the validity of that need. The educator-researcher was aware of the lack of time and financial resources required to conduct such a study at a national basis and thus, and chose to begin with the school where she worked.

**Purpose of the Study**

The aim of the study was two-fold. The first was to measure the degree of acquisition of financial literacy among grade 12 students in the private Lebanese school where the educator-researcher taught. The second was to seek the origin of financial literacy acquisition so as to validate the recommendation to its integration in the Economics Curriculum adopted in that particular private school. The study was designed as a pilot study to gather information about the level of financial literacy in one private school in Lebanon and to suggest embedding concepts of financial literacy that were missing in the economics curriculum.

It was the intention of the researcher to use the findings in the future to initiate a larger research study and to suggest proposals about the economics curriculum revealing opportunities for teaching financial literacy, resource development and/or institutional support to promote improved financial literacy levels in that particular private school.

**Variables**

The dependent variable of the study was the degree of financial literacy among third secondary and graduates of one private school in Lebanon measured by the score generated from their answers to a survey on the topic. It was a numerical ordinal variable that was labeled as “score”.

The degree of financial literacy however might be influenced by several independent variables which were identified by previous studies conducted in different countries at different time intervals: income level of parents, educational background of the parents, possession of assets, educational plans, possession of credit cards and other bank accounts, employment status, and specializations and majors pursued.

### **Hypotheses and Research Questions**

The basic research question addressed the first purpose of the study. It was a quantitative research question that will enable the measurement of the degree of financial literacy among third secondary students of a private catholic school in Lebanon.

**Question 1.** To what extent are third secondary students of one private school in Lebanon financially literate?

**Hypothesis 1.** The average financial literacy scores of both the third secondary students (Group 1) and graduates (Group 2) of the school where she worked and where the study took place were low.

**Question 2.** To what extent does the Economics Program implemented in that private school, in its current form, impact students' survey of financial literacy scores?

**Hypothesis 2.** The average scores of financial literacy of Group 1A (third secondary Sociology and Economics Section) would be significantly higher than the average scores of Group 1B (third secondary students Scientific Sections).

**Question 3.** To what extent is financially literacy acquired from university, work, or maybe family life?

**Hypothesis 3.** The average scores of financial literacy of Group 2 would be significantly higher than the average scores of Group 1.

**Hypothesis 4.** The average scores of financial literacy of Group 2A (graduates who pursued business studies at university) would be significantly higher as opposed to average scores of Group 2B (graduates who pursued non-business studies at university).

## **Conclusion**

Financial literacy has become the concern of policy makers, financial institutions, and educators over the past decade. In a report presented to the congressional committees in June 2011, the aggregate number of public and private non-profit organizations providing financial literacy education to Americans was determined to be in hundreds (United States Government Accountability Office, 2011). Studies suggested that access to financial literacy programs has become a pressing need in the world driven by higher unemployment rates, increasing individual responsibility for investment decisions, increasing levels of indebtedness and a longer life expectancy (Fadel, 2011), especially youth and families transitioning from welfare to self sufficiency (Friedman, 2005). The effectiveness of financial education still remains debated because the literature has not succeeded in establishing the extent of the benefit provided by financial education programs, nor has it provided conclusive support that any benefit in education at all exists (Hathaway & Khatiwada, 2008).

There is no official course providing financial literacy education in Lebanese schools, private and public. Yarak (2011), the General Director of the Ministry of Education, noted that currently, Lebanese citizen are clearly behind in term of basic financial education with dramatic implications on their immediate and long term life conditions.

Thus, the aim of the study was to examine the situation of financial literacy in a private school in Lebanon and assess the grounds to its introduction in that particular school.

The next unit will present relevant research studies on the situation of financial literacy in general and in Lebanon specifically.

## **Chapter Two**

### **Review of Related Literature**

#### **Introduction**

In chapter two, a detailed review of financial literacy levels in foreign countries is discussed followed by an exploration of financial literacy initiatives in these countries and their evaluation. The chapter also includes a review of previous financial literacy studies conducted in Lebanon.

#### **The International Scene: Initiatives and Evaluation**

Countries around the globe have been investing resources to implement financial literacy programs having realized the importance of such education in maintaining healthier financial systems especially after the financial crisis.

In 2011, President Obama declared April to be the National Month of Financial Literacy (U.S. Department of Education, 2012). In July 2008, the Ministry of Education in Mexico, the Mexican Senate, and the Organization for Economic Cooperation and Development organized a conference that allowed the authorities to establish the design of the national financial education strategy (Osorio, 2010). In October 2010, Bank Al Maghrib in Morocco announced that they had an ongoing project on financial education (Bank Al Maghrib, 2010). In the United Kingdom, CFEB, The Consumer Financial Education Body, was established by the UK's financial regulator, the Financial Services Authority which is held responsible to work to have better informed and more confident consumers who are able to take greater responsibility for their financial affairs and choose products and services that meet their needs (Stillwell, 2010). Studies measuring financial literacy among people were conducted in several of these countries. Results



warned of low levels of financial literacy in most countries, including developed and developing (Laboul, 2010).

After conducting studies in developing countries such as India, Zambia, and South Africa, Miller, Godfrey, Levesque, and Stark (2009) found results that reinforced the low levels of financial literacy in developed countries:

In India, for example, more than half of laborers surveyed indicated that they store cash at home, while borrowing from moneylenders at high rates of interest. This pattern of behavior (high-interest loans and no-interest savings, with the attendant high risk of theft—or “frittering away”—of savings) worsened their financial situation. In Zambia and six other African countries, only 29 percent of adults had a bank account and 50 percent used no financial products at all. In South Africa, a recent survey found that nearly 60 percent of the people surveyed did not understand the term “interest” (p.4).

The above examples showed that there was an international trend or need among both developed and developing nations to learn more about the situation of financial literacy locally to see whether the issue needed to be addressed at the national level to promote some kind of financial education initiatives. Since the literature showed a growing interest and investment in financial literacy education, it was important to review the procedures of financial literacy initiatives adopted by some countries searching for the most appropriate framework that could be implemented for the purpose of this research.

Literature in both developed and developing countries, even though, indicated different approaches to financial literacy initiatives, showed a sort of recurring sequence

among them. It also revealed that programs developed to improve financial literacy became more targeted, there was an increased focus on school students, and the creation of one or more body to coordinate the strategy aimed at improving financial literacy at a national level (Widdowson & Hailwood, 2007).

The educator-researcher felt compelled to study the situation and frameworks for financial literacy initiatives in developed countries because of several factors. First, developed economies harbored much more advanced financial systems than those of developing countries leading to the creation of much more complex financial services and tools. Thus, the level of financial literacy in developed countries might be a ground for similar studies in developing countries such as Lebanon. Second, compared to developing countries, the developed world had more resources to spend on research studies and testing pioneer educational initiatives such as integration of financial literacy in school programs. Third, the educator-researcher had easier access to full policy and curricular documents compared to partial or lack of access in developing countries. Fourth, the Lebanese educational curricula were based on adapted combinations of the curricula of offered by American and French missionaries who were pioneers in providing education before the year 1943, the year Lebanon took its independence (Frayha, 2009). The United States and France are among the leading developed countries in today's world.

Showcased below, were initiatives in each of Canada, Australia, and New Zealand.

#### **Developed Countries**

*Canada.* In a study conducted by the Youthography in 2009 in Canada, it was found that only 28 per cent of students felt that they were knowledgeable about money and that made good spending decisions and only 38 per cent of students felt prepared to

manage their money after graduation (Working Group on Financial Literacy, 2010). The Canadian Curriculum Council assigned a committee, the Working Group, to gather information and conduct consultations about ways to embed financial literacy education in the Ontario curriculum starting fall 2011 (p. 4). The study of the Working Group consisted of a review of strategies implemented in Canada and around the world, focus groups with stakeholders, an online survey to students, parents, and other stakeholders, presentations and discussions with experts in the field and researchers. A key finding of the study was an overwhelming consensus among students, parents, and the business community, that financial literacy was an essential lifelong skill that was critical for students' ability to make sound financial decision throughout their lives. This, in turn, will contribute to strengthening society as a whole. The Working Group, as a result of this study, was able to specify topics that needed to be covered in financial education programs in schools: "the concepts of income, money, earning, saving, spending, investing, budgeting, credit and borrowing, risks and rewards, compound interest, pensions, insurance, taxes, and planning ahead, how the financial system works, the difference between wants and needs, consumer awareness and advertising, fraud and its consequences, future consequences of financial decisions, how to plan for life after high school" (p. 13). The report of the Working Group found "a broad consensus that financial literacy education" should be based on "real life experiences such as games, simulations, and web based tools that reflected real situations" (p.18). Upon the review of the curricula searching for already existing opportunities for students to learn about financial literacy topics, the Working Group found such possibilities in elementary and secondary levels. At the elementary level, it was found that financial literacy concepts could be

integrated in mathematics, through the exploration of media in the language curriculum, and in social studies. At the secondary level, the skills and concepts associated with financial literacy were addressed most frequently in the curriculum for business studies, Canadian and world studies, guidance and career education, mathematics, and social sciences and humanities.

In these and other disciplines, financial topics might be the focus of several expectations or of a section within a course or the focus of an entire course (p. 9).

Consequently it was recommended to make financial literacy a compulsory part of the Ontario curriculum, introducing and integrating it at the earliest classes possible in age-appropriate and effective ways to build on the existing foundation (Working Group, 2010; Fadel, 2011).

The educator-researcher chose to simulate the Canadian framework for financial literacy because she found it relevant to her case study since the study was initiated among school students and took into consideration the teachers' feedback and entailed a curriculum mapping which matched the three phase procedure of the research study. Moreover, detailed information about the procedure was available and the framework was tested and scientifically approached yielding clear and measurable results.

Fadel (2011), in his research paper prepared for the Canadian Task Force on Financial Literacy recommended the use of a student financial portfolio, a real-life tool that tracked a student's personal financial situation. The portfolio included academic work, resumes, personal reflections, and the student's savings and assets and served as a means to modify behavior not just acquire the knowledge. Fadel (2011) preferred introducing financial literacy as an add-on mandatory subject in school on its integration

into existing subjects such as Math and History because he assumed the former would have the highest likelihood of affecting behaviors. He also stressed the importance of beginning to teach financial literacy at very early levels to achieve the goal of modifying behavior.

In 2011, the Ministry of Education in Canada published a document entitled *The Ontario Curriculum Guide on Financial Literacy* in which it was stated that the Ministry was working to embed financial literacy expectations and opportunities in all subjects in Grades 4 to 8 and all disciplines in Grades 9 to 12 in the Ontario curriculum (Ministry of Education, 2011).

The Ontario educational authorities chose to integrate financial literacy in the school curriculum as at elementary to achieve the goal of a more financially literate population and thus a more sound financial system in Canada. Therefore, even when a separate financial literacy education was judged to be more efficient in shaping behavior, educational authorities could not but take into consideration the time and money resources required for such an initiative.

*Australia.* The Australian Securities and Investments Commission is Australia's corporate, markets and financial services regulator (Australian Securities and Investment Commission, 2012). The main role of this commission is to ensure the economic well-being of Australia's financial markets by enhancing the participation of confident and informed investors and consumers in this sector. Concerned about the status of financial literacy in Australia, the commission prepared a consultation paper in 2003 addressing the problem. A survey on financial literacy of adult Australians associated the lowest levels of financial literacy with people at both extremes of the age profile (18–24 year

olds and those aged 70 years and over), those having lower education (Year 10 or less), those not working for a range of reasons or in unskilled work, those with lower incomes (household incomes under \$20,000), those with lower savings levels (under \$5000), and single people (ASIC, 2003). Falling in the lowest age interval of 18-24 years old, implied that school and university students were the least financially literate but they were cash holders and they also had access to many financial tools as at a young age. Results also hinted that financial literacy might be acquired on the job or with more work experience. Following the results of the survey the Commission conducted a curriculum mapping in schools to learn about the situation of financial literacy in 2003 (p. 16).

The concepts presented in the Australian curriculum mapping (see Appendix A) were clearly classified under three main headlines that the educator-researcher found the most relevant to the chosen definition of financial literacy for the study and thus, used the former for the mapping of the Economics curriculum implemented at the private school where she worked and where the study took place.

Findings of the curriculum map revealed that financial literacy was not a formal course in most of the states. However the mapping showed that there was a place in the curriculum framework (implicitly or explicitly) for the development of a unit of work and supporting materials that addressed financial literacy specifically in Math and Studies of Society and Environment (p. 23). The problem resided in that Strands within the Studies of Society and Environment (SOSE) framework were often optional. Therefore, although financial literacy opportunities existed in a strand in each SOSE framework not all students will necessarily be exposed to financial literacy learning (p. 24). Accordingly, it can be said that for financial literacy education to be effective, it is not enough to ensure

that the concepts are listed somewhere in the curriculum, rather they have to be included in courses or years that are considered as requisites for others.

The Commission recommended the creation of a body that would supervise the launching of financial literacy awareness in schools and for the adult populations (p. 62) and the integration of financial literacy in the existent curricula (p.47). In 2005, the Ministerial Council on Education, Employment, Training and Youth Affairs developed the National Consumer and Financial Literacy Framework where financial literacy was embedded in the curriculum for English, Mathematics, Science, Humanities, Business, Commerce, Economics, Technology, and Enterprise (Ministerial Council on Education, Employment, Training and Youth Affairs, 2005). The framework was revised in 2011 to study its efficiency however the results had not been published yet.

In 2009, the Commonwealth Bank in Australia, determined to bring financial literacy to one million kids, invested \$40 million in school banking marking the importance of this education in safeguarding a sound financial system (Commonwealth Bank, 2009). This might be an indication of how crucial government investment seemed to be in promoting financial literacy.

The case of Australia left a very big question to explore in the literature on Lebanon. If the initial survey results showed that Australian households with less than \$20,000 in income were the least financially literate, would low-income families in Lebanon show less financial literacy than those with higher income?

*New Zealand.* The educator-researcher chose to focus on the case of New Zealand in the review of literature among many other developed countries because the results of its national survey on financial literacy were deemed acceptable. Yet the

government developed a framework to improve levels of financial literacy among its citizens. And thus, the educator-researcher, unable to predict the outcome of her pilot study in Lebanon because of the very few surveys previously conducted, would need to recommend a framework to be implemented in Lebanon in case her data analysis yielded similar results. In New Zealand talk about financial literacy started back in the 1990's (Feslier, 2006). This country witnessed the deregulation of its financial sector in 1984 (The New Zealand Treasury, 2010) and has experienced ever since a larger growth in debt than the growth of household income (Widdowson & Hailwood, 2007). The deregulation of the financial sector also allowed the proliferation of very complex financial products that consumers did not understand making them accessible to people from different socioeconomic backgrounds (Feslier, 2006). New Zealand was affected by the economic downturn that followed the financial crisis and by the collapse of finance companies in the country highlighting the importance of financial literacy (The New Zealand Network for Financial Literacy, 2012).

A survey of personal financial knowledge was undertaken in 2005 that revealed that overall New Zealanders had an acceptable level of personal financial literacy knowledge (Feslier, 2006). However, results showed that understanding of certain concepts was very weak such as compounding interest, knowledge of mortgages, and investment strategies all of which were concepts indirectly related to the stability of the financial sector (p. 12). Two following surveys conducted in 2006 by ANZ-Retirement Commission entitled Financial Knowledge Survey, and a poll commissioned by the Reserve Bank in 2007 showed similar findings as those in 2005:



New Zealanders were aware of some of the financial issues that they faced, but they were ill-equipped to make financial decisions. They did not effectively understand the basic financial terms or instruments or, more worryingly, the concept of risk and return. Furthermore, they did not use existing financial disclosures or credit ratings in a manner that would enhance their understanding of financial exposures (Widdowson & Hailwood, 2007).

The above showed that financial literacy was not fully acquired from work experience because the survey was administered to people of different ages and with different statuses which was why integrating such an education in school curricula might have been a way to solve this problem.

Widdowson and Hailwood (2007) explained that the lack of financial literacy might be one of the factors that hindered growth in New Zealand since the choice of investments affected the efficient allocation of the scarce resources in the economy (p. 41). Could that mean that its acquisition provokes growth in Lebanon?

The government committed to improving the levels of financial literacy within the population launched the National Strategy for Financial Literacy in June 2008 (Working Group on Financial Literacy, 2010). The Strategy was revised in 2012 to ensure its relevance (The New Zealand Network for Financial Literacy, 2012).

Financial literacy concepts were integrated in the New Zealand Curriculum in 2007 (The New Zealand Network for Financial Literacy, 2012) across learning areas: language, social studies, mathematics, and technology for students between the ages of five and fourteen (Working Group on Financial Literacy, 2010). It was worth noting that even though financial literacy rates were acceptable in New Zealand, the government still

worked on integrating this education into the school curricula to avoid as many bad investments in the future. Did that mean that integration of financial literacy in national curriculum was a trigger for growth?

Despite the availability of various programs offering financial literacy education in New Zealand, research measuring their effectiveness was not numerous (The New Zealand Network for Financial Literacy, 2012). The government agreed to try out the Program for International Student Assessment in 2012 which enabled the assessment of gaps, needs, and strengths (p. 10). Those assessments would be helpful for countries that have not developed their own educational framework for financial literacy, like Lebanon, if proven in need of it, to help local authorities devise the most efficient strategies out of the limited resources they have. The necessity of assessing financial literacy education reinforced the importance of starting with a pilot study in Lebanon before initiating a strategy at the national level.

### **Developing Countries**

Financial literacy was considered even more important of a topic in developing countries because the majority of the estimated 150 million new consumers of financial services that were being added on a yearly basis to the global economy were citizens of developing countries (Rutledge, 2010). Rutledge (2010) advocated that financial literacy enabled consumers to evaluate the risk and rewards of each of the financial services or products and expanded their use of financial services since they would be more confident about their knowledge of them and thus contributed to the growth of the financial sector which would in turn positively affect the GDP of the country.

An exploratory study on financial illiteracy among university students in South Africa indicated moderate levels of illiteracy reinforcing the need for financial education since the subjects of the study were all educated (Rugimbana & Shambare, 2012). Another study on the financial well being of Malaysian college students showed that financial literacy was related to the latter's financial well being and consequently recommended the provision of financial education (Sabri, Cook & Gudmunson, 2012). A study conducted at the University of Cape Town in Ghana among undergraduate and postgraduate students found that age, work experience, and mother's education were positively related with financial literacy (Ansong & Gyesare, 2012). Other factors such as the work location, the father's education, and the student's educational level were not significantly correlated to financial literacy. Accordingly, Ansong and Gyesare (2012) recommended the involvement of parents in any financial education programs.

Financial literacy initiatives in Zambia, India, and Turkey were separately considered in an attempt to see whether those developing countries shared similar levels of financial literacy and common factors correlated with its acquisition.

**Zambia.** Zambia launched its National Strategy on financial Education in July 2012 (Ng'andu, 2012). The strategy was the result of consultations that took place after studies on Financial Sector Assessment Program were conducted in 2002 and 2003 (Ng'andu, 2012).

Even though there was no mention of a national survey on financial literacy in the review of literature, facts shared by Zambian officials pointed at very low levels of such knowledge. Dr. Phiri, the Minister of Education, stated that the levels of financial literacy among teachers in the country were very low and that they were heavily indebted

(Sinyangwe, 2012). Deputy Minister of Finance, Miles Sampa, related corporate and personal financial insolvency and bankruptcy with financial education dysfunction and expressed his growing concern about the over-indebtedness (Mitia, 2012).

Unfortunately the National Strategy had not been published online. The only information given was that the Strategy recognized all the public, private, and non-profit initiatives that were already engaged in promoting financial education in Zambia and provided a coherent and coordinated framework among them all for an effective delivery of financial education across the country (Ng'andu, 2012).

Finally, given that budget constraints are always a major consideration in developing countries, the estimated budget for the implementation of the five years strategy in Zambia was 15 million Kwacha (Zambian currency) equivalent to USD3000 only (Mitia, 2012). In comparison to the millions of dollars that were allocated for such strategies in developed countries, the figure presented by the Zambian authorities would be relieving for developing countries. However, the educator-researcher was aware that no further assumptions could be made in this regard because she did not have access to the five-year Zambian Strategy.

**Turkey.** Turkey was working on promoting financial literacy in collaboration with international organizations and other countries. A conference entitled *Financial Education and Awareness – Challenges, Opportunities and Strategies* was held in Turkey in 2011. The objective behind this conference was to formulate a national strategy for financial literacy in Turkey taking into consideration the successes and challenges of the implementation process of other countries (Yilmaz, 2011).

Following that, a nationwide survey on financial literacy that was completed in June 2012 under the supervision of the World Bank was supposed to provide the Turkish government with insight for its efforts to introduce the national strategy for financial education (Financial Literacy & Education Russia Trust Fund, 2012). The sample size was 3000 of adults only (18 years and above) and was nationally representative. Results of the survey and the strategy formulation had not been shared to the date of publishing of this thesis.

As it appeared, Turkey did not disregard the issue of financial literacy and moved from learning about the challenges faced by other countries to welcoming the conduct of a national survey based on which it would develop the Turkish financial literacy framework. Truly, Turkey reinforced the importance of studying the situation of financial literacy among citizens.

Other individual studies on financial literacy in Turkey were produced and recommended that financial education be implemented across the country.

Altintas (2011) conducted a much smaller in scale study in 2011 to determine the level of financial literacy among university students in Turkey and to highlight the factors affecting financial literacy in such a developing country. Out of the 650 questionnaires distributed, only 335 responses were used. Analysis of the results showed that university students in Turkey did not have the required financial literacy to lead their financial lives effectively (Altintas, 2011). It was also found that class rank, age, family income, and discussion of financial issues with parents were positively correlated with higher financial literacy levels. Surprisingly, participants from business majors were as incompetent as those of non business majors.

Another study on the effects of financial literacy on the borrowing behavior of Turkish financial consumers showed a positive correlation between higher levels of financial literacy and prevention of excessive borrowing (Sevim, Temizel & Sayilir, 2012).

On a same note, the World Bank in its Country Economic Memorandum for Turkey recommended financial literacy education as a means, along with the monetary policy tools, to boost the domestic savings that had declined significantly in the 2000s (The World Bank, 2012).

*India.* Increasing financial literacy in India was the concern of various organizations that have been offering different programs targeting different population age groups (Nash, 2012). The inter-regulatory body under the Ministry of Finance in India, the Financial Stability and Development Council, with an objective to coordinate these various programs and streamline them towards accomplishing the same objectives, submitted the draft proposal for National Strategy for Financial Education in July 2012 without conducting a national survey (TNN, 2012). The strategy was to be implemented according to a five year plan.

One of the surveys conducted showed that India had a financial literacy level of 55% ranking second position after Japan (Nash, 2012). Policy makers on the other hand were concerned with the challenge of transforming the high rate of savings among Indians into investment (TNN, 2012). Thus this formulation of national strategy was recommended to boost investment in a growing economy such as India, and to have an inclusive growth (Financial Stability and Development Council, 2012).

The content of financial education recommended by FSDC (2012) was narrowed down to attitude, financial competencies, and risk assessment and confidence. One of the delivery channels of financial education were the school curricula through an integrated approach rather than another subject matter. In other words financial literacy would be considered as one of the life skills equipped by the educational system in India. This was a very efficient channel since many students did not pursue any studies beyond the school level (p.19). Consequently, by integrating financial literacy education into the school curricula, India ensured that all school graduates acquired those skills upon graduation. In comparison, only half of the Lebanese youth got enrolled in university after school which meant that this channel could prove beneficial in the case of Lebanon as well if the study proved low financial literacy levels.

The draft strategy also included the specific financial literacy topics to be integrated in the school curricula (see Appendix B). The educator-researcher intended to use the detailed list of topics for her recommendation part of the pilot study if the hypothesized low level of financial literacy was valid in Lebanon.

What was found in the Developing Countries section was that every country believed that financial literacy education would positively affect growth by modifying its most serious problematic financial behavior; transfer of savings to investment in India, excessive indebtedness in Zambia, and low savings rate in Turkey. Further, the review of literature provided the educator-researcher with a diverse and consistent portfolio of financial literacy initiatives from around the world, forming a basis and a background for her pilot study in Lebanon. Accordingly, the next section examines previous studies on financial literacy conducted in Lebanon.

### **Financial Literacy in Lebanon**

Review of the literature revealed that very few studies were conducted in Lebanon on financial literacy. Most of the existing studies found investigated financial literacy of women.

Lebanon, as a member of the International Network on Financial Education (INFE), participated in an internationally comparable survey on Financial Education Programs and Gender Issues. The objectives of the survey were to examine the perception of gender gaps in financial literacy, study the level and type of policy concern, and observe the details of financial education programs conducted in the member countries during the last five years (Hung, 2011). The survey identified the following issues as the most pressing aspects of gender disparities in financial matters by Lebanese policy makers: Knowledge of basic financial concepts, access to financial products and services, managing credit, confidence when dealing with financial products and services, saving and investing wisely, day-to-day financial management (Hung, 2011). Moreover, the study determined the following group of women in Lebanon as having a particularly pressing need for financial literacy: low-income, youth, unbanked and underbanked, single mothers, women with disabilities, and employees (p. 19). Lebanon was among the countries that reported having financial education programs that were exclusive to women and other programs inclusive for all (p. 20). However these programs were not mandatory which could be an explanation for the low levels mentioned above.

Another study also targeting the financial literacy of women across Asia/Pacific, the Middle East and Africa demonstrated the importance of work-life-experience in acquiring financial literacy for women (Master Card Worldwide Insights, 2011). The



study consisted of a survey that comprised questions covering three major components: basic money management, financial planning, and investment (p. 5). The findings summarized in Table 2 showed that Lebanese women who were 30 years of age and above scored higher than the younger ones (p. 13) (see Table 2). Lebanese women who were working scored higher than those who were not (p. 14). Unmarried Lebanese women who were 30 years of age and above scored higher than married women the same age.

The report called for improvement of financial literacy among women in Lebanon indicated by its lower Index score (61.8%) and recommended targeted financial literacy as opposed to general education in schools (p. 16). The former was deduced by the lower scores of women below 30 years as compared to women of 30 years and above. Analysis of the findings also suggested that financial literacy was generally more acquired through work-life-experience because of the higher score of the working women versus the not working women and the lower scores of married women versus those of unmarried women (p. 16).

In 2010, Organization of Economic Cooperation and Development (OECD) and Banque du Liban organized a conference on financial education entitled *Building Financially Empowered Individuals*. During the conference the Director General of Education in the Ministry of Education and Higher Education (MEHE), Mr. Fadi Yarak (2010) stated

Lebanese citizens are clearly behind in terms of basic financial education according to a survey conducted in schools (n.p.).

In his presentation during the conference, Mr. Yarak (2010) indirectly correlated the integration of financial literacy and economic growth calling for the integration of financial literacy in schools without further delay. So far we had not seen a public initiative in Lebanon promoting financial literacy.

Similar to the one implemented in Turkey, the World Bank conducted a national survey in Lebanon to measure the financial capability of the citizens (The World Bank , 2012). Specific questions were added to the standard questionnaire that was administered in Lebanon regarding public finance and financial literacy because the topic was deemed important in the Lebanese context. A representative sample of 1200 Lebanese adults (above 18) was visited for the administration of the questionnaire. The survey should have been completed in August 2012 and its results would be shared with the Lebanese Government. The survey was in partnership with Bassel Fuleihan Institute in Lebanon. However, when the educator-researcher contacted the director of the program at Bassel Fuleihan Institute she was denied access to the results of this study because it should be shared with the Lebanese government before its publication.

The few research conducted on financial literacy in Lebanon may be one of the reasons why the educator-researcher planned to carry out the pilot study in a private school and study to what extent its students were financially literate. The review of literature also suggested that further studies should include male populations in Lebanon and implied that further research was needed to really understand the degree of teaching financial literacy in Lebanese schools and whether curricula would be a good source to transfer concepts such as investment.

**Financial Literacy Initiatives in Lebanon**

There were some ongoing financial literacy initiatives in Lebanon. INJAZ Lebanon, a non-profit non-governmental organization affiliated with INJZA Al Arab and Junior Achievement Worldwide, is dedicated to educating Lebanese youth about work readiness, entrepreneurship, and financial literacy (INJAZ Lebanon, 2012). INJAZ offered different programs that provided financial literacy education to Elementary, Intermediate, and Secondary School Students (INJAZ Lebanon, 2010).

Banks in Action was a secondary school program that taught high school students the principles of the banking industry, and introduced them to the challenges of successfully operating a bank in a competitive environment. Personal Finance was another program that demonstrated the importance of planning, goal setting, and thoughtful decision-making within the context of personal financial decisions. The MEHE in Lebanon also built a solid partnership with the Bassel Fuleihan Institute for the purpose of improving the level of financial literacy among youth (Yarak, 2010).

**Conclusion**

It might be concluded that financial literacy has gained momentum after the financial crisis. Countries, both developing and developed, aware of the implications of low financial literacy rates, had either launched their national strategies or were in the formulation stage of doing so.

Thus, the strategies studied, implemented or proposed, highlighted the need for financial education in schools but were divided on the execution. While some countries decided on an integrated approach throughout the compulsory years of education, others advocated the efficiency of a separate subject matter.

The review of literature provided a standard three phased sequence for any study on financial literacy: national survey, national strategy draft based on survey results, comprehensive execution coordinating all already existent efforts towards the achievement of the national strategy objectives.

The Lebanese government was waiting for the results of the national survey conducted by the World Bank to advise on the strategy and policy shifts; in the meantime, the present pilot study in one Lebanese school would be a reference for comparison.

The following chapter will address the methodology used for the pilot study.

## **Chapter Three**

### **Methodology**

#### **Introduction**

This study investigated the origin of financial literacy acquisition among third secondary (grade 12) students and graduates of a private catholic Lebanese school to validate the recommendation for its integration in the Economics Curriculum implemented in that particular private school.

In the methodology chapter, the educator-researcher discussed the participants, instruments used, the design, and the procedure.

#### **Design**

The study was a mixed method pilot study that required the collection and analysis of qualitative and quantitative data to understand the research problem more completely.

In the quantitative part of the research the educator-researcher relied on numerical data. She used a survey to test the dependent variable of the study, financial literacy score, and to determine the magnitude of the relationships between the independent variables and the dependent one.

For the qualitative part of the research, the educator-researcher relied on two instruments to achieve a comprehensive and holistic inquiry of the problem. In this approach, data was collected by mapping the economics curriculum implemented in the school where the study took place using the curriculum checklist of the Australian Framework on Financial Literacy (see Appendix A). The second instrument used was focus group discussions with graduates, teachers, and other adults.

For this mixed method research design, the educator-researcher gave more emphasis on quantitative data, however she was aware that the qualitative data was a necessity complement.

Chronologically, the study began with administering a survey on financial literacy. This was followed by a mapping of the economics curriculum implemented in the chosen private school in Lebanon, and in the last phase the educator-researcher held focus group discussions with economics instructors in neighboring schools, graduates and other adults.

### **Participants**

The study required collecting data from four groups: survey participants, economics curriculum implemented at a private catholic school, economics teachers in neighboring private schools, and adults with whom the educator-researcher held focus group discussions. Samples of each source were conveniently selected since the educator-researcher worked at the school where the pilot study took place and had easier access to students, graduates, and teachers to conduct her study.

#### **Survey Participants**

*Group 1.* Group 1 included students of the Third Secondary Class (Grade 12) at a private Catholic school in Mount Lebanon. The sample consisted of 59 upper middle class female learners who received a trilingual education. None of them was a transfer student which meant that they had all pursued their secondary education at that same school. This first group comprised two subgroups: Group A included all students in the Sociology Economics Section and Group B included students in the Life Sciences and General Sciences Sections. Participants of Groups A and B had received a

different number of economics periods during their secondary years based on their placements in their second and third year secondary (see Table 3). Group 1A had been exposed to 120 more hours of economics in their third year secondary, given that the same teacher taught Group 1A and 1B in the second year secondary. Their ages ranged between 17 and 18 years old.

*Group 2.* The second group of participants (Group 2) consisted of 50 female graduates of the same private school who pursued their secondary level studies after the introduction of the updated curricula as outlined by the Ministry of Education in 1997 which marked the launching of economics as a mandatory subject in the secondary levels. These graduates who had all received a trilingual education were either working or still pursuing their university education. The maximum age of participants of the second group was 31 years. Participants of the second group were divided into two subgroups, regardless of their third secondary year placement: Group 2A were those who had or had been pursuing a business oriented major and Group 2B were those who had or were still pursuing a non-business oriented type of major.

**Economics Curriculum.** The second source of data for the study was the Economics Curriculum implemented at the private catholic school where the educator-researcher worked (see Appendix C). The curriculum under study was based on the Lebanese Economics Program as set by the Center for Educational Research and Development (CERD) in 1997. The term financial literacy was not explicitly mentioned in the General Objectives of Teaching Economics in Secondary Classes (see Appendix D). It was worth noting that there was no set of standards published by the Ministry of Education and Higher Education, MEHE, concerning the curriculum of economics but a

list of General objectives for the Sociology and Economics and a list of Specific Objectives for Economics for each level (see Appendix E).

**Teachers.** The third group of participants was the teachers with whom the educator-researcher held focus group discussions. The group consisted of three teachers of economics one of whom was a common teacher between the same private school where the educator-researcher worked and a neighboring private Catholic school. The teacher in common was a male who taught Economics to first, second, and third secondary classes (Grades 10, 11, and 12). The other two educators were females who worked at the neighboring Catholic schools. One of them was the coordinator of the department of economics and taught the subject to first and second secondary classes (Grades 10 and 11). The educator-researcher selected teachers of those schools because their economics curriculum was also based on the one set by the MEHE.

**Adults.** The educator-researcher held more than one focus group with a total of 30 adults (N=25 females) who were either graduates of the school, their family members or friends, and between 18 or 35 years of age. One of the males had dropped out of school and the rest had completed high school and were either pursuing the undergraduate studies and/or working. Nine of the females interviewed were already enrolled in graduate programs.

### **Ethical considerations**

The dignity and goodwill of students were protected at all times. The survey data remained confidential throughout the study and the educator-researcher made sure the



information was kept anonymous. Teachers, students, and graduates had been all debriefed about the purpose of the study and informed that they were not compelled to share any information for the framework of this research. Also there were no identifiable risks for participating in this study. The information gained from this study would help in determining the origin of acquiring financial literacy in Lebanon and identify channels to reinforce it.

### **Instruments**

For the purpose of this study the educator-researcher used four instruments: survey questions, focus group questions for teachers, focus group questions for adults, and a curriculum checklist.

#### **Survey.**

*Survey 1: The 2008 Survey of Personal Financial Literacy among High School Students.* It is a standardized questionnaire, created by the Jump\$tart Coalition and was used as a basis for the development of the measuring instrument of the level of financial literacy in this study (see Appendix F). The questionnaire was designed by Jump\$tart Coalition to measure financial literacy among high school in the United States.

It had been administered yearly in the US since 1998 and biennially since the year 2000 and completed the first ten years of measuring financial literacy in the United States (Mandell, 2008). Lucey (2005) reported a moderately high degree of consistency overall but found moderate internal consistencies among subscales.

The questionnaire was divided into two parts, the first being a test on personal financial literacy knowledge and the second part constituted classification questions. The first part comprised 31 multiple choice questions that covered the four key areas of income, money management, saving and investing, and spending and credit and their major sub-categories (Mandell, 2008). The 18 classification questions were used to study patterns correlated with higher scores. These included information about the student's gender and race, family assets, educational plans, educational background and level of parents, type of profession students are expected to have in the future, employment history, debt history, courses attended, and finally SAT Scores. All items in the two parts featured structured closed-ended questions

*Survey 2: The 2008 Survey of Personal Financial Literacy among College Students.* It was also designed by the Jump\$tart Coalition and divided into two parts as well (see Appendix G). The first part was made up of the same 31 questions on financial literacy to allow for longitudinal data analysis. There were 25 classification questions part on the other hand. The added items sought answers about debt worries, investment schemes, income tax preparations, and college course attended.

*Survey 3: 2012 Survey of Personal Financial Literacy among Third Secondary Students: Customized version of the 2008 Questionnaire created by the Jump\$tart Coalition.* The educator-researcher customized the Jump\$tart Coalition Survey on Financial Literacy to fit the context of Lebanon. She reviewed items of the first part with bankers, insurance administrators, and accountants to modify and ensure content validity that would fit the context of Lebanon. She personally met with two

bankers working in a branch to validate the content of the questions, test them and retest them. Both bankers had at least eight years of experience in the banking sector. A similar meeting took place at a private insurance company, and an accounting firm whereby the educator-researcher had access to more than one opinion to ensure the validity of the content.

Three items, six, 12, and 15 were deleted by the educator-researcher as advised by bankers since they were not applicable in Lebanon. Moreover, and based on the recommendation of the accountants the educator-researcher had consulted, the term “sales tax” in the second question had been replaced by “VAT” to be applicable in Lebanon (see Appendix I & J). In question seven, the term Medicare was deleted since it is specific to the US, the term “sales tax” was replaced by “VAT”, and the term “federal” before income tax was removed since in Lebanon was not a federation system. In question eight, the term “401k” was replaced by “end of service indemnity” as advised by the accountants. The correct answer of question 11 was changed by the economists to be the government savings bond in Lebanon. And the term “US Govt” has been removed from part c. The term “federal” was also removed in question 13. In question 19, the term “federal law” was removed from the question and part “a” was replaced by “It depends on the insurance policy of each bank” to reflect the Lebanese norm. In question 21 the term “state” was replaced by the term “municipality”. All answers of question 22 were replaced by terms applicable to Lebanon as recommended by the insurance administrators consulted. The wording and structure of question 25 were changed. In question 29, part “a” has been replaced by “banks and the Central Bank”. In question 30, the term “finance charges” was replaced by “interest rate”. Last, answers of questions 31

were changed; part “a” was changed to “earnings from... may be taxed” instead of “may not”, and in part “c” sales tax was replaced by VAT (see Appendixes H & I).

Similarly, she eliminated some of the classification questions that were irrelevant or not applicable in the Lebanese context. The question about gender was not needed since the educator-researcher previously knew that her sample was an all-girl student body. The question about race was also deemed irrelevant in the context of a Lebanese private catholic school. A third question about the possession of a driver’s license was removed partly because the educator-researcher did not consider it as an appropriate independent variable for the study, and mainly because she knew that the majority of the sample did not reach the legal age to apply for the license. The fourth and last question that was eliminated was about the students’ SAT Scores. The reason behind its elimination was simply because such standardized tests were not mandatory in Lebanon, and thus not all students sit for them.

The wording of two questions about class level was altered to fit the Lebanese context.

Accordingly, the modified version of the questionnaire for high school students was renamed “2012 Survey of Personal Financial Literacy Among Third Secondary Students: Customized version of the 2008 Questionnaire created by the Jump\$tart Coalition” (see Appendix H). It consisted of a test part (28 questions) and a personal information part (11 questions). The test questions were used to measure the level of personal financial literacy and covered the four key areas of income, money management,

saving and investing, and spending and credit and their major sub-categories (Mandell, 2008).

*Survey 4: 2012 Survey of Personal Financial Literacy among College Students: Customized version of the 2008 Questionnaire created by the Jump\$tart Coalition.* The educator-researcher asked the graduates of the school to complete this questionnaire. It was a modified version of Survey 2. The first part included the exact number of questions of Survey 3 and the second part was based on the classification questions used in Survey 2, but with alterations to fit the Lebanese context (see Appendix I).

Similar to the alterations done on the classifications part of Survey 3, the educator-researcher also eliminated items related to gender, race, and income tax preparations. Thus the second part consisted of 20 questions.

A pilot for both Survey 3 and Survey 4 was administered in April 2012 to five female students from a neighboring private school to minimize the existence of vague questions and ensure construct validity. Their ages varied between 17 and 19 years of age. The economics curriculum in that neighboring school was the same as the one being taught in the school where the study took place thus eliminating the probability of having acquired more financial knowledge through formal education. The overall mean score was 13, based on a score of 28, with a minimum grade of 11 and a maximum grade of 19. The objective of the pilot was to confirm that all questions had been clearly stated and comprehended by all five females.

Using the same test questions allowed for the comparison between the average scores and deduce whether financial literacy was being acquired from university studies, work experience, or family.

In addition to computing average (mean) test scores for each group, it also showed what proportion of the groups will do relatively well by earning at least a “C,” (75 percent, or better) and what proportion will do poorly by failing the exam with a score of less than 60 percent. The score represented the number of correct responses to the question. Collected data was then analyzed using SPSS software.

More specifically, the scores on each set of the four key areas could be indicative of concepts acquired as well as inefficient behavior. Survey 1 and Survey 2 showed a mean score on each item so that the educator-researcher could use them to compare the mean scores in Lebanon (see Appendices F and G).

**Discussion Questions with Teachers.** The second instrument was the discussion questions (see Appendix J). The objective behind the teacher focus group discussions was to gather information on whether they thought financial literacy was important to secondary school students, why it was important, and if they were aware of the status of financial literacy in the economics curriculum. The educator-researcher was inspired by questions brought up in previous focus groups that were held in other countries discussing the situation of financial literacy.

**Discussion Questions with Adults.** The third instrument was the discussion questions with a sample of 30 adults (see Appendix K). The second focus group discussions were held with a group of adults who graduated from school and were still pursuing their higher education studies or in the workplace. The adult focus group

discussions entailed questions based on the Dusek & Furlong (2010) focus group question bank. The adult focus group discussions helped the educator-researcher learn about the importance of financial literacy for those who were in the workplace and universities and the sources of its acquisition.

**Curriculum Checklist.** The fourth instrument was a curriculum checklist which determined the degree of teaching financial literacy in the economics curriculum of a private catholic school in Lebanon. The purpose of using the checklist was to search for financial literacy concepts that were already embedded in the curriculum under study. Accordingly, the educator-researcher examined whether the Third Secondary Students (Grade 12) correctly answered the questions relevant to these concepts thus indicating that financial literacy education could be acquired through formal curricula. That would guide the educator-researcher to understand whether additional exposure to financial literacy education yields in more knowledge of the personal financial issues. Elements of the checklist were based on the definition of financial literacy adopted in this paper, the concepts used by ASIC for the curriculum mapping (see Appendix A), and the four key concepts that summarize the questions in the questionnaire that will be administered to the sample of grade 12 students and former graduates.

### **Procedure**

Towards the end of the academic school year 2011-2012, fifty-nine 12<sup>th</sup> grade students in the school where the educator-researcher worked were selected to answer the customized questionnaire entitled "Survey of Financial Literacy among High School Students". The educator-researcher waited for the last week of school to administer her questionnaire to ensure that the entire economics curriculum had been covered by the

teacher. The educator researcher took the permission of the division principal to administer the questionnaire. The educator-researcher coordinated with the floor supervisor to assign periods during which the former would administer the questionnaire. She began by explaining the topic of her study to the students and its purpose. It was a paper and pencil survey. She reminded them of the anonymity and confidentiality of the information they would be providing and asked them to circle only one answer without asking her to elaborate on any question. She supervised the process to make sure that the students were not receiving any help from the teacher or from each other. The maximum time allotted to answer the questionnaire was 40 minutes as permitted by the school administration. The educator-researcher did not argue about the time constraint because it meant that the student can have one minute per question for the quiz part and 10 minutes to answer the personal information part which was more than needed.

The questionnaire of Survey 4 was administered to a sample of 50 former graduates. The educator-researcher e-mailed the graduates whom she had as Facebook Contacts informing them about her thesis topic and purpose and asking each one of them for a meeting at their convenience. The next step was an individual or group meeting with former students in public places at their convenience.

For each question respondents received a score of one or zero with full score of 28. Data was retrieved in excel format and exported to SPSS software.

The focus group discussion with economics teachers took place in a neighboring private Catholic school during the weekly coordination meeting so as to ensure that teachers of all levels were present. Discussions lasted for 45 minutes during which the educator-researcher took notes to capture the teachers' responses. Letters, consent forms,



and interview questions were sent to the High School Principal of that School two weeks prior. The department of economics where the educator-researcher worked is made up of two teachers including her, which is why she needed to consult with teachers outside her school.

On the other hand, the focus group discussions with a sample of adults took place simultaneously with the administration of the questionnaire for former graduates. The educator-researcher met with different groups, three to five persons in each, in public places such as malls or at their place of residence, told them about her research and initiated a discussion on the issue referring to the list of questions for the Focus Group with Adults (see Appendix J). Every focus group discussion took around 15 minutes.

### **Data Analysis**

The first part of the 2012 Survey of Personal financial Literacy provided insight on the students and graduates' knowledge of financial literacy. Collected data was used to produce descriptive statistics of central tendency and *t*-test for independent samples. The analysis score of the mean of former graduates searched for possible gains in financial literacy knowledge acquired from finance or economics courses at university, the workplace, or personal experience.

Students who were pursuing business related studies were expected to score higher than their peers who were pursuing non-business studies at university.

In addition, the analysis of the economics curriculum allowed the identification of the number of concepts of financial literacy that were being taught during the three years in high school. Moreover, such analysis helped the educator-researcher relate whether

extra knowledge gained in the Sociology and Economics Sections yielded in higher scores.

### **Conclusion**

In this study the data was collected using a survey, focus group discussion questions, and a curriculum checklist. The participants varied; 12<sup>th</sup> grade students, former graduates, economics teachers, and school stakeholders. The data collected enabled the researcher to determine the level of financial literacy among the 12<sup>th</sup> grade students and the former graduates of the school. The comparison of the scores between the Sociology and Economics Section Students and the others on one hand, and the business and non-business majors on the other, allowed the researcher to analyze the sources of financial literacy acquisition among the student and graduates of one private catholic school in Mount Lebanon.

In the next chapter, the results and discussions of the study are revealed.

## Chapter Four

### Results

The aim of the study was two-fold. The first was to measure the degree of acquisition of financial literacy among grade 12 students in the private Lebanese school where the educator-researcher taught. The second was to seek the origin of acquisition of financial literacy. The scores will provide data that will validate the recommendation to integrate financial literacy education in the Economics Curriculum implemented in that particular private school.

#### Research Question 1

Are third secondary students of one private school in Lebanon financially literate?

To address this question the students' personal and consumer financial literacy skills were measured. The null hypothesis stated that the level of financial literacy amongst Group 1 will not be low.

**Hypothesis 1.** The average financial literacy scores of the third secondary students (Group 1) of the school where she worked and where the study took place were low.

**Survey 3 Results.** Among the 59 Third Secondary Students, five were absent the day the educator-researcher administered the questionnaire, leaving her with 54 completed papers. The descriptive statistics that were generated using SPSS showed that the average financial literacy score for Group 1 was 12.98. Given that the complete score was 28, the average showed that Group 1 participants were unable to pass the test of personal financial literacy (see Table 4).

Table 4

*Descriptive Statistics for Third Secondary Students and Graduates Samples*

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Group 1	54	12.98	3.423	.466	12.05	13.92	6	2
Group 2	49	15.98	3.705	.529	14.92	17.04	7	2
Total	103	14.41	3.849	.379	13.66	15.16	6	2

The mean score of Group 1 generated in Table 4 provided the answer for the first research question showing that the third secondary students of one private school in Lebanon were not financially literate. The average third secondary student in the sample did not pass the test on financial literacy, and thus, did not prove her ability to efficiently manage her financial decisions.

### **Research Question 2**

Does the Economics Program implemented in that private school, in its current form, impact students' survey of financial literacy scores?

To address this question the educator researcher conducted a curriculum mapping searching whether there are financial literacy concepts already integrated in the curriculum of the private school disregarding the class level they were being given at. In other words, the educator-researcher did a comparative study taking one Australian concept at a time and searching for its match or equivalence in the Lebanese private school curriculum (see Appendix C).

The educator-researcher based her curriculum mapping process on the Financial Literacy Concepts for the curriculum mapping for the Australian Framework (see

Appendix A). The Australian concepts were divided into three areas: personal finance, financial products and services, and consumer rights and responsibilities.

The educator-researcher tabulated each of the three headings to check for matching concepts in the curriculum standards implemented at the private catholic school in Lebanon (see Table 5). The letter “X” indicated that such concept was not found.

Table 5

*Curriculum Mapping of the Economics Program Implemented at a Private School*

Personal Finance Concepts from Australian Framework	Matching concepts in private catholic curriculum standards
What money is (different forms such as cash, credit)	Second Secondary (Grade 11) Standards 3.1; 3.3
Where money comes from (different forms of income such as wages and government benefits)	First Secondary (Grade 10) Standards 9.1; 9.2 Second Secondary (Grade 11) Standards 1.1; 1.2; 1.3; 1.4 (excluding government benefits)
Spending money (different payment methods such as cash, check and EFTPOS)	Second Secondary (Grade 11) Standard 4.1 (excluding EFTPOS)
Budgeting	Third Secondary (Grade 12) SE Section Standard 14.1 (only about the effect of income on consumption)
Saving money	First Secondary (Grade 10) Standards 8.1; 8.2 Second Secondary (Grade 11) Standard 4.1 Third Secondary (Grade 12) SE Section Standards 14.6; 14.7; 14.8; 14.9
Borrowing money	X
Financial planning (goals, needs, wants, life stages)	X
Investing money, including concepts of risk and return, interest, and financial markets	Third Secondary (Grade 12) SE Section Standards 16.1; 16.2; 16.3; 16.4; 16.5 – 17.1; 17.2; 17.3; - 18.1; 18.2; 18.3; 18.4; 18.5; 18.6; 18.7; 18.8 – 9.1; 9.2; 9.3 Second Secondary (Grade 11) SE Section Standards 3.1; 3.2; 3.3; 3.4 (excluding the concepts of risk and financial markets)

Financial products and services	Matching concepts in private catholic curriculum standards
Bank accounts	Only definitions of current/savings account Second Secondary (Grade 11) Standard 4.1
Electronic banking (e.g. ATMs, EFTPOS)	X
Credit and loans (credit/store cards)	X
Mortgages	X
Superannuation	X
Insurance (e.g. car, travel, home, life)	Only definitions of premium and life insurance First Secondary (Grade 10) Standard 8.2
Non-superannuation investments (e.g. managed investments, shares, futures and options)	X
Financial industry (e.g. banks, credit unions, insurance companies).	Only definitions of banks and insurance companies First Secondary (Grade 10) Standard 8.2
Financial advice	X
Consumer rights and responsibilities	Matching concepts in private catholic curriculum standards
Understanding that consumers have rights	X
Understanding information about financial products and services	X
Understanding the importance of financial management (e.g. staying out of debt, supporting family)	X
Understanding the importance of shopping around	X
Understanding the importance of keeping financial records	X
Knowing where to get (independent) information	X
Knowing what a regulator is and who they are	Only partially Second Secondary (Grade 11) Standard 4.3
Knowing how to make an effective complaint	X
Knowing where to go for assistance	X

**Personal financial concepts.** The mapping revealed that only two of the concepts listed in the Australian Framework were fully covered in the private school's curriculum, those of "What money is" and "Saving money". Other concepts of personal financial literacy were partially included in the Lebanese private school's curriculum. However, there were no standards for either "Borrowing money" or "Financial planning" in the school's curriculum even though the mapping was not limited to one of secondary levels only.

**Financial products and services concepts.** The educator-researcher found fewer matches in this area. The three concepts of "Bank accounts", "Insurance", and "Financial industry" were partially covered by the Lebanese curriculum. There were no standards about "Electronic banking", "Mortgages", "Superannuation", "Non-superannuation investments", and "Financial advice".

**Consumer rights and responsibilities concepts.** This was the area that the educator-researcher found the least matches. The only concept that was partially included in the Lebanese private school's curriculum was that of "Knowing what a regulator is". All the other eight concepts in this area were not mentioned in any of the Lebanese school's curriculum standards.

The mapping of the curriculum provided evidence that the Economics Program in its current form only had a minor influence on students survey scores because many financial literacy concepts were not mentioned in the standards. However to investigate whether economics program could be a source of financial literacy education, the educator-researcher advanced the second hypothesis of the study.

**Hypothesis 2.** The average scores of financial literacy of Group 1A would be significantly higher than the average scores of Group 1B. In other words, this hypothesis questioned whether students who attended more economics period would significantly score higher on Survey 2 than their peers who were exposed to fewer economics periods because of the placement choices (see Table 3). The null hypothesis would be that the mean score of Group 1A would not be significantly higher than the mean score of Group 1B.

To test this hypothesis, the scores of Group 1A were compared to those of Group 1B to check whether there was a significant difference between their scores revealing that the economics program could be a source of acquisition of financial literacy education.

An independent *t*-test for the financial literacy scores analysis was generated using SPSS. The results indicated  $M(1A) = 14.16$  and  $M(1B) = 11.97$ ,  $SD(1A) = 3.98$ , and  $SD(1B) = 2.50$ , and  $t = 2.38$  (rounded). The obtained value *t* was  $-2.379$  and the critical value needed for the rejection of the null hypothesis was at the .05 level was 2.02. As a result, the null hypothesis was rejected because the obtained value exceeded the critical value. Accordingly, it can be deduced that the mean score of Group 1A was significantly higher than the mean score of Group 1B (see Table 6) meaning that third secondary students who were placed in the SE Section during their last year secondary scored higher on the financial literacy test than their peers who were placed in the scientific sections.



Table 6

*T Test Comparing the Means between Subgroups of Group 1*

Group Statistics					
	Group	N	Mean	Std. Deviation	Std. Error Mean
Score	1B	29	11.97	2.500	.464
	1A	25	14.16	3.986	.797

Independent Samples Test											
		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
										Lower	Upper
Score	Equal variances assumed	5.195	.027	-2.458	52	.017	-2.194	.893	-3.986	-.403	
	Equal variances not assumed			-2.379	39.172	.022	-2.194	.923	-4.060	-.329	

### Focus Group Discussions with Economics Teachers

Given the results of both Hypothesis 1 and Hypothesis 2 generated by SPSS, the educator-researcher needed qualitative feedback from other economics teachers to see to what extent they too believed financial literacy should be tackled in the economics program.

The teachers with whom the educator-researcher held her focus group discussions were in agreement on each others' inputs sometimes just seconding the feedback of one of them. When she finished describing her study and its purposes one of the teachers told her that he has been calling to the MEHE for a review of the economics curriculum for the past 10 years because he was aware that it needed to be upgraded. The economics

teachers preferred to answer the questions as one chunk instead of each one alone (see Appendix J).

**Question 1.** Discussions revealed that teachers did not get the impression that students were very responsible about their finances, on the contrary they tend to be careless. Nevertheless, the teacher of the graduating class recalled the debate that usually took place among students who organized the Prom Night concerning budget limitations and ways to decrease cost.

**Question 2, 3, and 5.** Teachers reported that they sometimes had general discussions in class about certain concepts of financial literacy but not as part of the official school curriculum since the latter did not include a comprehensive education of these issues. Topics discussed included the difference between debit and credit cards but not once in a comprehensive way because, as one of the teachers put it, he hesitated when bringing up issues of income and savings in class because he was aware of the socio-economic discrepancies among students.

**Question 4 and 6.** Financial literacy concepts such as savings, income, stocks, and insurance premium were mainly the only ones described by teachers as included in the curriculum, however the standards were limited to their definitions and types in these cases.

One of the teachers told the educator-researcher that she had just been discussing (outside curriculum context) the taxation system in Lebanon because many students wanted to know about it. Another teacher added that students usually asked a lot about interest and loans, how to invest in stocks, the meaning of bonds, and the different types of companies. This could show that students were actually interested in financial literacy

education but the teacher's understanding of the concept might have been a barrier to how it was taught.

Focus group discussions with teachers reflected an agreement with the statistical findings that showed that third secondary students had low financial literacy rates and that there was a need communicated at different time intervals by students to receive such an education. Subsequently, the following data analysis was dedicated for the second purpose of the study which sought the source of acquisition of financial literacy.

### **Research Question 3**

Is financially literacy acquired from university, work, or maybe family life?

The study of the sample of third secondary school students showed that financial literacy levels were not up to the standards since the mean score of the sample was unable to accumulate the equivalence of 75 points on the financial literacy test, the required score to be considered as "passing" and thus proves the ability to make effective financial decisions.

The goal of this research was to recommend the integration of financial literacy education in the economics program of the private catholic school, as a means of promoting its acquisition. However, since very few studies on financial literacy had been conducted in Lebanon, the educator-researcher needed to explore whether it was being acquired informally. To do so, she used the statistical figures generated by SPSS using the data collected from Survey 4 and correlation indicators to identify influential independent variables.

Of the 50 questionnaires administered to the sample of graduates, one was removed because it was incomplete (N=49).

**Hypothesis 3.** The average scores of financial literacy of Group 2 would be significantly higher than the average scores of Group 1. The null hypothesis indicated that there was no significant difference between the means of Group 1 and Group 2. In other words, the null hypothesis pointed that financial literacy education was static and was not being acquired from anywhere after the student graduated from school.

Examinations of the means for the samples of Group 1 and Group 2 indicated that average score of the latter is 3 points higher (see Table 7).

Table 7

*T* Test Comparing Mean Scores between Group 1 and Group 2

Group Statistics					
	Group	N	Mean	Std. Deviation	Std. Error Mean
Score	Group 1	54	12.98	3.423	.466
	Group 2	49	15.98	3.705	.529

Independent Samples Test										
	Levene's Test for Equality of Variances				t-test for Equality of Means					
	F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
Equal variances assumed	.469	.495	-4.269	101	.000	-2.998	.702	-4.391	-1.605	
Equal variances not assumed			-4.252	97.937	.000	-2.998	.705	-4.397	-1.599	

An independent *t*-test for the financial literacy scores analysis was generated using SPSS. The results indicated  $M(1) = 13$  and  $M(2) = 16$ ,  $SD(1) = 3.42$ , and  $SD(2) = 3.70$ , and  $t = 2.38$  (rounded). The obtained *t* value was  $-4.30$  and the critical value needed for the rejection of the null hypothesis at the .05 level was 2. As a result, the null

hypothesis was rejected because the obtained value exceeded the critical value. The educator-researcher could confidently say that the mean score of Group 2 was significantly higher than the mean score of Group 1. Thus, the data did not statistically confirm the null hypothesis which stated that financial literacy education was static. On the contrary, the statistical tests showed that graduates of the private school had acquired financial literacy knowledge because they scored significantly higher on the same test taken by the third secondary students of that same school.

While it is true that the mean score of Group 2 was higher than that of Group 1, participants performance was evaluated following the grading system of the JumpStart Coalition. Participants who scored at least a “C” (75 percent, or better,  $\geq 21$ ) did relatively well, those who earned a score of less than 60 percent ( $\leq 17$ ) did poorly by failing the exam. For this reason, the mean score of Group 2 ( $M=16$ ) was not considered a passing grade and thus did not reflect the required level of financial literacy.

Joining both samples, the percentages showed that 70% of participants failed the test and thus, are not considered financially literate. Only 5.8% did relatively well (equivalent to “C”) by scoring 21 or more (see Table 8). The percentages revealed supported the first hypothesis that set a low expectation for financial literacy among the sample of Lebanese students.

Moreover, item analysis of Survey 3 and Survey 4 showed very low correct response rates in 6 questions that dealt with inflation, investment, savings, income taxation, and insurance.

Whereas the correct response rate remained the same in one of the questions, it was noted that for the other five questions, the correct response rate of Group 2 was double that of Group 1 (see Table 9).

Table 8

*Survey Score Percentages of both Group 1 and Group 2*

	Frequency	Percent	Valid Percent	Cumulative Percent
	24	2	1.9	1.9
	22	1	1.0	2.9
	21	3	2.9	5.8
	20	3	2.9	8.7
	19	6	5.8	14.6
	18	9	8.7	23.3
	17	7	6.8	30.1
	16	8	7.8	37.9
Valid	15	11	10.7	48.5
	14	8	7.8	56.3
	13	13	12.6	68.9
	12	7	6.8	75.7
	11	9	8.7	84.5
	10	7	6.8	91.3
	9	4	3.9	95.1
	7	3	2.9	98.1
	6	2	1.9	100.0
Total	103	100.0	100.0	

**Hypothesis 4.** The average scores of financial literacy of Group 2A would be significantly higher as opposed to average scores of Group 2B. The null hypothesis indicated that there was no significant difference between the mean score of Group 2A and Group 2B.

The scores of Group 2A and Group 2B were compared to see if there was any significant difference revealing that financial literacy was being acquired from specific majors without others. An independent *t*-test for the financial literacy scores analysis was generated using SPSS. The  $p = 0.277$  at 95% was greater than 0.05 and so the null hypothesis cannot be rejected. The mean score of Group 2A was not significantly different than the mean score of Group 2B (see Table 10).

Consequently, the examination of means showed that students who were pursuing or graduated with business majors did not score significantly higher on Survey 4 than their peers who were pursuing non-business majors.

Table 10

*T Test Comparing Mean Scores between Group 2A and Group 2B*

		Group Statistics				
Group		N	Mean	Std. Deviation	Std. Error Mean	
Score	2A	12	17.00	4.178	1.206	
	2B	37	15.65	3.537	.582	

		Independent Samples Test								
		Levene's Test for Equality of Variances				t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower		Upper
Score	Equal variances assumed	.559	.458	1.100	47	.277	1.351	1.228	-1.119	3.822
	Equal variances not assumed			1.009	16.438	.327	1.351	1.339	-1.481	4.184

Lastly, and since the significant difference in means between Group 1 and Group 2 was statistically supported, the educator-researcher tested for correlations between the scores of Group 2 and each of educational level of parents, income of parents, current status of the person, forms of investment held, and finally classes of economics, finance, or accounting attended at university. The data considered was that of graduate responses only since they scored higher on the test part of the survey. However, all, but the level of parents' education, from the above mentioned variables demonstrated insignificant correlations using the Pearson statistic (see Table 11). This indicated that parents' education could directly affect how knowledgeable their daughters were about managing their lives financially.

Table 11

*Correlation – Education level of parents*

Correlations			
		Score	Highest education level
Score	Pearson Correlation	1	-.292*
	Sig. (2-tailed)		.042
	N	49	49
Highest education level	Pearson Correlation	-.292*	1
	Sig. (2-tailed)	.042	
	N	49	49

\*. Correlation is significant at the 0.05 level (2-tailed).

These findings were reinforced during the focus group discussions the educator researcher held with adults.

**Focus Group Discussions with Adults.** The educator-researcher heard a common reaction among all participants to whom she administered the questionnaire in



person and with whom she held focus group discussions about the topic: they suddenly all felt completely ignorant about the topic and demonstrated symptoms of pre-exam anxiety even though the researcher ensured the anonymity and confidentiality of the disclosed information and answers. Eighty percent of the focus group participants gave answers to the different questions altogether, so the questions will not be tackled separately.

**Question 1 and 2.** Except five of those she met with, the adults confided that they relied on someone else to deal with their financial issues, the majority being their fathers, others their mothers, and in some cases their partners.

**Question 3 and 4.** Nine participants spoke of their experiences with very high interest loans that they learned afterwards they could have taken other types that were considered much cheaper. When it came to the insurance services and companies only six admitted that they know about them, but the majority of respondents directly said “Thank God for my parents for that”.

**Question 5 and 6.** The researcher also noticed that mainly all adults felt relieved to know that such things can be learned from somewhere and appreciated that such education might be given to future generations especially using practical simulations as 80% of the participants suggested.

In brief, the headlines of the discussions with adults were in synchrony with the findings. First, the anxiety and lack of confidence among respondents reinforce the low mean scores on the financial literacy test. Second, the correlation found between the test scores and the educational level of parents was reinforced in the respondents’ reliance on parents for financial advice and guidance. Lastly, the respondents’ expression of support

for the provision of financial education to younger future generations also reinforced the need for such education.

### **Conclusion**

The educator-researcher mainly relied on quantitative data analysis to verify the four hypotheses of the study and backed her findings by qualitative analysis of curriculum and focus group discussions.

Thus, results showed that the first three null hypotheses were rejected and consequently the educator-researcher's relative hypotheses were supported by statistical evidence. Accordingly, it was found respectively, that the mean scores on Survey on financial literacy of the third secondary students were low, the mean score of third secondary students place in SE section was significantly higher than that of their peers in scientific sections, the mean score of the graduates was significantly higher than that of the third secondary students.

The curriculum mapping and focus group discussions supported the findings of low financial literacy scores, low self esteem in ability to manage one's financial life without the advice and guidance of one's parents.

The fourth null hypothesis however, was not rejected. Consequently, the educator-researcher did not find enough evidence to support the hypothesis that stated that mean score of Group 2A would be significantly different than that of Group 2B showing that graduates who were pursuing or completed their university studies in business majors did not score significantly higher on Survey 4 than their peers who were pursuing non-business majors.

The following chapter includes interpretation of the quantitative and qualitative data analysis results. The educator-researcher presents her recommendation based on those findings.

## **Chapter 5**

### **Conclusion**

The analysis of the third secondary students' consumer and personal financial knowledge, in one private catholic school in Lebanon, conducted through a 28 multiple-choice questionnaire was the main purpose of the research study. The second purpose of the study was to determine the source(s) of acquisition of financial literacy by administering the same 28 multiple-choice assessment to a sample of graduates of the private catholic school in Lebanon. Both purposes served to support the existence of shortcomings of the Economics Program implemented by that school. Qualitative tools were used to provide a comprehensive approach to the problem under study. A curriculum mapping helped the educator-researcher identify previously acquired financial literacy concepts by the students, and focus group discussions with economics teachers and adults helped the educator-researcher identify whether her research hypotheses were shared by other stakeholders as well.

This chapter presents interpretation of the results, a conclusion, implications and limitations of the study, and recommendations for the future.

The two research questions revealed the purpose of the study. The point behind the first research question which tackled the issue of whether the third secondary students at one private school were financially literate was to measure the degree of financial literacy of these students. The second research question dealt with the identification of whether the economics program implemented at the private school was a source of acquisition of financial literacy education. Finally, the intention behind the third research

question was to investigate whether other independent variables affected the test scores of participants.

### **Interpretations**

**Research Question 1.** Are third secondary students of one private school in Lebanon financially literate?

Hypothesis 1: The average financial literacy scores of the third secondary students (Group 1) of the school where the educator-researcher worked and where the study took place were low.

To address this question the students' personal and consumer financial literacy skills were measured. The null hypothesis stated that the level of financial literacy amongst Group 1 will not be low.

The results supported the original hypothesis: third year secondary students did exhibit weak financial literacy skills; the mean score was below the passing grade adopted by JumpStart Coalition from whom the standardized survey questions were taken as an assessment tool for financial literacy. Similarly, Hung, in a study conducted on financial literacy in the Middle East and North African Region in 2011, concluded that youth, among other groups in Lebanon, had a particularly pressing need for financial literacy education because they scored the least on the administered test on financial literacy.

One of the themes that also emerged from the above findings was the effectiveness of the curriculum in provision of financial literacy education, since Group 1A (SE Section) who were exposed to more hours of economics scored significantly higher on the survey. Their mean scores yet, remained below the international standard

level of success which could be because many concepts were excluded from the curriculum as will be discussed next.

**Research Question 2.** Does the Economics Program implemented in that private school, in its current form, impact students' scores on financial literacy survey?

As a matter of fact the curriculum mapping uncovered that the concepts of financial literacy that were integrated in the curriculum of the Lebanese private school were only briefly tackled by teaching definitions and types. Besides, many of the concepts that were included in the first part of Survey 3 were not mentioned in the standards at all such as taxation, money borrowing, mortgages, financial planning, financial advice, health insurance, risk, and automobile insurance. It was in these areas of the questionnaire (money management, savings and investment, spending and credit) that third secondary students scored the least.

Standards of the Economics curriculum were void of implementation or application of the existent concepts of financial literacy which explained the low rate of correct responses among third secondary students (Group 1 participants) on related questions (see Appendix C).

For instance, Question 3, which was an understanding question of basic savings principles that were usually taught in Grade 10 or first year secondary, showed a 90% correct response rate compared to Question 8 which required some analysis which accumulated a 15% correct response rate only (see Table 9).

Similarly, questions related to the concept of income and that required only understanding such as Question 11 showed a 64% correct response rate compared to 22% on Question 6 (see Table 9). These facts indicated that the financial literacy concepts that

were integrated in the economics curriculum were acquired by students, and consequently, the latter was a medium to transfer comprehensive financial literacy education. Thus, adding financial literacy concepts to the economics program of the private school might provide future generations with the required knowledge and attain a mean score above the passing level.

Another emerging theme here is the shortcoming of the economics curriculum, identified from the response rate analysis, which focuses on defining concepts rather than using them.

Hypothesis 2: The average scores of financial literacy of Group 1A would be significantly higher than the average scores of Group 1B.

Students of the Economics and Sociology Section (Group 1A) scored significantly higher on the financial literacy test than their counterparts in the Sciences Sections (Group 1B), which supported the educator-researcher's assumption that the economics program could be a source of financial literacy education.

At the same time, the correct response rate on Question 1 of Group 1B participants was close to zero. This fact could also be explained referring to the curriculum mapping since, participants of Group 1B chose a class placement other than Sociology and Economics and consequently did not study economics during their third year secondary. This implied that they did not learn the concept of inflation, taught in third year secondary only, so they gave wrong answers because they were not familiar with the term. This finding reinforced the importance of the economics curriculum as a source of acquisition of financial literacy education.

McKann (2009), as well as other researchers whose works were mentioned in the literature section of this research, conducted studies that yielded a positive relationship between mandatory course education and financial literacy knowledge. Results in this study pointed in a similar direction, hence the educator researcher could confidently say that the economics program was an effective medium to teach financial literacy to future generations.

**Research Question 3.** Is financially literacy acquired from university, work, or maybe family life?

To answer the above question the educator-researcher tested the third hypothesis.

Hypothesis 3: The average scores of financial literacy of Group 2 (graduates) would be significantly higher than the average scores of Group 1 (third secondary students).

It yielded in a significant difference between mean scores of third year secondary students (Group 1) and graduate students (Group 2). Similarly, in a study targeting financial literacy of women in the Middle East and North African Region, it was found that Lebanese women who were 30 years of age or above scored significantly higher than younger women. However the mean of Group 2 was less than 16.8, the equivalence of 60 percent, which meant that the average graduate performed poorly on the financial literacy questionnaire and thus failed it.

Analysis of the graduates' response rates revealed a general increase compared to those of third secondary students probably because the former felt more confident. This confidence might have arisen from their banking experience while planning and paying for their university tuition fees or paying their car loan installments or even their university loans. Graduates who were already also working might have felt more



confident to answer questions regarding income, taxation, and insurance because they were things they had to deal with on the job.

Correct response rates however, on questions related to inflation, savings, and loans remained alarmingly low at 30 percent, seven percent, and 35 percent respectively. The study of literature in Lebanon highlighted that similar studies among women pressed the need for education on the previously mentioned concepts as well (Hung, 2011). Moreover, questions related to the value added tax, money borrowing, savings, and life insurance received a lower rate of correct responses compared to those given by the third secondary students. The above figures and comparisons question the efficiency of the source providing financial literacy after school. Questions related to health insurance, income tax, and investment received less than 50 percent correct response rates.

The significant difference in mean scores in this study meant that financial literacy could have been acquired either from courses at university (especially by students who attended business, finance, or economics courses), work experience, or family life.

For instance, in one study conducted in the United States, it was found that financial literacy was strongly influenced by the family's financial sophistication and by socio-demographic characteristics (Lusardi, Mitchel & Curto, 2010).

In this study, focus group discussions with teachers yielded and reinforced the main headlines of focus group with adults who revealed low self-confidence about financial literacy knowledge and dependence on parents for guidance about financial decisions.

Furthermore, tests of correlation showed a significant relationship only between scores of graduates (Group 2) and the level of education of their parents, hence,

emphasizing the stated above. However, the test showed a negative relation between the two variables most probably since 77% of the sample failed the test. This also raised the issue of whether parents' financial knowledge and experience are enough to adequately transfer useful financial knowledge or data to their children (Altintas, 2011).

It was the result of this test that unraveled the real problem because it became clear that financial literacy was circulating in a viscous cycle. One, the school under study, like the majority of the private school sector in Lebanon, did not provide a formal financial literacy education, not when the questionnaire was administered, not even decades before that. Two, it was parental advice that was sought for financial decisions by their daughters, even though the parents themselves might have not received any formal financial literacy education. Three, the only element of intervention in this case, before graduates entered the workforce was their university curriculum which might have been a source of financial literacy education that could break the cycle and provide graduates with a more efficient financial literacy education that equip them with tools that allowed them to question and evaluate the financial teachings of their parents and thus effectively manage their financial lives.

But the last test of the research did not support the university curricula as an intervention element. The educator-researcher tested the data using SPSS Software to check for a significant difference between the mean score of Group 2A (graduates who pursued studies in business majors) and 2B (graduates who pursued studies in non-business majors).

Hypothesis 4: The average scores of financial literacy of Group 2A would be significantly higher as opposed to average scores of Group 2B.

Group 2A participants were pursuing studies or graduated with a degree in Business, Finance, or Economics which meant that they attended all or one of these courses. Consequently, it was hypothesized that such additional education might lead to significant difference between the mean scores of Group 2A and 2B. The rationale behind this hypothesis was that the more financial education the student was exposed to the more elaborate his/her knowledge about financial issues as found by several researchers such as Chen & Volpe (1998), McKenzie (2009), and Shaari, Abu Hasan, Mohamad & Sabri (2013). Students pursuing non-business majors are exposed to fewer, if any, courses that provide financial education and consequently are expected to know less than their peers pursuing business major studies.

However, the statistical data generated did not support the fourth hypothesis at 95% or 90% confidence leading the educator-researcher to conclude that additional data should be collected. Similar results were revealed in the review of literature among university students in Turkey. Altintas (2011) found that Turkish business students were as incompetent as their non business peers.

In a perfect scenario, the fourth hypothesis would be statistically supported proving that the exposure to more financial education increases one's financial literacy and so it would have been safe to recommend its teaching at school to boost the financial literacy level among all students without exception. In the real scenario, the rejection of the fourth hypothesis however does not nullify the relationship between financial education and literacy because students of SE sections who had been exposed to more financial literacy concepts scored significantly higher than their peers in the scientific sections.

In the same real scenario, factors such as the professor's methodology, to what extent hands on financial education was given, variety of business curricula among Lebanese universities, and student's ambition might have influenced the scores of graduates. Lectures on business, economics, finance, accounting, marketing, and management are still adopted as the teaching methodology in some courses by some professors across universities, sometimes without linking the material covered with real life situations such as articles, news analysis, virtual simulations, financial laboratory experiments...which makes retrieval of such concepts very hard if not impossible in some cases. Thus, graduates answering the items of the questionnaire on financial literacy might have found it difficult to retrieve the required information to solve the problems or they did not know to use the appropriate information to solve the problems at hand.

In the context of higher education, there will be no questioning of the professors' financial literacy assuming that universities require that the staff members in the faculty of business have reached the highest degrees of education in the field of business.

Graduate participants who took the test had studied at different universities and thus different curricula. Accordingly the content of an introductory course to finance may not contain the same financial literacy concepts in all universities and so business students' knowledge is not the same among all.

Business students moreover, are not equally ambitious, because of the variety of specializations under the main branch of business. For example, marketing students might not be as interested in accounting, economics, or finance courses which might be the source of financial literacy education. Students' performance in these courses in such a case might be the strict minimum to guarantee the minimum required to pass the course.

In addition, in a credit system, business students have the freedom to choose among courses and thus students' knowledge upon graduation varies according to their transcripts.

### **Conclusion**

Findings regarding the first purpose of the study, determining the level of financial literacy among third secondary students, were coherent with results generated by the few similar studies conducted in Lebanon. And so, the educator-researcher confidently concluded that financial literacy among youth students and graduates of one private catholic school in Lebanon were low, specifically below the passing level.

In reference to the second purpose of the study, the source of acquisition of financial literacy education, results generated did not support the educator-researcher to confidently conclude that formal curricula at university, especially for graduates pursuing business majors, were a source of financial literacy education. Correlation tests however pointed to a strong influence produced by the education level of parents. Accordingly, the educator-researcher was able to confidently conclude that youth (ages 18 till 30) students and graduates of one private catholic school in Lebanon relied on their parents for financial guidance.

In summary, the situation seemed to reflect a cyclical direction: in its current form, the economics curriculum did not accommodate for financial literacy education to be acquired, and so students were not financially literate. Business graduates did not score significantly higher on the financial literacy questionnaire than their non-business graduates consequently ruling out the hypothesis that university curricula was a source of financial literacy education. Instead, parents proved to be the major source of acquisition

of financial literacy, however, their daughters scored, on average, below the passing grade on Survey 4. So the cycle went on, forbidding the Lebanese economy from enjoying the benefits of a more financially efficient consumer society.

### **Limitations**

The findings of this study about the low levels of financial literacy among high school students was in harmony with others conducted around the world and consistent with research on financial literacy in Lebanon in particular with those of the Director General of Education (Yarak, 2010). However, these results cannot be generalized to all school and university students of Lebanon because the study took place in a private Catholic School with an all-girls promotion the majority of whom come from upper-middle class families.

The educator-researcher was aware of this limitation prior the commencement of her study. The choice of sample served two purposes, the first was its convenience, and the second was the school's goodwill. The School administration had completed rewriting the standards of all subject matter, including economics, to fit the guidelines provided by Ministry of Education in 2011. Standards of the economics curriculum were not kept intact, and thus, in accordance with the specific objectives and scopes communicated by the ministry. In other words, the educator-researcher wanted to make sure that the curriculum under study was similar to that given in any public high school in Lebanon.

Moreover, selecting a school attended by students who come from generally financially well off families, helped the educator-researcher determine whether higher income was a main variable affecting the level of financial literacy.

An equally important limitation of the study was that the participants of Group 2 (graduates) were not asked to specify the number of Business, Economics, or Finance courses they had taken. This could have been a variable that impacted the results because having taken one course of business would not make the difference especially if it were an introductory one during the sophomore year, which was not asked to be determined either.

The educator-researcher was not aware of this limitation and recommends that similar studies be conducted on a larger scale in the future with emphasis on the status of graduates and the number of courses attended, maybe even specifying the major, differentiating among economics, finance, or accounting.

In addition, data collected from the personal information part or classification part of the survey might not have been accurate especially that information such as annual income and level of parent education were required, and students might have answered differently so as not to be labeled or avoid prejudice.

The educator-researcher, aware of this limitation, stressed on the confidentiality and anonymity of the information disclosed off by respondents in the second part of the survey before they began answering. This factor was believed to be beyond the control of the researcher and thus, had to be accepted.

Another factor which might have affected the results and which could not have been measured in this study was the maturation level of participants that might have been the reason why Group 2 participants (graduates) scored higher on average than Group 1 (third secondary students). The research study did not take this factor into consideration and so the educator researcher recommended that future longitudinal studies be

conducted to allow the administration of maturity tests at the beginning to determine whether the latter influenced the respondents' financial literacy scores.

Also, the timing of the survey administration to Group 1 (third secondary students) might have influenced the results because it was their last week of formal studies, and participants were aware that it was not a graded assignment and thus, might not have taken it very seriously. The educator-researcher purposefully waited until the last week to administer the survey because she wanted to guarantee that students had covered all the economics curriculum standards. However, it is advisable in future studies to give Group 1 respondents the impression that their answers will be graded and calculated as part of their term average to give them an incentive to answer honestly.

Lastly, in the second sample, Group 2 (graduates), participants of subgroup 2B (non-business majors) outnumbered participants of 2A (business majors), and so the latter might not have been a representative sample of the population of female graduates who pursued studies in business majors at university. Randomness, in this situation, may not have been the best sample selection criterion to follow, since the educator-researcher did not ask the participants about their majors before they completed the survey.

### **Recommendations**

The pilot research study of financial literacy as a possible shortcoming of the economics program in schools in Lebanon showed a significant need for the integration of such education in the economics curriculum.

The educator-researcher believed that the following three recommendations should be addressed in the future.



First, additional longitudinal investigation and research are needed, especially at the national level. More such studies are needed to evaluate their findings so as to shift educational policy accordingly and inform the government whether the formulation of a national financial education strategy in Lebanon is needed.

Second, results of this study showed that integrating financial literacy education in the economics program appears to be a viable tool to promote effective management of one's financial life which in turn helps in promoting economic growth. Accordingly, the educator-researcher recommends the reformulation of the economics curriculum to integrate financial literacy concepts and testing it over a one year period in several schools across Lebanon to be able to assess its success.

Third, the educator-researcher also suggests the adoption of the financial literacy concepts listed in the Indian Framework for Financial Literacy as a reference for integration studies of the economics program in Lebanon if the national survey results showed similar low financial literacy rates among the youth population (see Appendix B).

Results of this pilot study pointed that the mean score of financial literacy of SE Students was significantly higher than the mean of the other third secondary students proving that the Economics Program is a medium to transfer financial literacy education. However the effectiveness of this medium is influenced by several emerging factors such as the comprehensiveness of the curriculum standards and the knowledge or confidence of the economics teachers.

Furthermore, correlation tests in this study showed that there was a significant correlation only between the educational level of parents and financial literacy scores.

But the mean score of financial literacy among graduates which was significantly higher than the mean score of third secondary students, was still below the required passing level thus questioning the effectiveness of the parents knowledge as a medium to transfer financial literacy knowledge and advancing the need for a substitute medium.

On the other hand and at the macro-economic level, figures show that gross enrollment rate of tertiary education in Lebanon is 51.6 percent (Globe Education, 2012). In other words, only half of the Lebanese youth pursued college studies. Thus, to break the cycle of low levels of financial literacy in Lebanon, financial literacy education should be provided at school. The educator-researcher recommends the integration of financial literacy education in the economics program of the first and second year secondary since both are mandatory placements. Accordingly, a larger number of Lebanese youth, compared to only half of them will have the chance to receive such education. As Ludlum, Tilker, Ritter, Cowart, Xu & Smith (2012) said, financial literacy is paramount to the success of future since, those students will be the future parents who, if equipped with the required knowledge, can give their children effective and sound financial advice and guidance. This will also impact the economy because those students will be the future workforce of Lebanon who, if equipped with the required financial literacy knowledge, may contribute more effectively to the Lebanese economy, leading the way to growth.

### References

Ansong , A., & Gyesare, M. (2012). Determinants of university working-students' financial literacy at the university of Cape Coast, Ghana. *International Journal of Business and Management*, 7(9), 126 - 133. doi:10.5539/ijbm.v7n9p126

ASIC. ASIC, (2003). *Financial literacy in schools* (Consultation paper 45). Retrieved from Australian Securities & Investments Commission website: [www.asic.gov.au/asic/pdflib.nsf/LookupByFileName/FinLit\\_schools\\_DP.pdf/\\$file/FinLit\\_schools\\_DP.pdf](http://www.asic.gov.au/asic/pdflib.nsf/LookupByFileName/FinLit_schools_DP.pdf/$file/FinLit_schools_DP.pdf)

Altintas, M. (2011). The Dynamics of financial literacy within the framework of personal finance: An analysis among Turkish university students. *African Journal of Business Management*, Vol. 5(26), pp. 10483-10491. doi: 10.5897/AJBM11.401

Australian Securities and Investment Commission. (2012, January 17). *About ASIC: Our role* . Retrieved from [http://www.asic.gov.au/asic/ASIC.NSF/byHeadline/Our role](http://www.asic.gov.au/asic/ASIC.NSF/byHeadline/Our%20role)

Bank Al Maghrib. Bank Al Maghrib, (2010). *Protection des consommateurs de services financiers*. Retrieved from website: [http://www.oecd.org/document/3/0,3746,en\\_2649\\_15251491\\_45580483\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/3/0,3746,en_2649_15251491_45580483_1_1_1_1,00.html)

Braunstein, S. & Welch, C. (2002, November). Financial literacy: An overview of practice, research, and policy. *Federal Reserve Bulletin*, 445-457. Retrieved from <http://www.federalreserve.gov/pubs/bulletin/2002/1102lead.pdf>

Banque Audi sal. Group Research Department, (2012). *Lebanon economic report* (2<sup>nd</sup> Quarter 2012). Retrieved from Banque Audi sal - Audi Saradar Group website: [http://research.banqueaudi.com/documents/EconomicReports/lebanon\\_economic\\_report.pdf](http://research.banqueaudi.com/documents/EconomicReports/lebanon_economic_report.pdf)

Chen, H., & Volpe, R. (1998). An analysis of personal financial literacy among college students. *Financial Services Review*, 7(2), 107 - 128. Retrieved from [http://www2.stetson.edu/fsr/abstracts/vol\\_7\\_num2\\_107.pdf](http://www2.stetson.edu/fsr/abstracts/vol_7_num2_107.pdf)

Commonwealth Bank (2009). *Commonwealth bank determined to bring financial literacy to one million kids*. Retrieved from website: <http://www.commbank.com.au/about-us/news/media-releases/2009/191109-one-million-kids.aspx>

CRDP. Ministry of Education and Higher Education, CRDP. (1999). *Sociology and economics curriculum*. Retrieved from website: [http://www.crdp.org/crdp/allcurriculum/Sociology&Economy/Socio&Econo\\_eng.htm](http://www.crdp.org/crdp/allcurriculum/Sociology&Economy/Socio&Econo_eng.htm)

Cude, B., Lawrence, F., Lyons, A., Metzger, K., LeJeune, E., Marks, L., & Machtmes, K. (2006). *College students and financial literacy: What they know and what we need to learn*. Eastern family economics and resource management association. Retrieved from <http://mrupured.myweb.uga.edu/conf/22.pdf>

Dusek , H., & Furlong, R. (2010). *Fox cities financial literacy study a snapshot of a community: Attitudes, behaviors, and knowledge*. Manuscript submitted for publication, University of Wisconsin, Wisconsin, Retrieved from <http://outagamie.uwex.edu/files/2010/09/Financial-Literacy-Study-Final.pdf>

ED.gov U.S. Department of Education, (2012). *Excellence in economic education*= (CFDA Number: 84.215B). Retrieved from website:  
<http://www2.ed.gov/programs/econeducation/index.html>

Education World. Financial literacy begins at school. *educationworld.com*. Retrieved from Financial literacy begins at school . (n.d.). Retrieved from  
[http://www.educationworld.com/a\\_lesson/lesson232.shtml](http://www.educationworld.com/a_lesson/lesson232.shtml)

Fadel, C. Task Force on Financial Literacy, (2011). *Financial literacy & 21<sup>st</sup> century skills*. Retrieved from website: [www.financialliteracyincanada.com](http://www.financialliteracyincanada.com)

Feslier, D. Retirement Commission New Zealand, (2006). *Financial education and financial literacy in New Zealand*. Retrieved from website:  
[www.oecd.org/dataoecd/15/53/37424633.pdf](http://www.oecd.org/dataoecd/15/53/37424633.pdf)

Financial Literacy & Education Russia Trust Fund. (2012). *Financial capability measurement*. Retrieved from The World Bank website:  
<http://www.finlitedu.org/measurement/wb/country-pilots/turkey/>

Financial Stability and Development Council. (2012). *National strategy for financial education*. Retrieved from Securities Exchange Board of India website:  
[www.sebi.gov.in/cms/sebi\\_data/attachdocs/1342416428845.pdf](http://www.sebi.gov.in/cms/sebi_data/attachdocs/1342416428845.pdf)

Frayha, N. (2009). The negative face of the Lebanese education system. In Lebanon Renaissance. Retrieved from  
<http://www.lebanonrenaissance.org/assets/Uploads/0-The-negative-face-of-the-Lebanese-education-system-by-Nmer-Frayha-2009.pdf>

Friedman, P. The Finance Project, (2005). *Providing and funding financial literacy programs for low- income adults and youth*. Retrieved from the Finance Project website: Providing and Funding Financial Literacy Programs for Low- Income Adults and Youth

Globe Education. (2012). *Higher education in Lebanon*. Retrieved from <http://www.globetoday.net/directories/study-in-lebanon/39-higher-education-in-lebanon.html>

Hathaway, I., & Khatiwada, S. Federal Reserve Bank of Cleveland, (2008). *Do financial education programs work?* (Working Paper 08-03). Retrieved from Federal Reserve Bank of Cleveland website:  
<http://www.clevelandfed.org/research/workpaper/2008/wp0803.pdf>

Hung, A. (2011, May). *Gender and financial education*. , Toronto, Canada. Retrieved from <http://www.oecd.org/dataoecd/50/3/48211528.pdf>

Hung, A., Parker, A., & Yoong, J. RAND Corporation, (2009). *Working paper defining and measuring financial literacy* (WR - 708). Retrieved from website:  
[http://www.rand.org/pubs/working\\_papers/2009/RAND\\_WR708.pdf](http://www.rand.org/pubs/working_papers/2009/RAND_WR708.pdf)

INJAZ Lebanon. (2010, October ). *To inspire and prepare young arabs to succeed in a global economy*. , Beirut. Retrieved from [www.oecd.org/dataoecd/56/60/46280558.pdf](http://www.oecd.org/dataoecd/56/60/46280558.pdf)

INJAZ Lebanon (2012). *About us*. Retrieved from <http://www.injaz-lebanon.org/>

International Network on Financial Education, I. (2011). *Guidelines on financial education at school and guidance on learning framework* Organization of Economic Cooperation and Development.

Kelly, C. State Government Affairs, Credit Union National Association. (2002). *Financial literacy in schools the credit union commitment the knowledge of smart spending, wise use of credit and the benefits of regular saving and investing*. Retrieved from CUNA & Affiliates website: [http://www.cuna.org/download/stgovpub\\_finlit.pdf](http://www.cuna.org/download/stgovpub_finlit.pdf)

Laboul, A. (2010, October). *The OECD project on financial education and the international network for financial education.* , Beirut. Retrieved from <http://www.oecd.org/dataoecd/57/1/46256616.pdf>

Lucey, T. (2005). Assessing the reliability and validity of the jumpstart survey of financial literacy. *Journal of Family and Economic Issues*, 26(2), 283-294. Retrieved from <http://link.springer.com/article/10.1007/s10834-005-3526-8?LI=true>

Ludlum, M., Tilker, K., Ritter, D., Cowart, T., Xu, W., & Smith, B. (2012). Financial literacy and credit cards: A multi campus survey. *International Journal of Business and Social Science*, 3(7), Retrieved from [http://www.ijbssnet.com/journals/Vol\\_3\\_No\\_7\\_April\\_2012/3.pdf](http://www.ijbssnet.com/journals/Vol_3_No_7_April_2012/3.pdf)

Lusardi, A., Mitchel, O., & Curto, V. Michigan Retirement Research Center, (2010). *Financial literacy among the young: Evidence and implications for consumer policy*. Retrieved from Michigan Retirement Research Center website: [http://www.dartmouth.edu/~alusardi/Papers/Financial\\_literacy\\_young.pdf](http://www.dartmouth.edu/~alusardi/Papers/Financial_literacy_young.pdf)

Mandell, L. (2008). *The financial literacy of young American adults results of the 2008 national JumpStart coalition survey of high school seniors and college students*. Manuscript submitted for publication, University of Washington and the Aspen Institute, Retrieved from [www.jumpstart.org](http://www.jumpstart.org)

Master Card Worldwide Insights. Master Card Worldwide Insights, (2011). *How well do women know their money: Financial literacy across Asia/Pacific, Middle East and Africa*. Retrieved from website:  
[http://www.masterintelligence.com/upload/265/191/WomensFinancialLiteracyAPMEA\\_S.PDF](http://www.masterintelligence.com/upload/265/191/WomensFinancialLiteracyAPMEA_S.PDF)

McKann, K. (2009). *The effect of a high school financial literacy course on student financial knowledge*. (Doctoral dissertation), Available from Proquest. (3405767).

McKenzie, V. (2009). *The financial literacy of university students: A comparison of graduating seniors' financial literacy and debt level*. (Doctoral dissertation. University of South Carolina) Retrieved from <http://scholarcommons.usf.edu/etd/2094>

Miller, M., Godfrey, N., Levesque, B., & Stark, E. Department for International Development, (2009). *The case for financial literacy in developing countries: Promoting access to finance by empowering consumers*. Retrieved from The World Bank website:  
[http://www.mfw4a.org/documents-details/the-case-for-financial-literacy-in-developing-countries-promoting-access-to-finance-by-empowering-consumers.html?dl=1&ei=TAwnUpzGKIPJtAa374DoBA&usg=AFQjCNE6udPA\\_\\_oLHbiq-sYXHrMrWM5SsA&bvm=bv.51495398,d.Yms](http://www.mfw4a.org/documents-details/the-case-for-financial-literacy-in-developing-countries-promoting-access-to-finance-by-empowering-consumers.html?dl=1&ei=TAwnUpzGKIPJtAa374DoBA&usg=AFQjCNE6udPA__oLHbiq-sYXHrMrWM5SsA&bvm=bv.51495398,d.Yms)



Ministry of Education Ministry of Education Canada, (2011). *The Ontario curriculum grades 9-12 financial literacy scope and sequence of expectations*. Retrieved from Ministry of Education website: [www.ontario.ca/edu](http://www.ontario.ca/edu)

Ministerial Council on Education, Employment, Training and Youth Affairs. Ministerial Council on Education, Employment, Training and Youth Affairs, (2005). *National consumer and financial literacy framework*. Retrieved from Ministerial Council on Education, Employment, Training and Youth Affairs website: [http://www.mceecdya.edu.au/mceecdya/2011\\_financial\\_literacy\\_framework\\_homepage.34096.html](http://www.mceecdya.edu.au/mceecdya/2011_financial_literacy_framework_homepage.34096.html)

Mitia. (2012, July 13). Financial literacy vital — state. *Times of Zambia* . Retrieved from <http://www.times.co.zm/?p=4558>

National Financial Educators Council, N. (n.d.). *Best practices in financial education*. Retrieved from <http://www.financialeducatorsCouncil.org/financial-literacy-definition.html>

Nash, D. (2012). Financial literacy: An Indian scenario. *Asian Journal of Research in Banking and Finance*, 2(4), Retrieved from <http://www.indianjournals.com/ijor.aspx?target=ijor:ajrbf&volume=2&issue=4&article=006>

Ng'andu, B. (2012, July). In B. Ng'andu (Chair). *The national strategy on financial education for Zambia*. Launching the national strategy on financial education in Zambia, Lusaka, Zambia. Retrieved from [http://www.boz.zm/\(S\(nwdmfi2kmhhdzp3zhya3npao\)\)/RptPub\\_Speeches.aspx](http://www.boz.zm/(S(nwdmfi2kmhhdzp3zhya3npao))/RptPub_Speeches.aspx)

Osorio, G. S. Ministry of Finance, Deputy General Director of Savings and Financial Regulation. (2010). *Consumer protection and financial education: two sides of the same coin*. Retrieved from website:  
[http://www.oecd.org/document/3/0,3746,en\\_2649\\_15251491\\_45580483\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/3/0,3746,en_2649_15251491_45580483_1_1_1_1,00.html)

Rugimbana, R., & Shambare, R. (2012). Financial literacy among the educated: An exploratory study of selected university students in South Africa. *Thunderbird International Business Review*, 54(4), 581–590. doi: DOI: 10.1002/tie.21485

Rutledge, S. Finance and Private Sector Department, (2010). *Consumer protection and financial literacy lessons from nine country studies* (Policy Research Working Paper 5326). Retrieved from The World Bank Europe and Central Asia Region website: [www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2010/06/03/000158349\\_20100603082853/Rendered/INDEX/WPS5326.txt](http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2010/06/03/000158349_20100603082853/Rendered/INDEX/WPS5326.txt)

Sabri, M., Cook, C., & Gudmunson, C. (2012). Financial well-being of Malaysian college students. *Asian Education and Development Studies*, 1(2), 153 - 170. doi: 10.1108/20463161211240124

Sevim, N., Temizel, F., & Sayilir, O. (2012). The effects of financial literacy on the borrowing behaviour of Turkish financial consumers. *International Journal of Consumer Studies*, 36(5), 573–579. doi: 10.1111/j.1470-6431.2012.01123.x

Shaari, N., Abu Hasan, N., Mohamad, R., & Sabri, M. (2013). Financial literacy: A study among the university students. *Interdisciplinary Journal of Contemporary*

*Research in Business*, 5(2), 279 - 299. Retrieved from <http://journal-archievs33.webs.com/279-299.pdf>

Sinyangwe, C. (2012, September 13). Teachers shackled in debt - phiri. *The Post Newspapers Zambia*. Retrieved from [http://www.postzambia.com/post-print\\_article.php?articleId=28625](http://www.postzambia.com/post-print_article.php?articleId=28625)

Stillwell, S. Financial Services Authority, Consumer Financial Education Body. (2010). *Building financially empowered individuals – the UK's approach*. Retrieved from website:  
[http://www.oecd.org/document/3/0,3746,en\\_2649\\_15251491\\_45580483\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/3/0,3746,en_2649_15251491_45580483_1_1_1_1,00.html)

The Jump\$tart Coalition for Personal Financial Literacy. (2013). *Jump\$tart coalition survey of personal financial literacy among students*. Retrieved from <http://www.jumpstart.org/survey.html>

The New Zealand Treasury. The New Zealand Treasury, (2010). *Banking and business environment*. Retrieved from website: [www.treasury.govt.nz/economy/overview](http://www.treasury.govt.nz/economy/overview)

The New Zealand Network for Financial Literacy. The New Zealand Network for Financial Literacy. (2012). *National strategy for financial literacy*. Retrieved from website: <http://www.financialliteracy.org.nz/national-strategy>

The Wall Street Journal. (2008). Bernanke backs financial literacy; take the quiz. *WSJ.com*, Retrieved from <http://blogs.wsj.com/economics/2008/04/09/bernanke-backs-financial-literacy-take-the-quiz/tab/print/>

The World Bank. (2012). *Turkey Country Economic Memorandum (CEM) on Sustaining High Growth: The Role of Domestic Savings*. Retrieved from The World Bank website: <http://go.worldbank.org/BNYJN3RNU0>

The World Bank Financial Literacy & Education Russia Trust Fund, (2012). *Project Snapshot Lebanon*. Retrieved from The World Bank website: [http://www.finlitedu.org/i/page\\_files/file/44.0.pdf](http://www.finlitedu.org/i/page_files/file/44.0.pdf)

TNN. (2012, July 17). Financial literacy may become part of school curriculum. *The Times of India*. Retrieved from <http://timesofindia.indiatimes.com/business/india-business/Financial-literacy-may-become-part-of-school-curriculum/pmarticleshow/15012663.cms?prtpage=1>

United States Government Accountability Office. United States Government Accountability Office, (2011). *Financial literacy a federal certification process for providers would pose challenges* (GAO-11-614). Retrieved from website: [www.gao.gov](http://www.gao.gov)

United Student Aid Funds. (2011). *Does financial literacy education make a difference? Yes, says one researcher*. Retrieved from <http://www.usafunds.org/Consumer/LSWhitePaper.pdf>

U.S. Department of Education. (2012, April 10). *Excellence in economic education*. Retrieved from <http://www2.ed.gov/programs/econeducation/index.html>

Widdowson, D., & Hailwood, K. Reserve Bank of New Zealand, (2007). *Financial literacy and its role in promoting a sound financial system* (Bulletin, Vol. 70,

No. 2). Retrieved from website:

[www.rbnz.govt.nz/research/./2007jun70\\_2widdowsonhailwood.pdf](http://www.rbnz.govt.nz/research/./2007jun70_2widdowsonhailwood.pdf)

Working Group on Financial Literacy. Ministry of Education , Working Group on Financial Literacy (2010). *A sound investment financial literacy education in Ontario schools*. Retrieved from website:

[http://www.edu.gov.on.ca/eng/Financial\\_Literacy\\_Eng.pdf](http://www.edu.gov.on.ca/eng/Financial_Literacy_Eng.pdf)

Yarak, F. Ministry of Education and Higher Education, Director General of Education. (2010). “*Financial literacy: A life skill to be integrated in the Lebanese schools*” - without further delay-. Retrieved from website:

[http://www.oecd.org/document/3/0,3746,en\\_2649\\_15251491\\_45580483\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/3/0,3746,en_2649_15251491_45580483_1_1_1_1,00.html)

Yilmaz, D. (2011, March). *Financial education and awareness – challenges, opportunities and strategies*. International conference on financial education and financial awareness: challenges, opportunities and strategies, Istanbul, Turkey. Retrieved from [www.bis.org/review/r110314a.pdf](http://www.bis.org/review/r110314a.pdf)

The below mentioned definitions were adopted by different bodies dealing with financial literacy in different countries. However, for the purpose of this study, they were found to be either too broad or too specific. It was necessary to study the definitions adopted to understand the basis of financial literacy frameworks in the review of literature.

Table 1

*Conceptual Definitions of Financial Literacy*

Source	Conceptual Definition
Hilgert, Hogarth, & Beverley (2003)	Financial <i>knowledge</i>
FINRA (2003)	“The <i>understanding</i> ordinary investors have of market principles, instruments, organizations and regulations” (p. 2).
Moore (2003)	“Individuals are considered financially literate if they are competent and can demonstrate they <i>have used knowledge</i> they have learned. Financial literacy cannot be measured directly so proxies must be used. Literacy is obtained through practical <i>experience</i> and active <i>integration of knowledge</i> . As people become more literate they become increasingly more financially sophisticated and it is conjectured that this may also mean that an individual may be more competent” (p.29).
National Council on Economic Education (NCEE) (2005)	“ <i>Familiarity</i> with basic economic principles, knowledge about the U.S. economy, and <i>understanding</i> of some key economic terms” (3).
Mandell (2007)	“The <i>ability</i> to evaluate the new and complex financial instrument and <i>make informed judgments</i> in both choice of instruments and extent of use that would be in their own best long-run interests” (pp.163-164).
Lusardi and Mitchell (2007c)	<i>Familiarity</i> with “the most basic economic concepts needed to make sensible saving and investment decisions” (p. 36).
Lusardi and Tufano (2008)	Focus on debt literacy, a component of financial literacy, defining as “the <i>ability to make simple decisions</i> regarding debt contracts, in particular how one <i>applies basic knowledge</i> about interest compounding, measured in the context of everyday financial choices” (p. 1).
ANZ Bank (2008), drawn from Schagen (2007)	“The <i>ability to make informed judgments</i> and to take effective decisions regarding the use and management of money” (p. 1).
Lusardi (2008a, 2008b)	“ <i>Knowledge</i> of basic financial concepts, such as the working of interest compounding, the difference between nominal and real values, and the basics of risk diversification” (p. 2).

This table summarized results found in a study about financial literacy conducted in the MENA Region. The study compared acquisition of certain skills among various countries.

Table 2

*Financial Literacy of Lebanese Women Compared to the MENA Region*

Index/Component	Score of Lebanese Women/ Comparison to MENA or other Scores
Financial Literacy Index	61.8% 1.5 points below the average score in the Middle East
Comprehension of compounded interest	13% of Lebanese women 57% in Egypt
Women`s Basic Money Management Component	65.7% 1 ahead of the average score in the Middle East
Knowledge of Investing	44.4% 4 points below the average of the Middle East
Financial Planning Component	67% 4 points below the average score in the region

Students in their second year secondary do not take the same number of Economics Periods, and so students who are placed in SE are assumed to cover a larger amount of chapter than their peers in the scientific section.

Also, in third year secondary, only students placed in SE study Economics and accordingly are exposed to new material that their peers in scientific sections do not get the chance to learn.

Table 3

*Distribution of Economics Periods per Week/Year*

Stages	Secondary Education					
	First year	Second year		Third year		
Year		Sociology and Economics	Sciences	Sociology and Economics (Group 1A)	General Sciences (Group 1B)	Life Sciences (Group 1B)
Weekly periods	1	1	1	4	-	-
Yearly periods	30	30	30	120	-	-



The table below summarizes the response rates of third secondary students and graduates on Survey 3 and Survey 4 questions. The percentage written next to the correct answer marked by the \* symbol, represents the number of participants who chose it.

Table 9

*Survey Response Rates*

Question	Response Rate Group 1 N= 54	Response Rate Group 2 N=49
1. Inflation can cause difficulty in many ways. Which group would have the greatest problem during periods of high inflation that last several years?	90.70%	96%
a) Older, working couples saving for retirement.		
b) Older people living on fixed retirement income*	8.16%	31.25%
c) Young couples with no children who both work.		
d) Young working couples with children.		
2. Which of the following is true about value added tax (VAT)?	94.40%	98%
a) The national VAT percentage rate is 6%.		
b) The government will deduct it from your paycheck.		
c) You don't have to pay the tax if your income is very low.		
d) It makes things more expensive for you to buy*	49%	44.89%
3. Rebecca has saved \$12,000 for her college expenses by working part-time. Her plan is to start college next year and she needs all of the money she saved. Which of the following is the safest place for her college money?	100%	100%
a) Locked in her closet at home.		
b) Stocks.		
c) Corporate bonds.		
d) A bank savings account*	90.70%	90%

4. Which of the following types of investment would best protect the purchasing power of a family's savings in the event of a sudden increase in inflation?	94.40%	88%
a) A 10-year bond issued by a corporation.		
b) A certificate of deposit at a bank.		
c) A twenty-five year corporate bond.		
d) A house financed with a fixed-rate mortgage*.	21.56%	50%
5. Under which of the following circumstances would it be financially beneficial to you to borrow money to buy something now and repay it with future income?	90.74%	96%
a) When you need to buy a car to get a much better paying job.	61.22%	58.33%
b) When you really need a week vacation.		
c) When some clothes you like go on sale.		
d) When the interest on the loan is greater than the interest you get on your savings.		
6. Your take home pay from your job is less than the total amount you earn. Which of the following best describes what is taken out of your total pay?	90.74%	90%
a) Social security contributions.		
b) Income tax, property tax, and social security contributions.		
c) Income tax and social security contributions*	22.44%	42.22%
d) Income tax, VAT, and social security contribution.		
7. Retirement income paid by a company is called:	92.59%	98%
a) End of service indemnity.		
b) Pension *	56%	65.30%
c) Rents and profits.		
d) Social Security.		
8. Many people put aside money to take care of unexpected expenses. If Juan and Elva have money put aside for emergencies, in which of the following forms would it be of LEAST benefit to them if they needed it right away?	94.44%	90%
a) Invested in a down payment on the house*	15%	60%
b) Checking account.		
c) Stocks.		
d) Savings account.		

9. David just found a job with a take-home pay of \$2,000 per month. He must pay \$900 for rent and \$150 for groceries each month. He also spends \$250 per month on transportation. If he budgets \$100 each month for clothing, \$200 for restaurants and \$250 for everything else, how long will it take him to accumulate savings of \$600.	92.59%	96%
a) 3 months.		
b) 4 months *	82%	81.25%
c) 1 month.		
d) 2 months.		
10. Sara and Joshua just had a baby. They received money as baby gifts and want to put it away for the baby's education. Which of the following tends to have the highest growth over periods of time as long as 18 years?	98.14%	94%
a) A checking account.		
b) Stocks.		
c) Government savings bond*	7.54%	6.38%
d) A savings account.		
11. Chelsea worked her way through college earning \$15,000 per year. After graduation, her first job pays \$30,000. The total dollar amount Chelsea will have to pay in Income taxes in her new job will:	92.59%	96%
a) Increase according to a standard progressive structure*	64%	79.16%
b) Go up a little from when she was in college.		
c) Stay the same as when she was in college.		
d) Be lower than when she was in college.		
12. Which of the following best describes the primary sources of income for most people age 20-35?	96.29%	98%
a) Dividends and interest.		
b) Salaries, wages, tips*	86.53%	93.87%
c) Profits from business.		
d) Rents.		

13. Rob and Mary are the same age. At age 25 Mary began saving \$2,000 a year while Rob saved nothing. At age 50, Rob realized that he needed money for retirement and started saving \$4,000 per year while Mary kept saving her \$2,000. Now they are both 75 years old. Who has the most money in his or her retirement account?	92.59%	96%
a) They would each have the same amount because they put away exactly the same		
b) Rob, because he saved more each year		
c) Mary, because she has put away more money		
d) Mary, because her money has grown for a longer time at compound interest*	54%	56.25%
14. Many young people receive health insurance benefits through their parents. Which of the following statements is true about health insurance coverage?	87.03%	94%
a) You are covered by your parents' insurance until you marry, regardless of your age.		
b) If your parents become unemployed, your insurance coverage may stop, regardless of your age *	34.04%	44.68%
c) Young people don't need health insurance because they are so healthy.		
d) You continue to be covered by your parents' insurance as long as you live at home, regardless of your age.		
15. Don and Bill work together in the finance department of the same company and earn the same pay. Bill spends his free time taking work-related classes to improve his computer skills; while Don spends his free time socializing with friends and working out at a fitness center. After five years, what is likely to be true?	98.14%	96%
a) Don will make more because he is more social.		
b) Don will make more because Bill is likely to be laid off.		
c) Bill will make more money because he is more valuable to his company *	75.47%	72.91%
d) Don and Bill will continue to make the same money.		
16. If your credit card is stolen and the thief runs up a total debt of \$1,000, but you notify the bank as soon as you discover it is missing, what is the	96.29%	98%

maximum amount that you can be forced to pay?

- |  |        |        |
|--|--------|--------|
| a) It depends on the insurance policy of each bank | 37.03% | 46.93% |
| b) \$1000  |        |        |
| c) Nothing.  |        |        |
| d) \$100   |        |        |

17. Which of the following statements is NOT correct about most ATM (Automated Teller Machine.) cards?

- |   |        |        |
|---|--------|--------|
|   | 94.44% | 96%    |
| a) You can generally get cash 24 hours-a-day.   |        |        |
| b) You can generally obtain information concerning your bank balance at an ATM machine. |        |        |
| c) You can get cash anywhere in the world with no fee *                                 | 62.74% | 89.58% |
| d) You must have a bank account to have an ATM Card.                                    |        |        |

18. Matt has a good job on the production line of a factory in his home town. During the past year or two, the municipality in which Matt lives has been raising taxes on its businesses to the point where they are much higher than in neighboring municipalities. What effect is this likely to have on Matt's job?

- |  |        |        |
|--|--------|--------|
|  | 79.62% | 88%    |
| a) Higher business taxes will cause more businesses to move into Matt's municipality. raising wages. |        |        |
| b) Higher business taxes can't have any effect on Matt's job.  |        |        |
| c) Matt's company may consider moving to a lower-tax municipality, threatening Matt's job *          | 65.11% | 72.27% |
| d) He is likely to get a large raise to offset the effect of higher taxes.                           |        |        |

19. If you have caused an accident, which type of automobile insurance would cover damage to your own car?

- |                                    |        |        |
|------------------------------------|--------|--------|
|                                    | 85.18% | 92%    |
| a) Insurance premium.              |        |        |
| b) Third Party Liability.          |        |        |
| c) Compulsory Motor Insurance.     |        |        |
| d) Comprehensive Policy/All Risk * | 52.17% | 80.43% |

20. Scott and Eric are young men. Each has a good credit history. They work at the same company and make approximately the same salary. Scott has borrowed \$6,000 to take a foreign vacation. Eric has borrowed \$6,000 to buy a car. Who is likely to pay the lowest finance charge?	90.74%	90%
a) Eric will pay less because the car is collateral for the loan *	30.61%	35.55%
b) They will both pay the same because the rate is set by law.		
c) Scott will pay less because people who travel overseas are better risks.		
d) They will both pay the same because they have almost identical financial backgrounds.		
21. If you went to college and earned a four-year degree, how much more money could you expect to earn than if you only had a high school diploma?	98.14%	96%
a) About 10 times as much.		
b) No more; I would make about the same either way.		
c) A little more; about 20% more.		
d) A lot more; about 70% more*	62.26%	64.58%
22. If each of the following persons had the same amount of take home pay, who would need the greatest amount of life insurance?	98.10%	98%
a) An elderly retired man, with a wife who is also retired.		
b) A young married man without children.		
c) A young single woman with two young children *	52.83%	48.97%
d.) A young single woman without children		
23. Which of the following instruments is NOT typically associated with spending?	100%	90%
a) Debit card.		
b) Certificate of deposit *	81.48%	84.44%
c) Cash.		
d) Credit card		
24. Which of the following credit card users is likely to pay the GREATEST dollar amount in finance charges per year, if they all charge the same	53.70%	86%

amount per year on their cards?

- |  |        |        |
|--|--------|--------|
| a) Jessica, who pays at least the minimum amount each month and more, when she has the money.  |        |        |
| b) Vera, who generally pays off her credit card in full but, occasionally, will pay the minimum when she is short of cash  |        |        |
| c) Megan, who always pays off her credit card bill in full shortly after she receives it   |        |        |
| d) Erin, who only pays the minimum amount each month *   | 51.72% | 62.78% |
| <br>25. Which of the following statements is true?   | 83.33% | 92%    |
| a) Banks and the Central Bank of Lebanon share the credit history of their borrowers with each other and are likely to know of any loan payments that you have missed. | 46.60% | 56.52% |
| b) People have so many loans it is very unlikely that one bank will know your history with another bank  |        |        |
| c) Your bad loan payment record with one bank will not be considered if you apply to another bank for a loan.  |        |        |
| d) If you missed a payment more than 2 years ago, it cannot be considered in a loan decision.  |        |        |
| <br>26. Dan must borrow \$12,000 to complete his college education. Which of the following would NOT be likely to reduce the interest rate?                            | 79.62% | 94%    |
| a) If he went to a private college in Koura rather than a college in Beirut *  | 23.25% | 40.42% |
| b) If his parents cosigned the loan.   |        |        |
| c) If his parents took out an additional mortgage on their house for the loan.   |        |        |
| d) If the loan was insured by the Government.  |        |        |
| <br>27. If you had a savings account at a bank, which of the following would be correct concerning the interest that you would earn on this account?                   | 72.22% | 82%    |
| a) Earnings from savings account interest may be taxed.  | 10.25% | 29.26% |
| b) Income tax may be charged on the interest if your income is high enough.  |        |        |
| c) VAT may be charged on the interest that you earn.   |        |        |

d) You cannot earn interest until you pass your 18th birthday.

28. Treasury bonds are savings programs that are protected by the government against loss:

- a) True
- b) False

81.48%  
75%

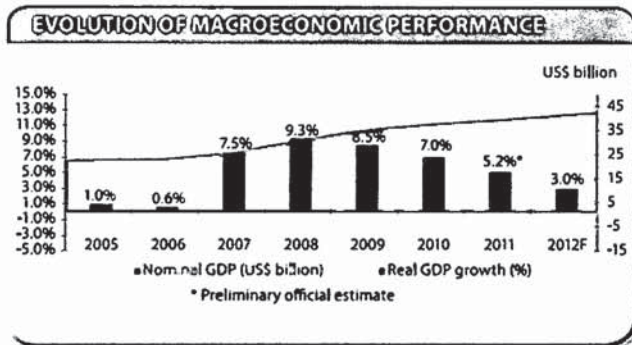
84%  
80.95%



The Lebanese economy Real GDP yearly growth rate graph showed a continuous recession since 2008, the year when the financial crisis began. The decreasing economic growth was partly caused by the global economic crisis. Those percentages might have been a starting point to research the importance of financial literacy at the macroeconomic level in Lebanon.

Figure 1

*Real GDP Growth of Lebanon*



## Appendix A

The list below was taken from the Australian Framework for Financial Literacy. The concepts were attributed to financial literacy education and were consequently used for the curriculum mapping of the economics program implemented at the private catholic school where the study took place:

### **Personal finance concepts**

- What money is (i.e. different forms of money such as cash and credit)
- Where money comes from (i.e. different forms of income such as wages and government benefits)
- Spending money (i.e. different payment methods such as cash, cheque and EFTPOS)
- Budgeting
- Saving money
- Borrowing money
- Financial planning (i.e. goals, needs, wants and life stages)
- Investing money, including concepts of risk and return, interest, and financial markets

### **Financial products and services**

- Bank accounts
- Electronic banking (e.g. ATMs, EFTPOS)
- Credit and loans, including credit cards and store cards
- Mortgages
- Superannuation
- Insurance (e.g. car, travel, home, life)
- Non-superannuation investments (e.g. managed investments, shares, futures and options)
- Financial advice
- Financial industry (e.g. banks, credit unions, insurance companies).

### **Consumer rights and responsibilities**

- Understanding that consumers have rights
- Understanding information about financial products and services
- Understanding the importance of financial management (e.g. staying out of debt, supporting family)
- Understanding the importance of shopping around
- Understanding the importance of keeping financial records
- Knowing where to get (independent) information
- Knowing where to go for assistance
- Knowing what a regulator is and who they are (e.g. ASIC, ACCC, RBA, APRA); and
- Knowing how to make an effective complaint (p.16).

## Appendix B

The educator-researcher used the following list of financial literacy education concepts developed for the purpose of the Indian Framework for Financial Literacy because she found it comprehensive, detailed, and clear. This list was used in the educator-researcher's discussion of results part as a recommendation to enhance the introduction of financial literacy education in the Lebanese economics curriculum.

**Money**

- History of Money
- Barter System
- Importance and Concept of money
- Coins
- Paper money
- Plastic Money
- E –Money

**Household Economics**

- Earnings
- Nature of Earnings
- Needs and Wants
- List your expenses
- Find Simple ways to save money
- Expenditure, Cost and Prices, Inflation
- Savings & Thrift
- What you save is what you earn
- Borrowing - Mild Definition
- Investment - Mild Definition
- Interest -- Mild Definition
- Interest rate -- Mild Definition

**Banking**

- Definition
- Role of a Bank - in growth of saving and Investment
- Types of banks
- Services offered by banks
- Deposits and Loans
- Types of A/c
- Opening a bank A/c
- How to Transact with banks
- KYC norms - (A/c opening form, Address Proof)
- How to read bank statement
- Banking products and services
- Net Banking

- Calculating Interest --Saving, FD, Simple and Compound Interest
- Power of compounding
- Loans
- Types of loans
- Definition of EMI
- Calculation of EMI
- Difference between Banks and Money lenders
- Micro Finance
- How to make a complaint -Banking complaints
- Ombudsman
- Basic of Foreign Exchange
- Importance and Use of Foreign Exchange
- Check Counterfeit Currency
- CIBIL
- Regulator – Role of RBI

**4. Investment**

- Piggy bank
- Principles of Investment- Safety, liquidity and return
- Bank saving
- FD, RD, Post Office Savings
- POMIS, NSC
- PPF
- NPS
- Bonds and debentures
- Shares
- Mutual funds
- Gold and Silver
- Real estate
- Arts and other investments
- Commodities
- Asset allocation
- Risk and Return
- Basics of Investment- liquidity, credit

- Compounding and Time value of money
- Nominal and Real Return(Inflation)
- Effect of taxes
- u. Long term v/s Short term

**Behavior Aspects**

- Concept of Needs and wants
- Helping the needy
- Spend wisely v/s waste spending
- Conspicuous Consumption-lavish
- Impulsive spending
- What you save is what you earn
- Using money responsibly
- Avoiding cash payments
- Insisting on bills
- Dangers of excessive borrowing
- Repayment of loans
- Make informed choices
- Ownership of your financial decision
- Take care of your old ones
- Tax payment
- Insider Trading
- Up Keep your Financial records
- Free advise may be injurious

**Financial Planning**

- Meaning
- Household financial health check up
- Important life stages
- Education
- Medical and other Emergencies
- Social obligations
- Goal setting
- Budgeting
- Marriage
- Buying a house
- Buying a vehicle
- Plan a vacation
- Retirement planning
- Price of procrastination

**Insurance**

- Meaning
- Need and Purpose
- Loss protection
- Life ,non life and health
- Benefits of Insurance
- Term plans
- Investment plans
- Hybrid plans -Ulip etc

- Agents, advisors
- Role of Insurance companies
- Regulator - IRDA
- Ombudsman
- How to take a new policy
- How to revive old policy
- Transaction cycle
- Nomination
- Assignement
- Claims settlement
- Exclusions
- Difference between Insurance and Investment

**8. Retirement and Estate planning**

- Concept
- PPF, EPF, Gratuity, NPS, SCSS
- Financial need after retirement
- Three Stages -Saving, Accumulating and Dis-saving
- Calculation of Corpus required after retirement
- Protection from Inflation
- Reverse Mortgage
- Definition of will
- Making a will

**9. Securities markets**

- Entrepreneurship
- Forms of Business enterprises
- Company definition
- Shares
- Primary market - Reading a prospectus, what to read
- Secondary market
- Issuers, Investor and Intermediaries
- Regulator - Role of SEBI
- Dealing in Securities market
- Demat account and Depository
- ASBA
- Broker
- Stock exchange
- Grievance and Redressal
- Financial Advisor, CA, CFP, CPFA
- Basic terms and processes in Securities Market
- Market rumors and tips
- Sources of reliable information
- What are indices ( Sensex and Nifty)

- Investment v/s Speculation

#### **. Use of Technology Do and Don'ts**

- Password protection
- NEFT and RTGS
- ATM
- Online trading
- Internet banking
- Need for keeping mobile number with banks
- Three in one account
- Need of protecting your online account
- Functioning of stock exchanges
- Depository working mechanism
- Algorithmic trading
- Financial functions using excel

#### **. Scams, Frauds and Ponzi Schemes**

- Free tips
- Insider trading
- Money laundering
- Phishing mail about winning a lottery
- Price rigging
- Dabba trading
- Bogus companies
- Multi level marketing
- Schemes not regulated by anyone
- Real Estate frauds
- Banking and credit card scams
- Preventive measures from getting duped

#### **. Borrowings Need for borrowing**

- Need for borrowing Source of borrowing
- Merit and demerits of borrowing
- How much to borrow
- Avoid life of credit
- Comparing interest rate on loan offering
- f. Importance of timely payment
- g. Avoid default

- h. Avoid borrowing for conspicuous consumption

- Credit cards - Merits and Demerits

#### **13. Consumer protection and redressal mechanism**

- Rights of Consumers
- Applicable to Financial services
- Filing a complaint
- Complain to entity concerned
- Ombudsman
- Regulators
- Arbitration
- Consumer courts
- Govt. Websites -(PG Portals)
- Investor Associations

#### **14. Taxes**

- Meaning
- Need of taxes
- Types of taxes
- How taxes impact income
- Income, wealth and gift tax
- Service tax, STT, Stamp Duty
- Tax planning v/s tax evasion
- Tax rates
- Tax free bonds
- Tax saving investment

#### **15. Importance of maintaining financial records**

- PAN and its utility
- Aadhar card
- Demat Account
- Bank statements and passbooks
- Insurance policies
- Tax return
- Property documents
- Helpline numbers of service providers

## Appendix C

The following document is the set of curriculum standards implemented at a private catholic school where the study took place. This document was used to search for explicitly mentioned concepts of financial literacy listed in the Australian Framework for Financial Literacy.

**HIGHEST SECONDARY – 12****Content Standards*****Economic Scarcity*****Learning Objectives**

*By the end of the year, students should be able to:*

- 1 Define scarcity of resources
- 2 Differentiate between the 3 economic resources
- 3 Determine cases of scarcity in both developing and developed countries
- 4 Analyze the economic problem based on the given needs/wants and the available resources

***Opportunity Cost***

- 1 Define opportunity cost
- 2 Apply the formula for the calculation of the opportunity cost
- 3 Make decisions based on their respective opportunity cost

***PPF***

- 1 Define set of assumptions
- 2 Relate assumptions to graph
- 3 Draw graph
- 4 Analyze graph

***Economic Questions***

- 1 Understand each of the questions
- 2 Relate the questions to opportunity cost
- 3 Analyze the allocation of resources based on the answers of each

***Economic Decision***

- 1 Distinguish between rational and irrational thinking
- 2 Take decisions based on the maximization of utilities and profits
- 3 Weigh costs and benefits of economic decisions
- 4 Analyze a successful economic decision from an unsuccessful one
- 5 Distinguish between private and social costs and benefits

***Production in a Firm***

- 1 Understand the process of production
- 2 Differentiate between the various types of production
- 3 Recognize the different purposes of production based on the identity of the producer
- 4 Analyze privatization as a solution

**Labor**

- . Explain the components of the labor force
- ! Interpret the law of demand
- ! Deduce the law of supply
- ! Draw the graph
- ! Analyze the wage differentials across professions, regions, and countries
- ! Understand the mechanism above and below the equilibrium point

**Saving**

- ! Understand reasons behind saving
- ! Recognize the various saving institutions
- ! Differentiate between income and wealth
- ! Analyze the inequalities of income and wealth between countries, or in the same area

**Profit 9.1** Define profits

- ! Distinguish between profits and revenues
- ! Understand profit maximization
- ! Analyze business strategies and purposes of firms

**Unemployment**

- .1 Define unemployment and its types
- .2 Deduce the consequences of unemployment
- .3 Explain the causes of unemployment
- .4 Analyze the appropriate government intervention channel for each type of unemployment

**COND SECONDARY - \*COMMON: 2S & 2SE****Content Standards*****Circular Flow of Income***

*the end of the year, students should be able to:*

- | Define economic models and their usage
- ? Distinguish between the 6 sectors of the economy
- ! Explain the interactions between the sectors according to the 2-sector and 5-sector model
- ! Analyze deficits and surpluses of trade and payment balances

***Gross Domestic Product***

- | Define GDP and its components
- ? Calculate GDP
- ! Deduce the effects of external factors on GDP
- ! Compare GDP per capital between countries and along the years
- ! Analyze the modifications the government has to do in order to boost national incomes

***Money***

- | Define money
- ? Recognize the essential characteristics of money
- ! Explain the evolution of money

***Banking***

- | Recognize the various services offered by a bank
- ? Understand process of money making numerically
- ! Explain the role of the central bank
- ! Analyze the monetary policy tools: interest and reserve requirements

***Supply & Demand***

- | Explain the law of demand and its determinants
- ? Explain the law of supply and its determinants
- ! Draw a graphical representation of supply and demand
- ! Distinguish between shifts and movements
- ! Analyze the interactions of the market according to supply and demand

***Market Structures***

- | Compare and contrast between the 2 basic market structures: perfect competition and monopoly
- ? Analyze the efficiencies of perfect competition and monopoly



**COND SECONDARY - 2SE**

**Concept Standards**

***International Trade***

**Students should be able to:**

- 1 Define international trade
- 2 Differentiate between domestic trade and int'l trade
- 3 Deduce the advantages of Int'l trade
- 4 Determine the various international trade organization

***Protectionism***

- 1 Define the types of protectionism
- 2 List the functions of each type
- 3 Describe each function
- 4 Deduce the advantages and disadvantages
- 5 Compare arguments for liberalization or protectionism

***Inflation***

- 1 Define inflation
- 2 Relate inflation to the price levels
- 3 List the causes of inflation
- 4 Estimate some effects of inflation
- 5 Understand the anti-inflationary policies
- 6 Describe each policy
- 7 Match the appropriate anti-inflation policy to each type

***Unemployment***

- 1 Define unemployment
- 2 List the costs of unemployment
- 3 Describe the costs of unemployment
- 4 Distinguish between social cost and economic cost
- 5 Describe the unemployment types
- 6 Understand the anti-unemployment policies
- 7 Describe each policy
- 8 Outline unemployment and the level of production
- 9 Categorize: which policy to which type

***Economic Growth***

- 1 Define economic growth
- 2 Relate investment and GDP to growth
- 3 List the resources that affect growth
- 4 Describe these resources
- 5 Deduce the importance of human resources

**HIRD SECONDARY – (Sociology & Economics) - 3SE****Content Standards*****Development******Students should be able to:***

- Define development
- ! Understand economic conditions
- ! Understand social conditions
- ! Deduce the difference between developed & developing countries

***Growth***

- Define growth
- ! List the indicators of development
- ! Describe the economic indicators
- ! Describe the financial indicators
- ! Describe the social indicators
- ! Describe the health indicators
- ! Describe the demographic indicators
- ! Describe the political indicators
- ! Describe the educational indicators
- ! Describe the cultural indicators
- ! Deduce the development-growth relationship
- ! Categorize (based on indicators) countries as: developed or developing

***Privatization***

- Differentiate between B.O.T & B.O.O

***Liberal System***

- Understand the main principles
- ! Distinguish between Classical and Neo
- ! Describe the advantages of Classical
- ! Describe the disadvantages of Classical
- ! Describe the advantages of Neo
- ! Describe the disadvantages of Neo
- ! Categorize economic systems as: Classical or Neo

***Socialist System***

- Define the principles of Communism
- ! Define the principles of Social-Democratic
- ! Distinguish between Comm. And Soc-Dem
- ! Describe the advantages of Communism
- ! Describe the disadvantages of Communism
- ! Describe the advantages of Soc-Dem
- ! Describe the disadvantages of Soc-Dem
- ! Describe each policy
- ! Categorize economic systems as: Communism or Soc-Dem

***Economic Cycle***

- Define economic cycle
- ! Describe cycles' phases:

Growth's characteristics \* Recession's characteristics \* Depression's characteristics \* Depression's characteristics

! Deduce the form of an economic cycle

### ***Demand Side Policy***

! Describe the related policies and their characteristics

### ***Supply Side Policy***

! Describe the related policies and their characteristics

! Deduce if supply side or demand side

### ***Inflation***

! Define the causes

! List the consequences

! Describe each consequence

! List the anti-inflationary policies

! Describe the anti-inflationary policies

! Deduce which policy to which cause

### ***Unemployment***

.1 Define the forms

.2 List the consequences

.3 Describe each consequence

.4 List the anti-unemployment policies

.5 Describe the anti-unemployment policies

.6 Deduce which policy to which form

### ***Agricultural Policy***

.1 Define "subsidized price"

.2 Describe the policies supporting farmer's revenues

.3 Describe the policies of improving the agricultural structure

.4 Deduce the importance of agriculture in the economy

### ***Industrial Policy***

2.1 Define the industrial policy

!2 Describe the alternative industrial policies based on government intervention

!3 List the tools of the industrial policy

!4 Describe each tool

!5 Deduce the importance of industry in the economy

### ***Cost***

!1 Define fixed and variable costs

!2 Calculate total costs

!3 Calculate average fixed costs

!4 Calculate average variable costs

!5 Calculate average costs

!6 Calculate marginal costs

!7 Plot the curve of each type of cost

!8 Analyze the curves' directions

**Consumption**

- .1 Define consumption
- .2 Calculate elasticity of price expectations
- .3 Define price-demand relationship
- .4 Calculate the price elasticity of demand
- .5 Deduce the elasticity type
- .6 Calculate the average propensity to save
- .7 Calculate the marginal propensity to save
- .8 Calculate the average propensity to save
- .9 Calculate the marginal propensity to save
- .10 Deduce the effect of income on consumption

**Supply**

- i.1 Define supply
- .2 Define price-supply relationship
- .3 Calculate the price elasticity of supply
- .4 Deduce the elasticity type

**Investment**

- .1 Define investment
- .2 Describe the forms of investment
- .3 Know how to fund investments
- .4 Plot the investment function
- .5 Deduce the relation between: interest rate and investment

**Interest**

- .1 Calculate the simple interest
- .2 Calculate the compound interest
- .3 Deduce the difference between the two types

**Feasibility study**

- .1 Define feasibility
- .2 Calculate present value of revenues
- .3 Calculate present value of costs
- .4 Calculate present value of cash flows
- .5 Define "break-even point"
- .6 Calculate the break-even point
- .7 Calculate the profitability rate
- .8 Deduce if the investment is feasible

**Management**

- .1 Define management
- .2 Describe the managerial skills
- .3 List the activities performed by managers

**Planning**

- .1 Define the steps of the planning process
- .2 List the planning phases (in order)
- .3 Deduce some effective organization standards

**Motivation** 21.1 Define motivation

- 2 Know the hierarchy of needs (Maslow)
- 3 Differentiate between moral and material motives
- 4 Classify promotion as moral and material motive

***Communication***

- 1 Know the means, objectives, and elements

***Coordination***

- 1 Define coordination
- 2 Deduce effective coordination

***Leadership***

- .1 Define leadership
- .2 Describe the characteristics
- .3 Deduce: Leader vs. Manager

***Control***

- .1 Define Control
- .2 List the steps of the control process
- .3 Deduce some objectives

***Decision Making***

- .1 Define and list the elements
- .2 List the steps of decision making
- .3 Describe the steps
- .4 Define tactic and strategic decisions
- .5 Deduce the differences between tactic and strategic

Appendix D

The following is a set of general objectives that were developed by CERD upon the implementation of the viewed educational curriculum that led to the opening of the Sociology Economics Sections at schools in Lebanon. There was no explicit mention of the term financial literacy.

General Objectives of Teaching Sociology and Economics in Secondary Classes

The major goals of teaching Sociology and Economics are to make the student:

1. Have a full understanding of the cultural, behavioral and economic characteristics of different social categories.
2. Notice the interdependence between sociology, economics and management and have a multidimensional view of everyday life.
3. Conceive social and economic problems in Lebanon and how to solve them.
4. Know the scientific dimension of sociology, economics and management, and the social and economic dimension of natural sciences.
5. Deal with economic and social issues rationally and perceive the importance of investment and national production.
6. Able to integrate in his society, participate in different developmental activities and deal with social and economic issues scientifically.

Appendix E

The following was the list of specific objectives of the economics curriculum by class level as published by the State Board of Education. The educator-researcher used it in her discussion part to recommend the integration of financial literacy in the curriculum.

**SECONDARY FIRST - SPECIFIC OBJECTIVES**

**Economics:**

1. Acquire the basic economic concepts needed to understand economic situation.
2. Learn about the enterprises: structure, function and legal status.
3. Use his background knowledge to understand different economic conditions.
4. Use the basic principles in finance and management to understand the economic conditions of economic life.

**CONTENT**

**ECONOMIC LIFE**

**1- Topics in Economics (2 periods)**

**2- Labor and labor force (5 periods)**

**3- Capital (5 periods)**

- Definition
- Forms
- Financial sources

**4- Economic enterprise (6 periods)**

- Definition
- Functions
- Kinds
- Legal status

**5- Income (4 periods)**

- Definition
- Distribution
- Redistribution

**6- Budgeting of family income**

- Consumption

- Savings
- Factors affecting consumption and savings.
- Central tendency and dispersion.

## SECONDARY SECOND – HUMANITIES SECTION – SPECIFIC OBJECTIVES

### **Economics**

1. Assimilate the operational concepts needed to understand the mechanisms of economic activities.
2. Skilled in fieldwork and data collection to develop his personal capacities and aptitudes.
3. Learn the techniques of analysis in economics and accounting.

## CONTENT

### ECONOMIC MECHANISMS AND ACTIVITIES

#### 1- Economic circuit (5 periods)

- Economic agents.
- Economic operations.

#### 2- National accounting (5 periods)

- Definition, function and rules.
- Main giant enterprises.
- Main economic ratios.

#### 3- Currency and banks (6 periods)

- Currency: definition and function, forms and the international monetary system.
- Banks: origin, functions, kinds, currency issuing Central Bank and monetary policy.

#### 4- Market mechanisms (4 periods)

- Definition of market economy.
- Law of demand and supply.
- Factors affecting demand and supply.
- Free competition.
- Forms of monopoly.
- State intervention in the market.

#### 5- Foreign trade (3 periods)

- Balance of payments.
- Foreign trade: globalization and specialization.
- Foreign trade policies

#### 6- Public finance (2 periods)



- State balance sheet.
- Local authorities finance.

#### 7- Public accounting (5 periods)

- Budget
- Investment and account.

### CONDARY SECOND – SCIENCES SECTION – SPECIFIC OBJECTIVES

#### conomics

1. Assimilate the operational concepts needed to understand the mechanisms of economic activities.
2. Skilled in fieldwork and data collection to develop his personal capacities and aptitudes.
3. Learn the techniques of analysis in economics and accounting.

#### CONTENT

#### ECONOMIC MECHANISMS AND ACTIVITIES

##### 1- Economic circuit (5 periods)

- Economic agents.
- Economic operations.

##### 2- National accounting (5 periods)

- Definition, function and rules.
- Main giant enterprises.
- Main economic ratios.

##### 3- Currency and banks (6 periods)

- Currency: Definition and function, forms and the international monetary system.
- Banks: origin, functions, kinds, currency issuing Central Bank and monetary policy.

##### 4- Market mechanisms (4 periods)

- Definition and market economy.
- Law of demand and supply.
- Factors affecting demand and supply.
- Free competition.
- Forms of monopoly.
- State intervention in the market.

##### 5- Foreign trade (3 periods)

- Balance of payments.

- Foreign trade: globalization and specialization.
- Foreign trade policies.

**5- Public finance (2 periods)**

- State balance sheet.
- Local authorities finance.

**7- Public accounting (5 periods)**

- Budget.
- Investment and Account.

SECONDARY THIRD – SOCIOLOGY & ECONOMICS SECTION – SPECIFIC OBJECTIVES

**conomics**

1. Know about different international policies in development and deduce the rules required to make an underdeveloped country a developed one.
2. Know about the conjunctural and structural policies in economics that the state adopts to develop the national economy.
3. Learn the basic principles of qualitative and quantitative analysis in economics and become trained in this domain.
4. Learn the basic concepts of administrative sciences.

CONTENT

**ECONOMICS**

**1- Growth and development (30 periods)**

- Industrial revolutions.
- International division of labor and economic development of non-industrial countries.
- Social and economic conditions of developing countries in the post-colonial period.
- The notion of development:
- Concepts
- Indications: economic, financial, social, demographic, cultural - political and public health.
- Strategies of development in developing countries.

**2- Contemporary economic systems and the role of the state (5 periods):**

- Market economy systems.
- The classical perspective.
- The modern perspective.
- Planned economy systems.
- Mechanisms and processes.
- Status-quos.

**3- Economic crises and fluctuations (8 periods)**

- Morphology of economic circuit.
- Expansion

- Recession
- Crisis
- Depression
- Fluctuations:
- Inflation
- Shortage in demand
- Stagflation
- Stagnation
- Crises
- Deteriorating terms of foreign trade.
- 1929 crisis: causes and results.
- 1970's crisis: causes and results.

**I- Economic policies: conjunctural and structural (17 periods)**

- Conjunctural policies:

Introduction: concept of economic: conjuncture.

Policy of economic reform:

- Financial incentives.
- Monetary incentives.
- Other incentives.

Anti-inflation policy:

- Price control policy.
- Financial policy.
- Circumstantial solution.
- Monetary policy.
- Income policy.

Structural policies:

Agrarian policy:

- Policy of price subsidizing.
- Policy of improving infra structures.
- Main options for industrial policy.
- Industrial policy.
- Elements of industrial policy.

Employment policy:

- The classical policy.
- Rehabilitation of labor force.
- Policy of maintaining job opportunities.
- Liberal solutions.
- Circumstantial solutions.
- Policy of providing new job opportunities.

**5- Economic and financial analysis (30 periods)**

- Fixed and variable cost of production.
- Function of consumption.
- Investment.
- Basics of economic and financial evaluations (applications).
- Introduction to financial analysis.
- Compound interest.
- Function of production.
- Simple interest.
- Working capital.

**i- Introduction to administrative science (30 periods)**

- Definition, forms and kinds of:
  - Planning
  - Organization
  - Orientation
- Decision making.
- Marketing:
  - Basic concepts.
  - Market research.
  - Constraints of the market.

## Appendix F

## 2008 survey of Personal Financial Literacy Among High School Students

The questionnaire below was used as an instrument to test financial literacy among the third secondary students and graduates of the private catholic school where the study took place. That was its original form before the researcher customized it to account for cultural and economic differences.

**Part 1 - 31 JumpStart Questions**

*Numbers to the Left of Answers are Proportion Giving Response*

Inflation can cause difficulty in many ways. Which group would have the greatest problem during periods of high inflation that last several years?

- 10.6 a.) Older, working couples saving for retirement.
- 40.0 b.) Older people living on fixed retirement income.\*
- 7.2 c.) Young couples with no children who both work.
- 41.7 d.) Young working couples with children.

Which of the following is true about sales taxes?

- 27.2 a.) The national sales tax percentage rate is 6%.
- 25.5 b.) The federal government will deduct it from your paycheck.
- 4.9 c.) You don't have to pay the tax if your income is very low.
- 41.9 d.) It makes things more expensive for you to buy. \*

Rebecca has saved \$12,000 for her college expenses by working part-time. Her plan is to start college next year and she needs all of the money she saved. Which of the following is the safest place for her college money?

- 3.7 a.) Locked in her closet at home.
- 3.7 b.) Stocks.
- 4.8 c.) Corporate bonds.
- 87.7 d.) A bank savings account.\*

Which of the following types of investment would best protect the purchasing power of a family's savings in the event of a sudden increase in inflation?

- 19.2 a.) A 10-year bond issued by a corporation.
- 26.2 b.) A certificate of deposit at a bank.
- 17.4 c.) A twenty-five year corporate bond.
- 35.8 d.) A house financed with a fixed-rate mortgage.\*

Under which of the following circumstances would it be financially beneficial to you to borrow money to buy something now and repay it with future income?

- 55.8 a.) When you need to buy a car to get a much better paying job.\*
- 5.1 b.) When you really need a week vacation.
- 5.8 c.) When some clothes you like go on sale.
- 33.4 d.) When the interest on the loan is greater than the interest you get on your savings.

Which of the following statements best describes your right to check your credit history for accuracy?

- 47.7 a.) Your credit record can be checked once a year for free.\*
- 5.3 b.) You cannot see your credit record.
- 13.8 c.) All credit records are the property of the U.S. Government and access is only available to the FBI and Lenders.
- 33.2 d.) You can only check your record for free if you are turned down for credit based on a credit report.

Your take home pay from your job is less than the total amount you earn. Which of the following best describes what is taken out of your total pay?

- 9.5 a.) Social security and Medicare contributions.
- 21.2 b.) Federal income tax, property tax, and Medicare and social security contributions.
- 56.4 c.) Federal income tax, social security and Medicare contributions.\*
- 12.9 d.) Federal income tax, sales tax, and social security contribution.

Retirement income paid by a company is called:

- 37.4 a.) 401 (k).
- 36.2 b.) Pension.\*
- 3.6 c.) Rents and profits.
- 22.8 d.) Social Security.

Many people put aside money to take care of unexpected expenses. If Juan and Elva have money put aside for emergencies, in which of the following forms would it be of LEAST benefit to them if they needed it right away?

- 40.1 a.) Invested in a down payment on the house.\*
- 13.2 b.) Checking account.
- 32.1 c.) Stocks.
- 14.6 d.) Savings account.

10. David just found a job with a take-home pay of \$2,000 per month. He must pay \$900 for rent and \$150 for groceries each month. He also spends \$250 per month on transportation. If he budgets \$100 each month for clothing, \$200 for restaurants and \$250 for everything else, how long will it take him to accumulate savings of \$600.

- 20.9 a.) 3 months.
- 60.2 b.) 4 months.\*
- 6.7 c.) 1 month.
- 12.2 d.) 2 months.

11. Sara and Joshua just had a baby. They received money as baby gifts and want to put it away for the baby's education. Which of the following tends to have the highest growth over periods of time as long as 18 years?

- 4.7 a.) A checking account.
- 16.8 b.) Stocks.\*
- 37.3 c.) A U.S. Govt. savings bond.
- 41.3 d.) A savings account.

12. Barbara has just applied for a credit card. She is an 18-year-old high school graduate with few valuable possessions and no credit history. If Barbara is granted a credit card, which of the following is the most likely way that the credit card company will reduce ITS risk?

- 7.2 a.) It will make Barbara's parents pledge their home to repay Karen's credit card debt.
- 32.7 b.) It will require Barbara to have both parents co-sign for the card.
- 14.1 c.) It will charge Barbara twice the finance charge rate it charges older cardholders.
- 45.9 d.) It will start Barbara out with a small line of credit to see how she handles the account.\*

13. Chelsea worked her way through college earning \$15,000 per year. After graduation, her first job pays \$30,000. The total dollar amount Chelsea will have to pay in Federal Income taxes in her new job will:

- 47.1 a.) Double, at least, from when she was in college.\*
- 36.4 b.) Go up a little from when she was in college.
- 10.0 c.) Stay the same as when she was in college.
- 6.5 d.) Be lower than when she was in college.

14. Which of the following best describes the primary sources of income for most people age 20-35?

- 9.1 a.) Dividends and interest.
- 75.3 b.) Salaries, wages, tips.\*
- 9.1 c.) Profits from business.
- 6.5 d.) Rents.

15. If you are behind on your debt payments and go to a responsible credit counseling service such as the Consumer Credit Counseling Services, what help can they give you?

- 7.0 a.) They can cancel and cut up all of your credit cards without your permission.
- 17.3 b.) They can get the federal government to apply your income taxes to pay off your debts.
- 70.5 c.) They can work with those who loaned you money to set up a payment schedule that you can meet.\*
- 4.7 d.) They can force those who loaned you money to forgive all your debts.

16. Rob and Mary are the same age. At age 25 Mary began saving \$2,000 a year while Rob saved nothing. At age 50, Rob realized that he needed money for retirement and started saving \$4,000 per year while Mary kept saving her \$2,000. Now they are both 75 years old. Who has the most money in his or her retirement account?

- 24.8 a.) They would each have the same amount because they put away exactly the same
- 11.7 b.) Rob, because he saved more each year
- 12.5 c.) Mary, because she has put away more money
- 51.1 d.) Mary, because her money has grown for a longer time at compound interest.\*



17. Many young people receive health insurance benefits through their parents. Which of the following statements is true about health insurance coverage?

- 18.4 a.) You are covered by your parents' insurance until you marry, regardless of your age.
- 40.4 b.) If your parents become unemployed, your insurance coverage may stop, regardless of your age. \*
- 8.2 c.) Young people don't need health insurance because they are so healthy.
- 33.0 d.) You continue to be covered by your parents' insurance as long as you live at home, regardless of your age.

18. Don and Bill work together in the finance department of the same company and earn the same pay. Bill spends his free time taking work-related classes to improve his computer skills; while Don spends his free time socializing with friends and working out at a fitness center. After five years, what is likely to be true?

- 11.5 a.) Don will make more because he is more social.
- 9.8 b.) Don will make more because Bill is likely to be laid off.
- 67.9 c.) Bill will make more money because he is more valuable to his company.\*
- 10.8 d.) Don and Bill will continue to make the same money.

19. If your credit card is stolen and the thief runs up a total debt of \$1,000, but you notify the issuer of the card as soon as you discover it is missing, what is the maximum amount that you can be forced to pay according to Federal law?

- 17.3 a.) \$500
- 16.9 b.) \$1000
- 52.8 c.) Nothing.
- 13.0 d.) \$50\*

20. Which of the following statements is NOT correct about most ATM (Automated Teller Machine.) cards?

- 8.8 a.) You can generally get cash 24 hours-a-day.
- 14.0 b.) You can generally obtain information concerning your bank balance at an ATM machine.
- 68.0 c.) You can get cash anywhere in the world with no fee.\*
- 9.2 d.) You must have a bank account to have an ATM Card.

21. Matt has a good job on the production line of a factory in his home town. During the past year or two, the state in which Matt lives has been raising taxes on its businesses to the point where they are much higher than in neighboring states. What effect is this likely to have on Matt's job?

- 14.4 a.) Higher business taxes will cause more businesses to move into Matt's state, raising wages.
- 18.7 b.) Higher business taxes can't have any effect on Matt's job.
- 57.3 c.) Matt's company may consider moving to a lower-tax state, threatening Matt's job.\*
- 9.7 d.) He is likely to get a large raise to offset the effect of higher taxes.

22. If you have caused an accident, which type of automobile insurance would cover damage to your own car?

- 16.1 a.) Comprehensive.
- 40.0 b.) Liability.
- 7.1 c.) Term.
- 36.8 d.) Collision.\*

23. Scott and Eric are young men. Each has a good credit history. They work at the same company and make approximately the same salary. Scott has borrowed \$6,000 to take a foreign vacation. Eric has borrowed \$6,000 to buy a car. Who is likely to pay the lowest finance charge?

- 43.1 a.) Eric will pay less because the car is collateral for the loan. \*
- 18.7 b.) They will both pay the same because the rate is set by law.
- 13.3 c.) Scott will pay less because people who travel overseas are better risks.
- 24.9 d.) They will both pay the same because they have almost identical financial backgrounds.

24. If you went to college and earned a four-year degree, how much more money could you expect to earn than if you only had a high school diploma?

- 21.9 a.) About 10 times as much.
- 8.6 b.) No more; I would make about the same either way.
- 22.0 c.) A little more; about 20% more.
- 47.6 d.) A lot more; about 70% more. \*

25. Many savings programs are protected by the Federal government against loss. Which of the following is not?

- 13.4 a.) A U. S. Savings Bond.
- 43.8 b.) A certificate of deposit at the bank.
- 28.4 c.) A bond issued by one of the 50 States.\*
- 14.4 d.) A U. S. Treasury Bond.

26. If each of the following persons had the same amount of take home pay, who would need the greatest amount of life insurance?

- 31.6 a.) An elderly retired man, with a wife who is also retired.
- 10.0 b.) A young married man without children.
- 51.1 c.) A young single woman with two young children. \*
- 7.2 d.) A young single woman without children.

27. Which of the following instruments is NOT typically associated with spending?

- 6.7 a.) Debit card.
- 82.1 b.) Certificate of deposit.\*
- 6.7 c.) Cash.
- 4.5 d.) Credit card.

18. Which of the following credit card users is likely to pay the GREATEST dollar amount in finance charges per year, if they all charge the same amount per year on their cards?
- 16.8 a.) Jessica, who pays at least the minimum amount each month and more, when she has the money.
- 17.1 b.) Vera, who generally pays off her credit card in full but, occasionally, will pay the minimum when she is short of cash
- 18.2 c.) Megan, who always pays off her credit card bill in full shortly after she receives it
- 48.0 d.) Erin, who only pays the minimum amount each month. \*
19. Which of the following statements is true?
- 53.7 a.) Banks and other lenders share the credit history of their borrowers with each other and are likely to know of any loan payments that you have missed. \*
- 14.8 b.) People have so many loans it is very unlikely that one bank will know your history with another bank
- 18.8 c.) Your bad loan payment record with one bank will not be considered if you apply to another bank for a loan.
- 12.7 d.) If you missed a payment more than 2 years ago, it cannot be considered in a loan decision.
30. Dan must borrow \$12,000 to complete his college education. Which of the following would NOT be likely to reduce the finance charge rate?
- 32.5 a.) If he went to a state college rather than a private college. \*
- 19.2 b.) If his parents cosigned the loan.
- 28.8 c.) If his parents took out an additional mortgage on their house for the loan.
- 19.5 d.) If the loan was insured by the Federal Government.
31. If you had a savings account at a bank, which of the following would be correct concerning the interest that you would earn on this account?
- 40.6 a.) Earnings from savings account interest may not be taxed.
- 27.3 b.) Income tax may be charged on the interest if your income is high enough. \*
- 17.8 c.) Sales tax may be charged on the interest that you earn.
- 14.3 d.) You cannot earn interest until you pass your 18<sup>th</sup> birthday.

**Part 2 - Classification Questions**

Numbers in **Bold** at Left are Mean Scores

Numbers not in **Bold**, to Right of Bold Numbers, are Percent in Sample

32. Does your family rent or own your home?

Score %

**44.0** 22.7 Rent

**49.7** 77.3 Own

33. What is your gender?

**49.0** 44.7 Male

**48.0** 55.3 Female

34. What are your educational plans after high school?

Score %

- 34.9 2.2 No further education is planned.
- 44.6 18.7 Attend a 2-year college or junior college.
- 50.9 67.2 Attend a 4-year college or university.
- 44.2 6.8 Other plans for training or education.
- 39.2 5.1 Don't know.

35. What is your best estimate of your parents' total income last year? Consider annual income from all sources before taxes.

- 43.4 10.7 Less than \$20,000.
- 47.3 20.1 \$20,000 to \$39,999.
- 50.3 26.5 \$40,000 to \$79,999.
- 52.3 23.0 \$80,000 or more.
- 44.8 19.7 Don't know.

36. How do you describe yourself?

- 52.5 55.0 White or Caucasian.
- 41.3 13.6 Black or African-American.
- 45.1 20.1 Hispanic American.
- 47.2 3.7 Asian-American.
- 37.7 2.2 American Indian, Alaska Native, or Native Hawaiian
- 41.1 5.4 Other.

37. What is the highest level of schooling your father or mother completed?

- 44.2 11.5 Neither completed high school
- 47.2 24.4 Completed high school.
- 49.0 21.6 Some college.
- 51.4 36.8 College graduate or more than college.
- 36.9 5.9 Don't know.

8. What type of work do you intend to do when you finish school?

- 36.9 2.8 Manual work such as truck driver, laborer, farm worker.
- 43.8 6.5 Skilled trade such as plumber, electrician.
- 44.6 12.1 Service worker such as secretary, food service worker, office worker, police officer, firefighter.
- 51.7 48.6 Professional worker such as nurse, computer programmer.
- 46.6 30.0 Other or don't know.

39. When you start to work full-time, after you finish your education, how much do you expect to make per year before deductions for taxes and other items?

Score %

38.5 3.4 Under \$15,000.

42.2 6.7 \$15,000 to \$19,999.

46.8 10.6 \$20,000 to \$29,999.

50.7 20.5 \$30,000 to \$39,999.

50.2 41.6 \$40,000 or more.

46.4 17.2 Don't know.

40. Whose credit card do you use?

44.2 14.9 My own.

45.9 14.2 My parents'.

45.2 5.6 Both my own and my parents'.

50.1 65.3 None, I don't use a credit card.

41. How do you use your debit (or ATM) card?

49.9 40.6 For getting cash from an ATM and for buying things directly.

45.4 12.6 For getting cash from an ATM only.

47.8 46.7 I don't have a debit card.

42. Which of the following best describes your automobile driving?

46.0 26.8 I don't have a driver's license.

42.6 4.3 I have a driver's license, but no car in the family that I can drive.

44.2 4.9 I drive the family car, which is used by others, and help pay for the insurance.

50.9 12.7 I drive the family car, which is used by others, and don't help pay for the insurance.

49.7 21.5 I drive my own car and help pay for the insurance.

50.0 29.9 I drive my own car and don't help pay for the insurance.

43. How would you describe your employment history?

48.8 24.5 I work full time in the summers and part time during the school year.

48.6 6.3 I work full time in the summers and don't work during the school year.

48.9 33.8 I work part time in the summers and part time during the school year.

48.9 11.8 I work part time in the summers and don't work during the school year.

46.6 23.6 I have never been formally employed outside the home.

44. What kind of bank account do you have?

43.7 24.9 I don't have a bank account.

49.7 29.1 I have a savings account but no checking account.

49.1 11.8 I have a checking account but no savings account.

50.3 34.3 I have both a savings and a checking account.

45. Which of the following is true about your ownership of stocks and mutual funds (circle **all** that apply)?

Score %

- 49.1 73.0 I own no stocks or mutual funds.
- 47.1 7.8 I own stocks in my own name.
- 48.8 8.8 I own stocks in my parents' name.
- 47.7 6.0 I own mutual funds in my own name.
- 47.7 6.3 I own mutual funds in my parents' name.

46. What is your high school class level?

- 48.3 100.0 Senior.
- Junior.
- Sophomore.
- Freshman.

47. Which of the following classes have you had in high school (circle **all** that apply)?

- 47.5 21.4 An entire course in money management or personal finance.
- 48.9 26.2 A portion of a course where at least a week was focused on money management or personal finance.
- 48.8 44.7 An entire course in economics.
- 49.4 23.7 A portion of a course where at least a week was focused on economics.
- 51.0 24.0 A course in which we played a stock market game.

48. If you have taken a full semester course in money management or personal finance, did you take it as a:

- 47.1 52.4 Senior
- 48.5 26.1 Junior
- 49.2 12.7 Sophomore
- 44.7 8.8 Freshman

49. Approximately what was your **total** score on the college entrance exam?

- 45.5 10.4 SAT under 1,500
- 54.1 17.3 SAT 1,500 to 2,000
- 52.2 4.3 SAT over 2,000
- 43.3 10.7 ACT under 20
- 51.3 17.4 ACT 21-26
- 58.8 5.9 ACT 27 or higher
- 44.0 34.5 I didn't take a college entrance exam or don't remember my score.

## Appendix G

## 2008 survey of Personal Financial Literacy Among College Students

The survey was divided into two parts, the first being a test on financial literacy and the second a personal information part. The questions of the second part were changed for the population of college students as follows:

**Part 2 - Classification Questions**

Numbers in **Bold** at Left are Mean Scores

Numbers not in **Bold**, to Right of Bold Numbers, are Percent in Sample

\*\* Scores for Groups Under 3% of Sample are not Reported

2. What is your gender?

Score %

**59.6** 23.1 Male

**62.6** 76.9 Female

i. What is the highest level of education you expect to achieve?

Score %

54.6 9.6 Associate degree (two-year).

61.2 46.4 Bachelor degree (four-year).

63.6 27.1 Master's degree.

65.9 16.9 Doctorate, law or professional (six year or more)

l. What is your best estimate of your parents' total income last year? Consider annual come from all sources before taxes.

51.9 11.2 Less than \$20,000.

62.2 14.4 \$20,000 to \$39,999.

63.8 29.8 \$40,000 to \$79,999.

64.6 31.9 \$80,000 or more.

59.7 12.7 Don't know.

5. What is the highest level of schooling your father or mother completed?

\*\*\* 2.1 Neither completed high school.

62.5 16.3 Completed high school.

58.2 28.1 Some college.

64.1 52.6 College graduate or more than college.

\*\*\* 0.9 Don't know.

5. How do you describe yourself?

63.3 75.4 White or Caucasian.

55.3 8.5 Black or African-American.

59.8 5.9 Hispanic American.

57.1 6.6 Asian-American.

\*\*\* .7 American Indian, Alaska Native, or Native Hawaiian

60.8 2.9 Other

37. When you start to work full-time, after you finish your education, how much do you expect to make per year before deductions for taxes and other items?

56.3 16.5 Under \$30,000.

62.8 30.4 \$30,000 to \$39,999.

63.7 21.2 \$40,000 to \$49,999

62.9 32.0 \$50,000 or more

38. How many credit cards do you use, including store credit cards?

61.1 33.4 None.

61.8 31.2 One.

61.9 19.3 Two.

63.2 8.8 Three.

68.3 3.2 Four.

63.4 4.1 Five or more.



9. Which of the following statements best describes the way in which you make payments on your credit cards?

**Score %**

- 62.7 46.7 I always pay off the total balance each month.  
 62.9 16.9 I occasionally do not pay off the balance for a month or so when I am short on funds.  
 58.9 12.9 I generally have an outstanding balance but occasionally am able to pay it off.  
 63.9 15.8 I seldom, if ever, pay off all my balances, but try to pay them down when I can.  
 63.8 7.7 I generally pay only the minimum required payment each month.

10. What is the outstanding balance on all of your credit cards?

- 63.4 69.1 Under \$1,000  
 61.7 15.4 \$1,000 to \$2,499  
 60.7 8.9 \$2,500 to \$4,999  
 55.4 5.0 \$5,000 to \$9,999  
 \*\*\* 1.6 More than \$10,000

11. When did you get your first credit card?

- 64.0 20.1 Before graduating high school  
 62.7 21.5 When I graduated from high school  
 59.8 26.8 When I started college  
 64.9 14.2 During my first year in college  
 62.2 17.4 After completing my first year of college

12. How often are you late paying your credit card bills?

- 63.5 64.8 Never  
 63.0 24.4 Once or twice since I've had credit cards  
 51.0 5.2 Once or twice per year  
 59.7 5.6 More than two times per year

13. When you finish your undergraduate education, how much do you expect to owe in student loans?

- 61.3 34.7 Nothing  
 59.5 7.2 Less than \$5,000  
 59.4 11.1 \$5,000 to \$9,999  
 62.9 14.7 \$10,000 to \$19,999  
 64.2 12.7 \$20,000 to \$29,999  
 63.4 8.7 \$30,000 to \$49,999  
 65.0 8.3 \$50,000 or more

14. Aside from any credit card debt or student loans you might have, what other types of debt do you have? (check ALL that apply)

- 60.8 12.5 Auto loans  
 50.5 2.7 Home Mortgage  
 56.6 20.9 Personal debt or other debt

45. Do you have a checking account?  
Score %  
62.6 91.1 Yes  
54.3 8.9 No
46. How often have you bounced a check (had it returned for insufficient funds)?  
63.0 70.9 Never  
62.1 20.8 Once or twice in my lifetime  
64.8 5.7 Once or twice per year  
50.0 2.6 More than twice per year
47. How often do you balance your checkbook?  
63.0 23.3 After every check, deposit and ATM withdrawal  
62.2 17.1 About once a week  
62.8 17.4 About once a month  
62.0 5.0 Several times per year  
64.2 4.3 Once or twice per year  
62.3 32.8 Never
48. In what form do you hold for your savings and investments? (Check ALL that apply)  
62.6 80.9 Savings account.  
63.5 13.7 Certificates of deposit.  
61.3 18.3 U. S. Savings Bonds.  
60.5 10.9 Stocks.  
68.5 8.9 Mutual funds.  
\*\*\* 2.3 Bonds other than U. S. Savings Bonds.  
65.8 6.9 Retirement accounts such as 401k's and IRAs.
49. How would you rate the savings and investments that you have?  
61.3 40.6 Adequate for my needs right now  
62.1 32.4 Slightly less than I should have right now  
63.6 27.0 Much less than I should have right now
50. How much do you worry about your debts?  
60.1 26.8 Never  
61.7 25.5 A little  
64.4 22.1 Sometimes  
64.2 15.7 Often  
60.4 9.8 Nearly all the time
51. Who prepares your income taxes?  
63.8 12.4 I do it myself by hand  
65.0 19.7 I do it myself using a computer program  
62.0 21.3 A tax preparer  
60.6 46.5 My parents

2. Which of the following classes did you have in high school? (Check ALL that apply)

Score %

- 59.3 12.0 An entire course in personal money management or personal finance.
- 62.1 24.7 A portion of a course where at least a week was focused on personal money management or personal finance.
- 62.7 48.1 An entire course in economics.
- 62.2 15.5 A portion of a course where at least a week was focused on economics.
- 65.6 29.5 A course in which we played a stock market game.

3. Which of the following classes have you had in college? (Check ALL that apply)

- 60.1 9.6 A semester-length course in personal money management or personal finance
- 58.2 13.7 Coverage of money management or personal finance (including part of freshman orientation)
- 63.2 36.1 Economics
- 64.6 10.2 Finance
- 65.4 19.0 Accounting

4. Which of the following best describes your status as a student?

- 62.6 81.0 I am a full time undergraduate student at a Four-year college or university
- 58.7 19.0 I am a full time undergraduate student at a Two-Year college or university

5. What is your class standing?

- 59.3 21.9 Freshman
- 61.0 29.3 Sophomore
- 62.1 23.7 Junior
- 64.8 25.2 Senior

56. Which of the following best describes your major or area of interest in college?

- 59.4 10.7 Arts
- 62.4 18.7 Business or economics
- 63.2 5.2 Engineering
- 62.1 7.3 Humanities
- 57.1 5.7 Nursing
- 63.4 14.9 Science
- 64.0 15.3 Social Science
- 60.9 22.1 Other

Appendix H

s survey was the modified version of the JumpStart Coalition set to the context of Lebanon. The star at the  
 | of the answers indicates the correct ones. It was administered to a sample of Third Secondary Students to  
 ermine the level of financial literacy among them.

e cover letter was attached to the questionnaire to provide the required information about the purpose of the  
 dy as follows:

Cover Letter

May 4, 2012

ar Ms \_\_\_\_\_ :

ank you for your participation in this survey. I am conducting a study for my thesis to collect baseline data on  
 : financial literacy of the graduating class at Jesus and Mary School and its former graduates. The survey  
 ntains questions covering four key areas in personal finance. These areas are income, money management,  
 /ing and investing, and spending and credit.

ur participation in this survey will help to inform me of the current level of financial literacy at school and  
 vvide insight on how to increase financial literacy and improve financial behavior for generations to come.

e results of the Financial Literacy Survey will be summarized and shared in my thesis. No personal  
 :ntification information will be collected and any information that you share will not be connected to you in  
 y way. Results will be used in summary form only in order to protect your confidentiality. Your participation  
 this study is voluntary, confidential and implies your consent to participate.

you have any questions regarding the survey you may call or email Pascale El Hayek Bassil, 03 657643 or  
 hayek@ndu.edu.lb.

Sincerely,

Pascale El Hayek Bassil

2012 Survey of Personal Financial Literacy Among Third Secondary Students:  
Customized version of the 2008 Questionnaire created by the Jump\$tart Coalition

Part 1-28 Jump\$tart Questions

1. Inflation can cause difficulty in many ways. Which group would have the greatest problem during periods of high inflation that last several years?
  - a) Older, working couples saving for retirement.
  - b) Older people living on fixed retirement income\*
  - c) Young couples with no children who both work.
  - d) Young working couples with children.
2. Which of the following is true about value added tax (VAT)?
  - a) The national VAT percentage rate is 6%.
  - b) The government will deduct it from your paycheck.
  - c) You don't have to pay the tax if your income is very low.
  - d) It makes things more expensive for you to buy\*
3. Rebecca has saved \$12,000 for her college expenses by working part-time. Her plan is to start college next year and she needs all of the money she saved. Which of the following is the safest place for her college money?
  - a) Locked in her closet at home.
  - b) Stocks.
  - c) Corporate bonds.
  - d) A bank savings account\*
4. Which of the following types of investment would best protect the purchasing power of a family's savings in the event of a sudden increase in inflation?
  - a) A 10-year bond issued by a corporation.
  - b) A certificate of deposit at a bank.
  - c) A twenty-five year corporate bond.
  - d) A house financed with a fixed-rate mortgage\*.
5. Under which of the following circumstances would it be financially beneficial to you to borrow money to buy something now and repay it with future income?
  - a) When you need to buy a car to get a much better paying job.
  - b) When you really need a week vacation.
  - c) When some clothes you like go on sale.
  - d) When the interest on the loan is greater than the interest you get on your savings.
6. Your take home pay from your job is less than the total amount you earn. Which of the following best describes what is taken out of your total pay?
  - a) Social security contributions.
  - b) Income tax, property tax, and social security contributions.
  - c) Income tax and social security contributions\*
  - d) Income tax, VAT, and social security contribution.
7. Retirement income paid by a company is called:
  - a) End of service indemnity.
  - b) Pension \*
  - c) Rents and profits.
  - d) Social Security.

8. Many people put aside money to take care of unexpected expenses. If Juan and Elva have money put aside for emergencies, in which of the following forms would it be of LEAST benefit to them if they needed it right away?
  - a) Invested in a down payment on the house\*
  - b) Checking account.
  - c) Stocks.
  - d) Savings account.
9. David just found a job with a take-home pay of \$2,000 per month. He must pay \$900 for rent and \$150 for groceries each month. He also spends \$250 per month on transportation. If he budgets \$100 each month for clothing, \$200 for restaurants and \$250 for everything else, how long will it take him to accumulate savings of \$600.
  - a) 3 months.
  - b) 4 months \*
  - c) 1 month.
  - d) 2 months.
10. Sara and Joshua just had a baby. They received money as baby gifts and want to put it away for the baby's education. Which of the following tends to have the highest growth over periods of time as long as 18 years?
  - a) A checking account.
  - b) Stocks.
  - c) Government savings bond\*
  - d) A savings account.
11. Chelsea worked her way through college earning \$15,000 per year. After graduation, her first job pays \$30,000. The total dollar amount Chelsea will have to pay in Income taxes in her new job will:
  - a) Increase according to a standard progressive structure\*
  - b) Go up a little from when she was in college.
  - c) Stay the same as when she was in college.
  - d) Be lower than when she was in college.
12. Which of the following best describes the primary sources of income for most people age 20-35?
  - a) Dividends and interest.
  - b) Salaries, wages, tips\*
  - c) Profits from business.
  - d) Rents.
13. Rob and Mary are the same age. At age 25 Mary began saving \$2,000 a year while Rob saved nothing. At age 50, Rob realized that he needed money for retirement and started saving \$4,000 per year while Mary kept saving her \$2,000. Now they are both 75 years old. Who has the most money in his or her retirement account?
  - a) They would each have the same amount because they put away exactly the same
  - b) Rob, because he saved more each year
  - c) Mary, because she has put away more money
  - d) Mary, because her money has grown for a longer time at compound interest\*
14. Many young people receive health insurance benefits through their parents. Which of the following statements is true about health insurance coverage?
  - a) You are covered by your parents' insurance until you marry, regardless of your age.
  - b) If your parents become unemployed, your insurance coverage may stop, regardless of your age \*
  - c) Young people don't need health insurance because they are so healthy.
  - d) You continue to be covered by your parents' insurance as long as you live at home, regardless of your age.
15. Don and Bill work together in the finance department of the same company and earn the same pay. Bill spends his free time taking work-related classes to improve his computer skills; while Don spends his

- free time socializing with friends and working out at a fitness center. After five years, what is likely to be true?
- a) Don will make more because he is more social.
  - b) Don will make more because Bill is likely to be laid off.
  - c) Bill will make more money because he is more valuable to his company \*
  - d) Don and Bill will continue to make the same money.
16. If your credit card is stolen and the thief runs up a total debt of \$1,000, but you notify the bank as soon as you discover it is missing, what is the maximum amount that you can be forced to pay?
- a) It depends on the insurance policy of each bank
  - b) \$1000
  - c) Nothing.
  - d) \$100
17. Which of the following statements is NOT correct about most ATM (Automated Teller Machine.) cards?
- a) You can generally get cash 24 hours-a-day.
  - b) You can generally obtain information concerning your bank balance at an ATM machine.
  - c) You can get cash anywhere in the world with no fee \*
  - d) You must have a bank account to have an ATM Card.
18. Matt has a good job on the production line of a factory in his home town. During the past year or two, the municipality in which Matt lives has been raising taxes on its businesses to the point where they are much higher than in neighboring municipalities. What effect is this likely to have on Matt's job?
- a) Higher business taxes will cause more businesses to move into Matt's municipality, raising wages.
  - b) Higher business taxes can't have any effect on Matt's job.
  - c) Matt's company may consider moving to a lower-tax municipality, threatening Matt's job \*
  - d) He is likely to get a large raise to offset the effect of higher taxes.
19. If you have caused an accident, which type of automobile insurance would cover damage to your own car?
- a) Insurance premium.
  - b) Third Party Liability.
  - c) Compulsory Motor Insurance.
  - d) Comprehensive Policy/All Risk \*
20. Scott and Eric are young men. Each has a good credit history. They work at the same company and make approximately the same salary. Scott has borrowed \$6,000 to take a foreign vacation. Eric has borrowed \$6,000 to buy a car. Who is likely to pay the lowest finance charge?
- a) Eric will pay less because the car is collateral for the loan \*
  - b) They will both pay the same because the rate is set by law.
  - c) Scott will pay less because people who travel overseas are better risks.
  - d) They will both pay the same because they have almost identical financial backgrounds.
21. If you went to college and earned a four-year degree, how much more money could you expect to earn than if you only had a high school diploma?
- a) About 10 times as much.
  - b) No more; I would make about the same either way.
  - c) A little more; about 20% more.
  - d) A lot more; about 70% more\*
22. If each of the following persons had the same amount of take home pay, who would need the greatest amount of life insurance?
- a) An elderly retired man, with a wife who is also retired.
  - b) A young married man without children.
  - c) A young single woman with two young children \*

- d) A young single woman without children.
23. Which of the following instruments is NOT typically associated with spending?
- Debit card.
  - Certificate of deposit \*
  - Cash.
  - Credit card
24. Which of the following credit card users is likely to pay the GREATEST dollar amount in finance charges per year, if they all charge the same amount per year on their cards?
- Jessica, who pays at least the minimum amount each month and more, when she has the money.
  - Vera, who generally pays off her credit card in full but, occasionally, will pay the minimum when she is short of cash
  - Megan, who always pays off her credit card bill in full shortly after she receives it
  - Erin, who only pays the minimum amount each month \*
25. Which of the following statements is true?
- Banks and the Central Bank of Lebanon share the credit history of their borrowers with each other and are likely to know of any loan payments that you have missed.
  - People have so many loans it is very unlikely that one bank will know your history with another bank
  - Your bad loan payment record with one bank will not be considered if you apply to another bank for a loan.
  - If you missed a payment more than 2 years ago, it cannot be considered in a loan decision.
26. Dan must borrow \$12,000 to complete his college education. Which of the following would NOT be likely to reduce the interest rate?
- If he went to a private college in Koura rather than a college in Beirut \*
  - If his parents cosigned the loan.
  - If his parents took out an additional mortgage on their house for the loan.
  - If the loan was insured by the Government.
27. If you had a savings account at a bank, which of the following would be correct concerning the interest that you would earn on this account?
- Earnings from savings account interest may be taxed.
  - Income tax may be charged on the interest if your income is high enough.
  - VAT may be charged on the interest that you earn.
  - You cannot earn interest until you pass your 18th birthday.
28. Treasury bonds are savings programs that are protected by the government against loss:
- True
  - False

Part 2 – Personal Information

Questions 29 - 40

29. Does your family rent or own your home?
- Rent
  - Own
30. What are your educational plans after high school?
- No further education is planned
  - Pursue a Bachelor Degree
  - Pursue a Bachelor degree followed by a Master degree



- d) Other plans for training or education
  - e) Don't know
31. What is your best estimate of your parents' total income last year?
- a) Less than \$20,000
  - b) \$20,000 to \$39,000
  - c) \$40,000 to \$79,999
  - d) \$80,000 or more
  - e) Don't know
32. What is the highest level of schooling your father or mother completed?
- a) Neither completed high school
  - b) Completed high school
  - c) Some university
  - d) Graduate or post-graduate studies
  - e) Don't know
33. What type of work do you intend to do when you finish school?
- a) Manual work such as truck driver, laborer, farm worker
  - b) Skilled trade such as plumber, electrician
  - c) Service worker such as secretary, food service worker, office worker, police officer, firefighter
  - d) Professional worker such as nurse, computer programmer
  - e) Other or don't know
34. When you start to work full-time, after you finish your education, how much do you expect to make per year before deductions for taxes and other items?
- a) Under \$15,000
  - b) \$15,000 to \$19,999
  - c) \$20,000 to \$29,999
  - d) \$30,000 to \$39,999
  - e) \$40,000 or more
  - f) Don't know
35. Whose credit card do you use?
- a) My own
  - b) My parents'
  - c) Both my own and my parents'
  - d) None, I don't use a credit card
36. How do you use your debit card?
- a) For getting cash from an ATM and for buying things directly
  - b) For getting cash from an ATM only
  - c) I don't have a debit card
37. How would you describe your employment history?
- a.) I work full time in the summer and part time during the school year
  - b.) I work full time in the summer and don't work part time during the school year
  - c.) I work part time in the summer and part time during the school year
  - d.) I work part time in the summer and don't work during the school year
  - e.) I have never been formally employed outside home
38. What kind of bank account do you have?
- a.) I don't have a bank account
  - b.) I have a savings account but no checking account
  - c.) I have a checking account but no savings account
  - d.) I have both a savings and a checking account
39. Which is true about your ownership of stocks and mutual funds (circle all that apply)?
- a.) I own no stocks or mutual funds

- b.) I own stocks in my own name
  - c.) I own stocks in my parents' name
  - d.) I own mutual funds in my own name
  - e.) I own mutual funds in my parents' name
40. What is your third secondary year's specialization?
- a.) Sociology Economics
  - b.) General Sciences
  - c.) Life Sciences

## Appendix I

The survey below was administered to the graduates of the private public school where the study took place.

Some parts of the survey have been customized to fit the Lebanese context.

2012 Survey of Personal Financial Literacy Among Former Graduates:  
Customized version of the 2008 Questionnaire created by the Jump\$Start Coalition

## Part 1-28 Jump\$Start Questions

1. Inflation can cause difficulty in many ways. Which group would have the greatest problem during periods of high inflation that last several years?
  - a) Older, working couples saving for retirement.
  - b) Older people living on fixed retirement income\*
  - c) Young couples with no children who both work.
  - d) Young working couples with children.
2. Which of the following is true about value added tax (VAT)?
  - a) The national VAT percentage rate is 6%.
  - b) The government will deduct it from your paycheck.
  - c) You don't have to pay the tax if your income is very low.
  - d) It makes things more expensive for you to buy\*
3. Rebecca has saved \$12,000 for her college expenses by working part-time. Her plan is to start college next year and she needs all of the money she saved. Which of the following is the safest place for her college money?
  - a) Locked in her closet at home.
  - b) Stocks.
  - c) Corporate bonds.
  - d) A bank savings account\*
4. Which of the following types of investment would best protect the purchasing power of a family's savings in the event of a sudden increase in inflation?
  - a) A 10-year bond issued by a corporation.
  - b) A certificate of deposit at a bank.
  - c) A twenty-five year corporate bond.
  - d) A house financed with a fixed-rate mortgage\*.
5. Under which of the following circumstances would it be financially beneficial to you to borrow money to buy something now and repay it with future income?
  - a) When you need to buy a car to get a much better paying job.
  - b) When you really need a week vacation.
  - c) When some clothes you like go on sale.
  - d) When the interest on the loan is greater than the interest you get on your savings.
6. Your take home pay from your job is less than the total amount you earn. Which of the following best describes what is taken out of your total pay?
  - a) Social security contributions.
  - b) Income tax, property tax, and social security contributions.
  - c) Income tax and social security contributions\*
  - d) Income tax, VAT, and social security contribution.
7. Retirement income paid by a company is called:
  - a) End of service indemnity.
  - b) Pension \*

- c) Rents and profits.
  - d) Social Security.
8. Many people put aside money to take care of unexpected expenses. If Juan and Elva have money put aside for emergencies, in which of the following forms would it be of LEAST benefit to them if they needed it right away?
- a) Invested in a down payment on the house\*
  - b) Checking account.
  - c) Stocks.
  - d) Savings account.
9. David just found a job with a take-home pay of \$2,000 per month. He must pay \$900 for rent and \$150 for groceries each month. He also spends \$250 per month on transportation. If he budgets \$100 each month for clothing, \$200 for restaurants and \$250 for everything else, how long will it take him to accumulate savings of \$600.
- a) 3 months.
  - b) 4 months \*
  - c) 1 month.
  - d) 2 months.
10. Sara and Joshua just had a baby. They received money as baby gifts and want to put it away for the baby's education. Which of the following tends to have the highest growth over periods of time as long as 18 years?
- a) A checking account.
  - b) Stocks.
  - c) Government savings bond\*
  - d) A savings account.
11. Chelsea worked her way through college earning \$15,000 per year. After graduation, her first job pays \$30,000. The total dollar amount Chelsea will have to pay in Income taxes in her new job will:
- a) Increase according to a standard progressive structure\*
  - b) Go up a little from when she was in college.
  - c) Stay the same as when she was in college.
  - d) Be lower than when she was in college.
12. Which of the following best describes the primary sources of income for most people age 20-35?
- a) Dividends and interest.
  - b) Salaries, wages, tips\*
  - c) Profits from business.
  - d) Rents.
13. Rob and Mary are the same age. At age 25 Mary began saving \$2,000 a year while Rob saved nothing. At age 50, Rob realized that he needed money for retirement and started saving \$4,000 per year while Mary kept saving her \$2,000. Now they are both 75 years old. Who has the most money in his or her retirement account?
- a) They would each have the same amount because they put away exactly the same
  - b) Rob, because he saved more each year
  - c) Mary, because she has put away more money
  - d) Mary, because her money has grown for a longer time at compound interest\*
14. Many young people receive health insurance benefits through their parents. Which of the following statements is true about health insurance coverage?
- a) You are covered by your parents' insurance until you marry, regardless of your age.
  - b) If your parents become unemployed, your insurance coverage may stop, regardless of your age \*
  - c) Young people don't need health insurance because they are so healthy.
  - d) You continue to be covered by your parents' insurance as long as you live at home, regardless of your age.

15. Don and Bill work together in the finance department of the same company and earn the same pay. Bill spends his free time taking work-related classes to improve his computer skills; while Don spends his free time socializing with friends and working out at a fitness center. After five years, what is likely to be true?
- Don will make more because he is more social.
  - Don will make more because Bill is likely to be laid off.
  - Bill will make more money because he is more valuable to his company \*
  - Don and Bill will continue to make the same money.
16. If your credit card is stolen and the thief runs up a total debt of \$1,000, but you notify the bank as soon as you discover it is missing, what is the maximum amount that you can be forced to pay?
- It depends on the insurance policy of each bank
  - \$1000
  - Nothing.
  - \$100
17. Which of the following statements is NOT correct about most ATM (Automated Teller Machine.) cards?
- You can generally get cash 24 hours-a-day.
  - You can generally obtain information concerning your bank balance at an ATM machine.
  - You can get cash anywhere in the world with no fee \*
  - You must have a bank account to have an ATM Card.
18. Matt has a good job on the production line of a factory in his home town. During the past year or two, the municipality in which Matt lives has been raising taxes on its businesses to the point where they are much higher than in neighboring municipalities. What effect is this likely to have on Matt's job?
- Higher business taxes will cause more businesses to move into Matt's municipality, raising wages.
  - Higher business taxes can't have any effect on Matt's job.
  - Matt's company may consider moving to a lower-tax municipality, threatening Matt's job \*
  - He is likely to get a large raise to offset the effect of higher taxes.
19. If you have caused an accident, which type of automobile insurance would cover damage to your own car?
- Insurance premium.
  - Third Party Liability.
  - Compulsory Motor Insurance.
  - Comprehensive Policy/All Risk \*
20. Scott and Eric are young men. Each has a good credit history. They work at the same company and make approximately the same salary. Scott has borrowed \$6,000 to take a foreign vacation. Eric has borrowed \$6,000 to buy a car. Who is likely to pay the lowest finance charge?
- Eric will pay less because the car is collateral for the loan \*
  - They will both pay the same because the rate is set by law.
  - Scott will pay less because people who travel overseas are better risks.
  - They will both pay the same because they have almost identical financial backgrounds.
21. If you went to college and earned a four-year degree, how much more money could you expect to earn than if you only had a high school diploma?
- About 10 times as much.
  - No more; I would make about the same either way.
  - A little more; about 20% more.
  - A lot more; about 70% more\*
22. If each of the following persons had the same amount of take home pay, who would need the greatest amount of life insurance?
- An elderly retired man, with a wife who is also retired.

- b) A young married man without children.
  - c) A young single woman with two young children \*
  - d) A young single woman without children.
23. Which of the following instruments is NOT typically associated with spending?
- a) Debit card.
  - b) Certificate of deposit \*
  - c) Cash.
  - d) Credit card
24. Which of the following credit card users is likely to pay the GREATEST dollar amount in finance charges per year, if they all charge the same amount per year on their cards?
- a) Jessica, who pays at least the minimum amount each month and more, when she has the money.
  - b) Vera, who generally pays off her credit card in full but, occasionally, will pay the minimum when she is short of cash
  - c) Megan, who always pays off her credit card bill in full shortly after she receives it
  - d) Erin, who only pays the minimum amount each month \*
25. Which of the following statements is true?
- a) Banks and the Central Bank of Lebanon share the credit history of their borrowers with each other and are likely to know of any loan payments that you have missed.
  - b) People have so many loans it is very unlikely that one bank will know your history with another bank
  - c) Your bad loan payment record with one bank will not be considered if you apply to another bank for a loan.
  - d) If you missed a payment more than 2 years ago, it cannot be considered in a loan decision.
26. Dan must borrow \$12,000 to complete his college education. Which of the following would NOT be likely to reduce the interest rate?
- a) If he went to a private college in Koura rather than a college in Beirut \*
  - b) If his parents cosigned the loan.
  - c) If his parents took out an additional mortgage on their house for the loan.
  - d) If the loan was insured by the Government.
27. If you had a savings account at a bank, which of the following would be correct concerning the interest that you would earn on this account?
- a) Earnings from savings account interest may be taxed.
  - b) Income tax may be charged on the interest if your income is high enough.
  - c) VAT may be charged on the interest that you earn.
  - d) You cannot earn interest until you pass your 18th birthday.
28. Treasury bonds are savings programs that are protected by the government against loss:
- a) True
  - b) False

## Part 2 – Personal Information

Questions 29 - 49

29. What is the highest level of education you expect to achieve?
- a) Bachelor degree
  - b) Master's degree
  - c) Doctorate
30. What is your best estimate of your parents' total income last year?

- a) Less than \$20,000
  - b) \$20,000 to \$39,000
  - c) \$40,000 to \$79,999
  - d) \$80,000 or more
  - e) Don't know
31. What is the highest level of schooling your father or mother completed?
- a) Neither completed high school
  - b) Completed high school
  - c) Some university
  - d) Graduate or post-graduate studies
  - e) Don't know
32. When you start to work full-time, after you finish your education, how much do you expect to make per year before deductions for taxes and other items?
- a) Under \$30,000
  - b) \$30,000 to \$39,999
  - c) \$40,000 to \$49,999
  - d) \$50,000 or more
33. How many credit cards do you use?
- a) None
  - b) One
  - c) More than one
34. Which of the following statements best describes the way in which you make payments on your credit cards?
- a) I always pay off the total balance each month
  - b) I occasionally do not pay off the balance for a month or so when I am short of funds
  - c) I generally have an outstanding balance but occasionally am able to pay it off
  - d) I seldom if ever pay off all my balances but try to pay them down when I can
  - e) I generally pay only the minimum required payment each month
35. What is the outstanding balance on all of your credit cards?
- a) Under \$1000
  - b) \$1000 to \$3000
  - c) \$5000 to \$9,999
  - d) More than \$10,000
36. When did you get your first credit card?
- a) Before graduating high school
  - b) When I graduated from high school
  - c) When I started college
  - d) After I finished college
37. How often are you late paying your credit card bills?
- a) Never
  - b) Once or twice since I've had it
  - c) Once or twice per year
  - d) More than twice per year
38. When you finish (or when you finished) undergraduate education, how much do you expect to owe (or owed) in student loans?
- a) Nothing
  - b) Less than \$5000
  - c) \$5000 to \$9,999
  - d) \$10,000 to \$19,999
  - e) \$20,000 to \$29,999

- f) \$30,000 to \$ 39,999
  - g) \$50,000 or more
39. Aside from any credit card debt or student loans you might have, what other types of debt do you have?
- a) Auto loans
  - b) Home mortgage
  - c) Personal debt or other debt
40. Do you have a checking account?
- a) Yes
  - b) No
41. How often have bounced a check?
- a.) Never
  - b.) Once or twice in my lifetime
  - c.) Once or twice per year
42. How often do you balance your checkbook?
- a.) I don't have a checkbook
  - b.) After every check, deposit, and ATM withdrawal
  - c.) About once a week
  - d.) About once a month
  - e.) Several times per year
  - f.) Never
43. In what form do you hold for your savings and investments?
- a.) Savings account
  - b.) Certificates of deposits
  - c.) Bonds
  - d.) Stocks
  - e.) Retirement account
44. How would you rate the savings and investments that you have?
- a) Adequate for my needs right now
  - b) Slightly less than I should have right now
  - c) Much less than I should have right now
45. How much do you worry about your debts?
- a) Never
  - b) A little
  - c) Sometimes
  - d) Often
  - e) Nearly all the time
46. What was your third secondary year's specialization?
- a.) Sociology Economics
  - b.) General Sciences
  - c.) Life Sciences
47. Which of the following classes have you attended in college?
- a) Economics
  - b) Finance
  - c) Accounting
48. Which of the following describes your status?
- a) Still studying at university
  - b) Finished my university education and working
  - c) Finished my university education but not working
49. Which of the following best describes your major?
- a) Arts



- b) Business or economics
- c) Engineering
- d) Humanities
- e) Nursing
- f) Science
- g) Social science
- h) other

## Appendix J

## Focus Group Questions for Economics Teachers

The following questions were asked to teachers of economics during focus groups moderated by the educator-researcher to see whether they shared her concern about the situation of financial literacy in Lebanon.

1. Do you recall any classroom incidents that reveal the need for financial literacy education?
2. Do you ever talk with your students about their finances?
3. If so, was the discussion enough to cover the topic?
4. Are there any financial literacy concepts covered in the curriculum you teach?
5. Do you think they are well tackled to prepare students to manage their finances effectively upon graduation?
6. Do you feel that students would like to receive information about their finances?

## Appendix K

## Adults Focus Groups Questions

These questions were used by the educator-researcher during the discussions with a sample of adults to share their opinions regarding the importance and sources of acquiring financial literacy.

1. Where do you learn about financial topics?
2. Who do you trust in your financial matters?
3. What do you think of banks? Insurance companies? Do they provide good information?
4. What role does/did your parents have in your financial education? Schools? Community organizations? Church?
5. Do you think financial literacy should be acquired at a young age?
6. What is the most effective way to acquire financial literacy in your opinion?