

LEVELS AND PROFICIENCIES OF CONSUMER FINANCIAL LITERACY
AMONG APPRENTICES IN THE WESTERN SUBURBS OF MELBOURNE,
AUSTRALIA



Joel Tworek

Honours

2006

Victoria University

VICTORIA UNIVERSITY OF TECHNOLOGY



3 0001 00911 5819

FTS

THESIS
332.024
009451
TWO

**LEVELS AND PROFICIENCIES OF CONSUMER FINANCIAL LITERACY
AMONG APPRENTICES IN THE WESTERN SUBURBS OF MELBOURNE,
AUSTRALIA**



JOEL TWOREK

THIS THESIS IS SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR HONOURS DEGREE OF

BACHELOR OF BUSINESS (HONOURS) (APPLIED ECONOMICS)

**SCHOOL OF APPLIED ECONOMICS
FACULTY OF BUSINESS AND LAW
VICTORIA UNIVERSITY
MELBOURNE, AUSTRALIA
JUNE 2006**

WORK THESIS

332.024009451 TWO

30001009115819

Tworek, Joel

Levels and proficiencies of
consumer financial literacy
among apprentices in the

TABLE OF CONTENT

| | |
|--|-----------|
| DECLARATION | 2 |
| ACKNOWLEDGEMENTS | 3 |
| LIST OF FIGURES | 4 |
| LIST OF TABLES | 4 |
| ABSTRACT | 5 |
| CHAPTER 1. INTRODUCTION | 6 |
| CHAPTER 2. LITERATURE REVIEW | 10 |
| 2.1 DEFINING FINANCIAL LITERACY | 10 |
| 2.2 FINANCIAL LITERACY IN THE US | 25 |
| 2.3 FINANCIAL LITERACY IN THE UK | 26 |
| 2.4 FINANCIAL LITERACY IN SINGAPORE | 27 |
| 2.5 FINANCIAL LITERACY IN AUSTRALIA | 28 |
| CHAPTER 3. METHODOLOGY AND DATA | 32 |
| 3.1 DEVELOPING THE MODEL AND QUESTIONNAIRE | 33 |
| 3.1.1 The Model | 33 |
| 3.1.2 Development of Questionnaire | 34 |
| 3.1.2.1 Basic Financial Understanding | 34 |
| 3.1.2.2 Basic Financial Competency | 35 |
| 3.2 QUESTIONNAIRE PRE-TESTING AND DATA COLLECTION | 37 |
| 3.2.1 Questionnaire Pre-Testing and Selection of sample | 37 |
| 3.2.2 Collection and Analysis of data | 37 |
| CHAPTER 4. RESULTS AND DISCUSSION | 40 |
| 4.1 BASIC FINANCIAL UNDERSTANDING | 40 |
| 4.1.1 Basic financial mathematical skills | 40 |
| 4.1.2 Basic knowledge and understanding of payment methods | 41 |
| 4.2 BASIC FINANCIAL COMPETENCY | 43 |
| 4.2.1 Knowledge and Actions | 43 |
| 4.2.2 Attitudes | 47 |
| 4.2.3 Overall Financial Situation | 49 |
| CHAPTER 5. CONCLUDING REMARKS | 52 |
| REFERENCES | 56 |
| APPENDIX – COPY OF THE SURVEY | 60 |

DECLARATION

This thesis embodies the original academic work of the author except where stated in this thesis. This thesis contains no material that has been submitted for examination or award of any other degree at any other university.

9th June, 2006

Joel Tworek

ACKNOWLEDGEMENTS

There were a number of individuals who provided guidance and support in the writing of this thesis. The author wishes to acknowledge and thank the following people:

- Associate Professor Shashi Sharma, School of Applied Economics, Faculty of Business and Law – For providing guidance and support throughout the whole process of completing this research.
- Peter Damediuk, Senior Lecturer, School of Accounting and Finance, Faculty of Business and Law - For being my mentor during the early stages of planning this research.
- Jane Nash, ANZ - For taking time to meet me and discuss and share some of her wisdom on financial literacy.
- Rehamat Mohammad - Organising meetings with apprenticeship students to conduct the survey required for this research.
- To all those individuals who participated in the survey.
- Finally, to my girlfriend for her understanding and strong support during the writing of this thesis.

LIST OF FIGURES

| | |
|--|----|
| <i>Figure 1 The Information and Advice Environment</i> | 15 |
| <i>Figure 2 Model of Consumer and Financial Skills</i> | 19 |
| <i>Figure 3 Consumer Behaviour Model</i> | 22 |

LIST OF TABLES

| | |
|--|----|
| <i>Table 1 Results on Financial Mathematical Skills</i> | 40 |
| <i>Table 2 Results on Basic Knowledge and Understanding of Payment Methods</i> | 41 |
| <i>Table 3 Knowledge and Actions Results</i> | 43 |
| <i>Table 4 Crosstabulation results on PERSONAL and KNOWPERSONAL</i> | 45 |
| <i>Table 5 Crosstabulation Results on INVEST.and SAVEREG</i> | 46 |
| <i>Table 6 Apprentices Attitudes to Financial Literacy Results</i> | 48 |
| <i>Table 7 Crosstabulation Results on IMPBUDGET.and BUDGET</i> | 48 |
| <i>Table 8 Assessment on Overall Financial Situation Results</i> | 49 |
| <i>Table 9 Crosstabulation Results on FINSIT and LEVELDEBT</i> | 50 |
| <i>Table 10 Crosstabulation Results on FINSIT and SAVEREG</i> | 50 |
| <i>Table 11 Crosstabulation Results on LEVELDEBT and SAVEREG</i> | 51 |

ABSTRACT

In this research study we have adopted Mason and Wilson's (2000) definition of being financially literate as "the ability to make informed judgments and to take effective decisions regarding the use and management of money". Keeping this definition in mind, certain financial skills are identified as important for apprentices, to rightfully be considered financially literate. These skills include basic financial mathematical skills, cash and financial management, basic knowledge of payment methods, superannuation, loans, investments and the ability to source financial assistance.

Through analysing the survey data we found that a significant percentage of apprentices do not possess the required financial skills identified in this study to manage their finances effectively.

It was also found that apprentices lack understanding of more complex payment methods such as credit cards and EFTPOS, as a result these are not used on a regular basis. Major areas of concern are knowledge of superannuation, interest rates and personal loans.

Finally, the data revealed that apprentices could identify the importance of financial management and its benefits. Unfortunately this is often not put into practice. Hence a major indication from the study was that apprentices lack most basic knowledge and confidence to actively manage their finances effectively.

This study has identified that apprentices would benefit from an effective education program aimed at improving their financial skills. For an apprentice to feel comfortable with their current financial position, they need to be confident with both their current asset position and debt level. With this understanding, a financial education program primarily aimed at teenager and young adults is well advised, to engage the major areas in order to give apprentices confidence in their financial position. Once this has been achieved they can then move on to improving their knowledge of payment methods and other financial products.

CHAPTER 1. INTRODUCTION

There has been a growing concern over the last decade by financial commentators of insufficient financial literacy, not only in Australia but throughout the developed world. America, the UK and Canada have taken steps in the last 10 years to improve their consumers' financial literacy levels, but to date no government initiated programs are underway in Australia.

Financial skills are becoming more important as financial markets have been deregulated, credit is more assessable to consumers as competition flourishes and financial institutions compete for market share. Financial institutions have increased the number of financial products, including their complexity as they tailor products to suit consumers, seeking a competitive advantage.

Availability of credit has seen substantial consumer spending, as a proportion of income reaching record levels, with an average Australian's spending exceeding income. Financial skills required to manage financial affairs, are not only limited to credit and cash flows, but are also vital as consumers are being encouraged to invest directly through the internet.

New superannuation rules introduced in July 2005 allow employees to choose their own super funds. This process provides an improved alternative which ultimately brings sophistication and more contented clients. Consumers now seem to have greater control over their finances and a wider selection of financial products and services. As a result a higher level of financial literacy skills are required to enable financial security for consumers.

A global trend in developed economies over the past twenty years has seen mortgage debt and consumer credit rise sharply. Household debt is increasing at a higher rate than disposable household income. Household debt as a share of disposable income has grown to record highs from 1990 to 2005, with household debt to income ratio rising from 55% to 150% during this period. In the current climate of rising interest

rates, a lack of financial knowledge of demand-side market participants has caused serious concerns in government circles (Australian Government Treasury 2005).

A similar situation is being experienced in other developed countries albeit not with the same urgency. Responding to these developments, the US has introduced the “Jump\$tart” program with the United Kingdom through the Financial Services Authority (FSA) and Personal Finance Education Group (pfeg). Australia also developed the Consumer and Financial Literacy Taskforce in 2004 to help improve our financial literacy levels. Unfortunately though, the program is currently still exploring various actions and to date no productive programs are in place.

Financial Institutions are becoming involved as many are becoming aware of the importance of financial education to the success of their businesses. Selected banks in the US, UK and Australia have developed financial education programs. A financially literate society will benefit financial institutions through increased use of financial products. Ultimately, client’s improved decisions about products available for use lead to having happier customers who are exposed to a much greater range of financial products.

The profile of consumers requiring knowledge to deal with financial markets has changed in recent years. Changes in demographic characteristics with an ageing population and ethnically diversified population, has seen emergence of language, educational and cultural barriers, exposing less financially literate clients to questionable marketing practices and exposures to higher level of debt. This shift has seen the age of the population requiring financial skills fall as younger and younger people are targeted by marketers and financial institutions. As a result, the younger population aged between 15 and 24 years are required to have ascertained a level of financial literacy skills.

There are over 1.5 million (ABS 2005) young adults aged between 15 and 24 years old in Australia, most of whom are single and living with their parents. Approximately a quarter of these people are located in Victoria, with majority located in Melbourne and surrounding suburbs. In western suburbs of Melbourne alone there are approximately 100,000 (DSE 2004) young adults aged between 15 and 24.

Young adults typically begin to engage with financial institutions once they move into the workforce (Hutton and Seavers, 2001). In particular, they open transaction accounts and make use of overdrafts, credit cards and direct debits to manage their money. During this stage, young adults must be promptly and adequately educated to ensure that they make smart and mature decisions to ensure a healthy future.

Early familiarity with financial management skills allows individuals a foundation for progressively building and responsibly entering into financial transactions and to understand the terms and conditions of such transactions. All financial institutions should support an early intervention financial management program by providing a financial grant, or donation of time or resources. Early intervention offers the greatest opportunity to develop future customers. Other ways to promote financial literacy among school age individuals would be to conduct train-the-trainer courses including material for school teachers, sponsoring a booth at a school fete, a country fair or to play a major role in a banking development day.

For the purpose of this study, we have identified apprentices as a section of young adults aged from 15 to 24 for greater focus. They are representatives of similar demographics as identified by ANZ (2003) - aged between 18 and 24 years - with an income less than \$20,000 p.a. and have a lower educational level. They are also in a stage of their lives where their income levels are about to increase considerably by completing their trade and entering the workforce as skilled tradesmen.

This study aims to identify the financial needs of the apprentice population aged between 15 to 24 years in the western suburbs of Melbourne. It also focuses on the apprentices' attitudes towards their personal finances and their current actions taken in dealing with their finances. Apprentices are a unique group and the study seeks to identify areas for which they meet basic financial requirements and also areas that require further development. An attempt is also made to identify areas that require attention through financial educational programs aimed towards those aged between 15 and 24 years particularly in the western suburbs of Melbourne.

This research report is divided into 5 chapters. The second chapter discusses some of the recent academic debate on the issues relating to the definition of financial literacy. On this basis the chapter picks up on some of the ongoing discussions that relate to different financial literacy concepts, what it means to different people and the results from other research projects. This chapter also presents a critical look of the current activities undertaken by governments, government agencies, financial institutions and like from the US, the UK, Australia and Singapore.

Chapter 3 develops a methodological framework for analysing apprentices' financial literacy levels. It outlines the concepts used and the development of a questionnaire to study the behaviour of sampled apprentices. This report mainly relies on basic statistical procedures and hypotheses testing involving qualitative data rather than complex econometric modelling.

The results from the analysis of survey data are presented in chapter 4. These results are divided into two groups: basic financial understanding and financial competency of sampled apprentices to assess apprentices' financial literacy levels. Chapter 5 sums up the arguments with conclusions being drawn and recommendations offered to developers of financial literacy programs to enhance their effectiveness.

CHAPTER 2. LITERATURE REVIEW

2.1 DEFINING FINANCIAL LITERACY

Throughout much of the research during the past five years, there has been a change in thinking that incorporates the inaccuracies about standardizing the measuring of financial literacy levels. It is important to take into account the wider context within which the individual is operating, in particular the individual's circumstances and needs. This is evident in the works on Information Literacy and Citizenship that was undertaken by Correira (2002). She emphasised both the need to take into account the context and the role of information providers when assessing an individual's information literacy.

“If the citizen stays within his or her sphere of expertise, then there should be no problem with basic information literacy skills. Once outside that sphere, the average citizen should not be expected to have the knowledge required to understand the information unless the information is given in a form which is designed for general consumption. Here it is the responsibility of the information provider to ensure that the information provided is suitable for the average citizen, whatever his or her calling” (Correira, 2002).

This can also be applied to the understanding of financial literacy, in a way that the individual can only be judged in the context in which the individual is operating. This context will be determined by the individual's financial circumstances and will differ greatly within a group. Two individuals who have different financial circumstances and responsibilities should not be measured by the same process. A young adult looking at purchasing their first car will require different financial skills than someone looking to retire from the workforce.

The other aspect to note from Correira's works is the importance of the information environment, the availability and quality of information and the providers' consequent responsibility to provide information that can easily be used. This is further

highlighted by the significant role played by financial intermediaries, such as independent financial adviser, family and friends in the decision making process. If this information is not readily available or is misleading, the individual will be required to gather and interpret information needed to make an effective financial decision.

Bundy (2004) supports Correira's views on information literacy within Australia and New Zealand. He argues that the 21st century has become information abundant and intensive. Information systems have allowed for the flow of all types of information on a variety of subjects giving individuals a greater range of information choices. With the advances of Internet, information is readily available on any subject. He further pointed out that in many circumstances information's authenticity, validity and reliability can not be guaranteed. Bundy emphasized that being so readily available, information literacy now plays a greater importance on our ability to effectively make decisions than ever before. He recognized that information literate people are able to:

- Recognize a need for information;
- Determine the extent of the information needed;
- Access information efficiently;
- Critically evaluate information and its resources;
- Classify, store, manipulate and redraft information collected or generated;
- Incorporate selected information into their knowledge base;
- Use information effectively to learn, create new knowledge, solve problems and make decisions;
- Understand economic, legal, social, political and cultural issues in the use of information;
- Access and use information ethically and legally;
- Use information and knowledge for participative citizenship and social responsibility;
- Experience information literacy as part of independent learning and lifelong learning.

There are a number of views on how 'financial literacy' should be defined as a concept. The universal definition of financial literacy is somewhat broad. The most commonly used definition is "*the ability to make informed judgments and to take*

effective decisions regarding the use and management of money” (Mason and Wilson 2000). This definition is commonly used as a starting point by which to further define financial literacy. Mason and Wilson (2000) expanded upon this broad definition to include that financially literate people should be able to understand the outcomes from their financial transactions and that it is a process that leads to the desired outcome. *“Financial literacy could be defined as an individual’s ability to obtain, understand and evaluate the relevant information necessary to make decisions with an awareness of the likely financial consequences”* (Mason and Wilson 2000).

The Financial Services Authority (FSA) (2005) stated that *“financially capable people are able to make informed financial decisions. They are numerate and can budget and manage money effectively. They are able to assess needs for insurance and protection. They can assess the different risks and return involved in different saving and investment options. They have an understanding of the wider ethical, social, political and environmental dimensions of finance”*. By taking this approach they conceptualised financial literacy and identified different areas and stages of being financially literate such as:-

1. Financial Knowledge and Understanding

This is the ability to make sense of and manipulate money in its different forms, uses and functions. It allows people to acquire the skills they need to deal with everyday financial matters and make the right decisions.

2. Financial Skills and Competence

This is the ability to apply knowledge and understanding across a range of contexts including both predictable and unexpected situations. It allows people to plan, monitor, manage and resolve any financial problem or opportunities.

3. Financial Responsibility

This is the ability to appreciate the wider impact of financial decisions and personal circumstances, the family and the broader community, and to consider the social and ethical issues. It enables people to understand and

appreciate their rights and responsibilities and have the right attitude to plan, analyse, evaluate and monitor financial decisions and choices.

The Basic Skills Agency (2004) addressed the concept in a different way, not by explicitly addressing the fact that consumers are a heterogeneous group but the nature of the capability required will be determined by the individuals' own financial circumstances, i.e., each individual requires different financial knowledge and skills in their everyday life. For example, the knowledge and skills required by a young lone parent living on a low income will be very different from those required by a high-income professional who is nearing retirement. People also differ in the extent of the financial products available and whether they need advice to make those decisions. This inevitably changes as an individual moves through different stages of their life. However, there is a basic level of financial literacy required by all members of today's developed society. We can develop a floor or basic level of financial skills and knowledge required by all consumers to effectively manage their finances.

The Basic Skills Agency developed a framework that specified following three levels of capability that enabled the progression from one level to another.

1. Basic understanding and developing confidence

Aimed at those adults who have a low level of understanding and who require the skills to make informed judgments concerning their finances, and the ability to use appropriate financial services.

2. Developing competence and confidence

Aimed at those adults who have a basic understanding and competence in handling financial services, and who require more knowledge and skills to meet their needs.

3. Extending competence and confidence

Aimed at adults who require the skills and knowledge to understand the wider range of services and the ability to make informed decisions regarding their own personal circumstances.

In 2004, the Basic Skills Agency identified three interrelated components with the aim to differentiate beyond the basic definition of financial literacy. They identified knowledge, skills and attitude as essential attributes for an adult to successfully manage one's finances. This concept was further developed in 2005 by the Financial Services Authority (FSA) and used to establish an approach for measuring financial capability.

The FSA identified following six key areas of knowledge and understanding to an adult to possess to be considered financially capable:

- Different types of money or payments.
- Income generation.
- Income disposal.
- Concepts, such as risk, interest, inflation and probability.
- Financial Products.
- Institutions, including sources of information, advice and redress.

In addition, the FSA also established four fundamental skills required by adults to become financially literate:

- Gathering financial information and record keeping.
- Financial planning – saving, spending and budgeting.
- An understanding of the concept of Risk and Return.
- Evaluate information and to make comparisons between different products or courses of action.

The FSA further emphasized that an adult with an acquired knowledge of financial management and skills still required the right attitude to put these skills into practice.

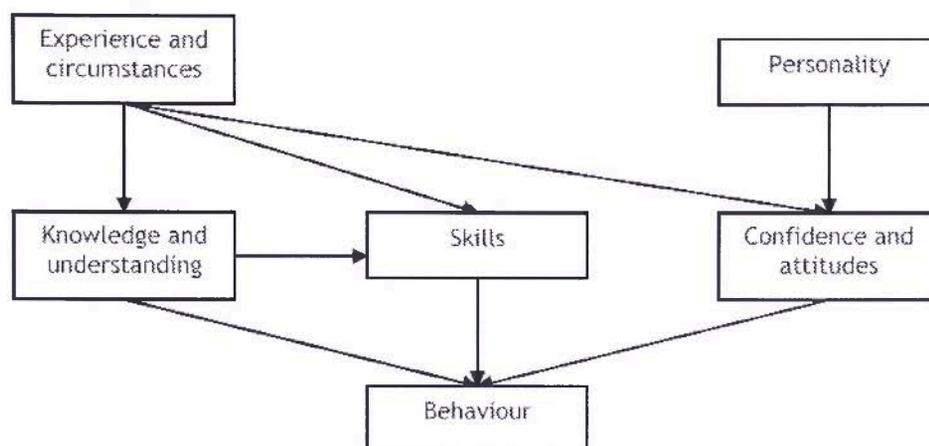
The FSA report also identified that financially capable adults would be:

- Willing to invest the time and other resources required to apply their knowledge and to exercise their skill
- Able to gain access to information, advice and other resources
- Confident enough to exercise their skills and to act on the results

These three categories constituted the framework for the FSA to develop a national questionnaire that could be tailored to suite different individuals. After testing and

further research they also included experience and circumstances, personality and behaviour to give them an enhanced picture of financial literacy. They found a definite interrelationship between these factors as demonstrated by the flow chart in figure 1. A consumers circumstances can influence the skills they have learnt, the knowledge they have gained from their situation and ultimately their behaviour.

Figure 1 The Information and Advice Environment



Source: FSA (2005)

In 2005, Lau, Chung, and Hui, conducted a national financial literacy survey in Singapore using a similar approach to study financial literacy. They measured financial literacy through, (1) Basic Money Management, (2) Financial Planning/Retirement Planning, and (3) Investment Know-How. Whereas earlier in 2003, the MoneySENSE Financial Education Steering Committee (FESC) wanting to determine whether Singaporeans are knowledgeable about financial products and services and have been making effective financial decisions identified two main dimensions of financial literacy in knowledge and actions. A significant outcome of their research was that being financially literate and using financial knowledge in a pro-active way greatly enhanced one's financial position.

ANZ commissioned Roy Morgan in 2003 to conduct research into financial literacy in Australia. They looked at financial literacy from a bank's perspective and considered what they believed were important factors in managing and controlling ones financial

position. In their report, they emphasized that the financially literate are also confident in making their financial decision. Based on this research ANZ stated that financial literacy *“is about enabling people to make informed and confident decisions regarding all aspects of their budgeting, spending and saving and their use of financial products and services, from everyday banking through to borrowing, investing and planning for the future”* (ANZ 2003). One of the goals of their report was to try and set a benchmark paving way for further research in the future. For this research to be successful they saw the importance of determining a broad definition of financial literacy and how it differs between different social classes and age groups. In order to achieve this, ANZ considered four areas that they found to be essential for the financial literate:

- Mathematical and Standard Literacy
- Financial Understanding
- Financial Competence
- Financial Responsibility

Based on their own experience, ANZ had strong views that to be financially literate one must have basic mathematical and standard literacy. They introduced mathematical and standard literacy as one of the must haves which has not been included in other research around the world. Importance of numeracy skills stems from the fact that this skill enables consumers to have a greater comprehension of money, managing their finances and an understanding of borrowing and investing. Whereas, a basic knowledge of mathematics is essential in making appropriate and rational financial comparisons and decision aided by their ability to add and subtract, calculate and understand percentages and interest rates.

According to this commissioned report, financial understanding included an understanding of money, the exchange of money and where money comes from and goes to. It also incorporated knowledge of payment methods and the advantages and disadvantages of the different methods, understanding of financial terminology related to loans and credit, the implications of secured and unsecured loans. The report also examined financial understanding through ones knowledge of how fees, charges and interest rates are related to their dealings with financial institutions and compare these within the marketplace.

In its report to ANZ Morgan stated that individuals' financial competency was seen as the behaviour and knowledge regarding basic financial services, financial records and information, spending money and budgeting and also risk and return. In addition, financial competency was also measured through an individual's awareness of the availability and basic features of various financial products, associated fees and whether one would shop around for the best product for them.

The last area considered by ANZ research to be of importance, financial responsibility was examined in terms of the approach to making personal life choices, understanding of consumer rights and responsibilities, and understanding of access to sources of assistance. This characteristic took into account the ability to understand the difference between long-term and short-term needs, prioritizing to balance income and expenditure and the ability to make informed decisions when experiencing a drop in income.

In 2006, the Commonwealth Bank Foundation's (CBF) assessment report aimed directly at Australian students' financial literacy further supported ANZ's assessment of required financial literacy skills. The CBF developed four skill categories that they considered mandatory for students to be classed as financially literate. These four areas used to assess the abilities of students aged 15 and 16 across the country are presented below:

- Financial Understanding – having the skills to deal with everyday financial issues and having the ability to make informed decisions about personal finances
- Financial Responsibility – assesses awareness of a range of social, moral, cultural and environmental issues that affect a person's finances.
- Financial Enterprise – assess the ability to make decisions on the most suitable forms of spending, saving or investment.
- Financial Competence – assesses an individual's ability to identify and tackle financial problems or issues with confidence and effectively manage their finances daily.

The importance of a financially literate society has also been recognised in the US where they have developed a financial literacy program, the “Jump\$tart Coalition”. The program aims to improve the nation’s financial literacy standards of children through to retirees. Frederichs and Rohrke (2002) in a report for the Reserve Bank of San Francisco identified the importance of a financial education program with the poorer classes as a way for them to achieve financial security. They divided financial literacy into four main categories:

- early intervention,
- basic literacy,
- credit rehabilitation, and
- long-term planning or asset building.

Frederichs *et al*’s work follows the work done in the UK through the Basic Skills Agency and the FSA and stressed the early intervention of financial literacy as a method and possible solution to improve literacy standards. They claimed that an early intervention can reduce or eliminate financial literacy problems later in life.

Following the UK and the US examples, the Australian Government developed the Consumer and Financial Literacy Taskforce (CFLT) in 2004. The CFLT’s main objective was to consolidate financial literacy research and education to ensure consistency throughout Australia. For financial literacy research to be consistent in Australia the CFLT had to develop a definition of financial literacy that catered for all demographics. In order to achieve this they recognised that individuals have unique characteristics and should be treated differently since our individual characteristics, including intuition, attitudes, motivations and our problem-solving capabilities shape the choices we make. In doing so CFLT acknowledged that the process of identifying problems and ultimately attempting to improve financial literacy can benefit from the acknowledgement that consumers are a diverse group. The CFLT placed a great emphasis on this in their report by identifying financial literacy problem areas and improving not only these areas but the general financial literacy skills of the nation.

An average person will engage in many events in his or her life that have major financial implications. These range from moving out of home, losing a job, buying a house and having a child. People go through a number of stages in life where different

things are important and they impact on the financial decisions we make. There are certain events that are linked with certain life stages, getting a mobile phone and acquiring a credit card as a teenager or buying a home as an adult. This demonstrates the importance of identifying at which stage a person is in when measuring their financial literacy and also in developing appropriate and relevant educational programs. It was acknowledged that financial education programs would be far more beneficial if focused on educating people about relevant issues that are relevant to their current circumstances.

The CFLT developed a model of consumer and financial skills (Figure 2) which it considered relevant to an individual's lifestyle. In the model CFLT divided breaks financial literacy into three different parts, firstly the financial skills required, secondly to understand financial options and finally to know one's rights and responsibilities. In order to understand basic financial activities and to properly understand basic consumer contract terms, consumer need to possess a functional level of numeracy and literacy skills. These skills play a major role in being able to understand all types of financial requirement from budgeting to understanding basic financial products and services.

Planning skills are seen to be highly beneficial to get further ahead in life. The ability to set goals and work out how to achieve them is an essential part of managing one's finances. It involves breaking down various goals into manageable steps through budgeting and self-discipline and awareness of our income and expenditure.

Investing in general has become an integral part of one's financial management. The ability of an individual to invest money effectively to maximize returns can create additional income. Investment income can be anything from the simple interest paid on a savings account to dividends from shares and returns on investment properties. Consumer's can greatly benefit from having the necessary investment skills. These skills are not only identifying investment opportunities but also recognising bad investments and get-rich quick schemes. It also involves knowing and understanding the concept of risk and return.

Figure 2 Model of Consumer and Financial Skills

I have these skills

My pre-requisite

My planning skills (budgeting and saving)

My investing skills

My borrowing skills

My spending skills

My risk management skills

I know my options

My market awareness (what are the best products for me?)

I know my rights

My rights and responsibilities

My attitude

Source: The Consumer and Financial Literacy Taskforce (2004)

It is widely recognised that borrowing plays an important part of our lives. Most people take on debt to purchase a car or a home. If individuals do decide to borrow, it is important they understand the key aspects of lending and managing their debt. Debt can be used to make purchases and enhance wealth but it can also get a consumer into financial difficulty. It is important for consumers see both the benefits of borrowing and the negatives. Debt used to purchase appreciating assets and increase wealth is good debt whereas bad debt is borrowing to purchase depreciating assets or to fund lifestyle choices such as going on a holiday.

In modern times, spending skills are becoming more and more important as financial products are becoming more easily available. Individual's need to identify and negotiate the best deal available to suit their circumstances, rather than accept the first product or service offered. Credit card facilities are now available to a large number

of individuals' enables them to spend more than they are earning. This has led to many problems as some individuals overspend on luxury items and find themselves unable to meet the financial obligations (RBA 2003).

According to the literature, an individual who is considered financially capable can not only manage and use money correctly but also protect him/herself from financial loss. By having good risk management skills individuals are able to protect their assets through insurance or from what are referred to as investment scams. In present times, this has led to an increasing importance of insurance needs for the individual resulting in an increase in insurance products and providers. Wealth management and banking insurance have also become increasingly important as well as the traditional forms of insurance such as life, house, car and health. Given the wide range of products available, individuals need to be able to determine in what circumstances they need insurance, what type of insurance they need and to what level they should insure. This further strengthens the argument in favour of programs enhancing financial literacy of individuals.

Due to technological changes and increased competition individuals now require a greater understanding of the marketplace than ever before. Products are ever changing and diverging, creating the need for individuals to keep up-to-date knowledge of market conditions including:

- an understanding of current financial products and services
- the suitability of different products to our specific needs
- how these products are affected by change in economic conditions over time
- latest financial terminology and concepts
- how to obtain information and advice on market conditions

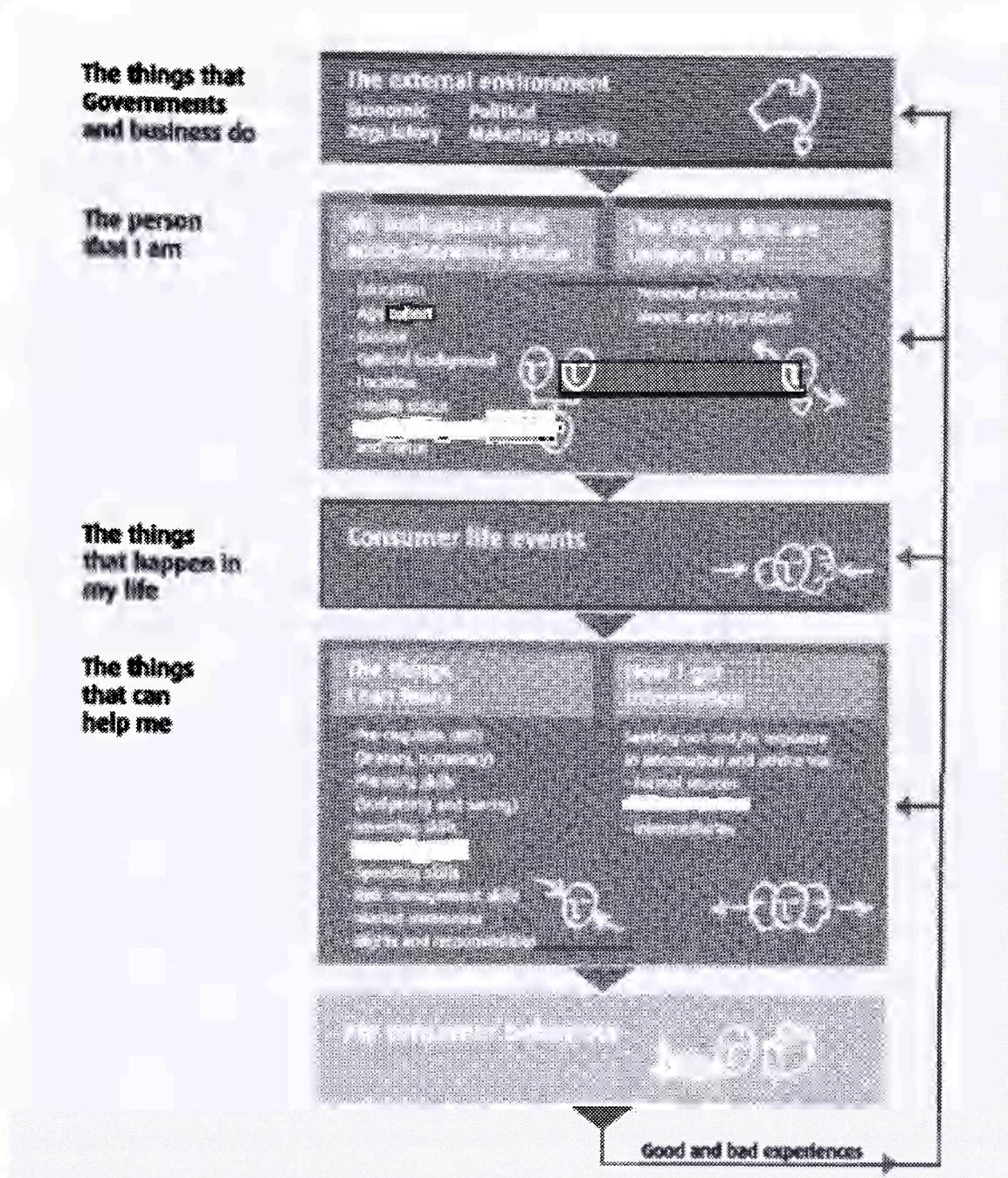
The CFLT realising the importance of a single model on consumer's financial behaviour and what shapes our behaviour to be adapted for all sectors of society developed a consumer behaviour model (Figure 3). In doing so they took financial literacy beyond other research works in this area. The model continues the concept of looking at things from a individual's perspective and takes into account external events, socio-economic background, personal characteristics, skill levels and choice of information that shape a individuals decision making process..

The consumer behavioural model (figure 3) has been developed by the CFLT on the assumption that each individual has different financial requirements. The main focus of The Consumer and Financial Literacy Taskforce is identifying and measuring Australia's current financial literacy and determining solutions to problem areas. The model attempts to address the influences of the external environment that can play a role in the financial decisions undertaken by individuals. Although one is unable to have any influence over the external environment it is necessary for some individuals to possess the ability to understand this environment and the influence it will have on their finances. For most, it is about being able to accept and deal with the economic, cultural and political environment in which we interact.

Over the past twenty years, the economy has changed considerably and it is more so in case of the finance industry. This has brought benefits to individuals in terms of choice and accessibility to numerous financial products and services. At the same time this has brought with its complexities and the need for individuals to be informed about an ever increasing range of products and for them to have the capacity to make informed financial decisions. Other economic factors which may have an affect on behaviour and capacity include:

- The employment opportunities available
- The level of inflation
- The level and complexity of products
- The competition present in the market
- The great extent to which products are marketed

Figure 3 Consumer Behaviour Model



Source: The Consumer and Financial Literacy Taskforce (2004)

Apart from the economic environment, the political environment also has an impact on individuals through the direction of government policy that is applied to the economic and regulatory environment. The major influence of the government has been the deregulation of the banking system, which has led to greater competition within the finance sector. This has led to a plethora of financial products that are more complex than other types of consumer goods resulting in individuals being in a weaker position in terms of information and understanding. The recent introduction of the Financial Services Reform Act 2001 (FSRA) has established a synchronized licensing, conduct and disclosure regime for all financial product providers and

advisors. The main role of the FSRA is to improve the level and quality of information that is available to individuals. This has made available the information individuals require to make informed financial decisions. The down side is that individuals now have more information than ever to comprehend.

Through the consumer behavioural model CFLT isolated various socio-economic and demographic factors that influence our financial decisions and level of financial literacy. Such segregation in measuring financial literacy of individuals was warranted as socio-economic status generally refers to a measure of an individual's or group's social standing and can be used to measure potential disadvantages. The term socio-economic status usually refers to income, occupation, education attainment and wealth of either an individual or group.

Being a certain age means belonging to a certain generation. That generation usually shares some sociological traits. These sociological characteristics lead to relatively homogenous groups. This is no more evident with the youth of today. They have greater choices for recreation and lifestyle and this has caused greater spending within this generation than previous generations. Their debt management skills are generally poor as they continue to spend in a greater number of ways. These include, in particular mobile phones and credit cards. Individual characteristics, including intuition, attitudes, motivations and our limited problem-solving capabilities shape the choices that we make.

The model put forward by the Consumer and Financial Literacy Taskforce as a synthesis of the best approaches to the consumer decision making process was in response to the finding that Australia is lacking an effective framework for understanding consumer and financial literacy and an effective structure for improving information provisions across sectors. The CFLT highlighted the need for a central coordinating body with representations from all sectors to promote and facilitate a targeted approach to financial education and information in Australia.

2.2 FINANCIAL LITERACY IN THE US

The US government addressed financial literacy extensively through legislation to provide funds for financial education. They have targeted all age groups from children through the *No Child Left Behind Act of 2001* to retirees with the *Education for Retirement Security Act of 2003*. The Financial Literacy and Education Commission was set up in 2004 by the Department of the Treasury to develop a national strategy to improve consumer education and financial literacy. Through a website called mymoney.gov they provide the basics about financial education in a number of different areas for all age groups and needs. It is a comprehensive resource that covers areas from budgeting and taxes, credit, financial planning, home ownership to paying for education, investing and retirement planning. Throughout the website, information from over 20 federal agencies can be found.

The Jump\$tart Coalition is another government sponsored initiative which looks at developing the financial literacy levels of young adults at high school. With the backing of Citibank and MasterCard to develop a program in the attempt to improve financial literacy in young adults, the Jump\$tart program began in 1997 when there were few school leavers who were able to pass a 31 question multiple choice examination administered by the schools. This examination measured their ability to make informed financial decisions in matters of importance to people of their age. The scores in this examination have declined each year until the last test conducted in 2004.

Mandell (2004) undertaking a survey on behalf of the State University of Buffalo and Jump\$tart Coalition to evaluate financial literacy level amongst young African-American adults found young Americans place a greater emphasis on spending than on savings. The overall savings and money management scores were well below 50%. This means less than half of high school leavers surveyed had an acceptable understanding of money management and saving. The score for the other two areas tested were quite low as well, with spending scoring 55.4% and income 62.9%. Financial literacy levels of young Americans fell short of what Mandell considered being necessary for them to effectively manage their financial position.

2.3 FINANCIAL LITERACY IN THE UK

There have been major steps taken towards improving the financial literacy levels of individuals in the United Kingdom. Government initiatives such as The Basic Skills Agency along with Financial Services Authority (FSA) have been at the forefront of this movement.

The Basic Skills Agency has developed financial educational tools for all parts of personal finances on one easy to access website. It is the central resource for financial education providing financial educational programs aimed at various individuals. They have also developed a number of programs with a primary focus on younger segment of the population and these programs include The Quality Mark and the Better Teaching Partnership.

The Quality Mark program is aimed at infants to secondary schools children throughout the UK and strives to increase their literacy and numeracy levels. Whereas, the Better Teaching Partnership program is designed for adults by providing advice and support to help improve their quality of basic financial skills. The program is run in conjunction with colleges, adult and community education services, prisons and probation services, adult training organizations and workplace educational programs.

The FSA, a UK financial regulator, is responsible for promoting public understanding of the financial system. The FSA has two objectives, to provide individuals with the knowledge and skills base necessary to become informed individuals and to manage their finances effectively and to provide generic advice to help individuals to plan their finances and make informed decisions.

Another organisation, the Personal Finance Education Group (pfeg) is also active in promoting financial literacy within the UK. Pfeg is an education charity with a mission to ensure that all young people leave school with the confidence, skills and knowledge they need in financial matters so that they can participate fully in a modern society.

2.4 FINANCIAL LITERACY IN SINGAPORE

Chung and Hui (2005) surveyed financial literacy levels in Singapore and found that Singaporean's displayed some good money management habits, 85% indicated a regular saving habit and a third of them saved a fixed amount each month. More than half monitored their spending by examining their account balances and tracking bills. They also found that of those Singaporean's who invested, roughly three quarters took into account the risks of their investment before investing and over 60% monitor their investment on a regular basis. Their study reported an encouraging sign that almost 83% of Singaporean's take steps in basic financial planning, including savings for their future, having a retirement plan, taking out insurance and investing to grow in wealth.

The study in to Singaporean's financial literacy, also found that Singaporeans were generally knowledgeable about their loans and understood the implications of not repaying their unsecured loans. It was also found that those Singaporean's who have investments are quite knowledgeable on the subject and had a good understanding of the risks involved and understood the idea of diversification of an investment portfolio.

Chung and Hui found that Singaporean's generally set aside savings for emergencies. However, only 32% were considered to have set aside sufficient funds for emergencies. Based on the survey results they concluded that the main area for improvement for many Singaporean's is planning for retirement because the majority of Singaporean's were unclear about how much is needed for retirement, with 70% underestimating funds required for retirement.

According to their study, the sections of populations with the most responsibilities preformed better, these included the working singles, working married with no children, working married with children, and working married with no children. They also found that the unemployed and retirees were the worst performing groups in almost all areas with students and married housewives only marginally performing better.

In general, they reported that the areas Singaporean's were least knowledgeable about were, what is a financial plan, how much CPF (Singapore's Super) savings they will have at retirement, Insurance policies and Unit trust investments.

In October 2003, the government of Singapore set up the MoneySENSE Financial Education Steering Committee to improve financial literacy throughout the country. It aims to bring together industry and public sector initiatives in financial education focusing not only in the immediate future but also in the long-term.

2.5 FINANCIAL LITERACY IN AUSTRALIA

In 2003, ANZ commissioned Roy Morgan to conduct a survey and prepare a report into the financial literacy levels of various segments of the Australian population. The ANZ report, as it is known, found that Australians as a whole had a reasonable level of financial literacy. It revealed that 97% of the population surveyed had everyday bank accounts, 80% were well informed when making financial decisions and 98% understood the need for prioritising different needs when balancing income and expenditure. It also showed that Australian's were generally knowledgeable when it came to superannuation and common payment methods such as EFTPOS, credit cards, ATMs and cheques. The report further concluded that individuals had a reasonably good understanding of some of their responsibilities when it came to managing their own finances.

The survey ranked different segments of the population by financial literacy levels achieved and identified that those with the lowest levels of financial literacy were associated with:

- those having lower education (Year 10 or less)
- those not working for a range of reasons or in unskilled employment
- those with lower incomes (less than \$20,000 p.a.)
- those with lower savings levels (under \$5,000)
- single people
- people at both extremes of the age profile (18 – 24 year olds and those aged 70 years and over)

In another ANZ commissioned report in 2005, AC Neilson confirmed the findings by Roy Morgan Research in an earlier report in 2003 in that individuals with lower financial literacy levels did come from the above mentioned groups of the community.

In recent years, most of the major banks in Australia have joined rank in providing financial literacy educational programs with ANZ and Commonwealth Bank of Australia (CBA) being at the forefront. They have both either commissioned or conducted research into the financial literacy levels within Australia, with CBA focusing mainly on the teenagers and younger segment of the population. They have both developed education programs aimed at increasing the financial literacy levels of the Australian public while other banks such as Westpac and Bank of Queensland have also developed programs to improve financial literacy in Australia.

ANZ developed the MoneyMinded program following their survey into adult financial literacy in Australia, which identified a strong link between socio-economic status and adult financial capability. It was developed by the Centre for Learning Innovation at NSW Department of Education and Training, in conjunction with an advisory committee consisting of:

- the Australian Financial Counselling and Credit Reform Association (AFCCRA)
- the Financial Counsellors Association of NSW Inc. (FCAN)
- the Australian Securities and Investments Commission (ASIC)
- ANZ Consumer Finance.

The program was originally aimed at low income parents and individuals. As part of the program, they were provided with cash incentives for participation. If participants were able to follow their savings plan as agreed, the ANZ bank was to provide them with cash bonuses.

A Train-the-Trainer program is being used to support facilitators at the Brotherhood of St Laurence to deliver the curriculum to individuals by the facilitators of the MoneyMinded program. These facilitators, in turn, will train educators from other organisations affiliated with the Brotherhood to deliver MoneyMinded workshops.

The Train-the-Trainer program has now grown to incorporate other social service providers such as The Smith Family, Mission Australia and The Benevolent Society. In 2004, ANZ commissioned RMIT University to conduct an evaluation of the MoneyMinded program to ensure the program is benefiting those it targeted at and to ensure that the program stays on track.

The MoneyMinded program is also progressing into schools where selected schools have already begun to teach this program once a week. ANZ's goal is that the lessons will be introduced into the Victorian Certificate for Applied Learning (VCAL) curriculum to offer students practical life-skills before leaving high school. Eventually, ANZ is aiming for the MoneyMinded program to be introduced into high school curriculum nationally.

The Commonwealth Bank of Australia has been involved in financial education for over 70 years since the introduction of school banking. Through this program they went into schools to promote young students to open savings accounts, introducing them to banking practices finance. It was not until 2002 that they began to take a greater interest in the financial literacy and education through the “CommFoundation”. In July 2002 they launched the “DollarsandSense” website aimed at increasing the financial literacy among Australian teenagers. The website provides young adults with information on saving, budgeting, borrowing, lending, jobs and money and can also be used as an education tool for teachers.

The Consumer and Financial Literacy Taskforce was set-up in 2004 with the purpose of forming a central organization to oversee the financial education of the Australian public. Its objective is to provide a clear direction, strategy and vision to ensure the various financial education programs around the country are all moving in the same direction.

This chapter discussed financial literacy concepts as developed and examined by various researchers from the US, the UK, Singapore and Australia. A common theme that emerged from the above relates financial literacy as an individual's ability to obtain, understand and evaluate financial information necessary for the decision making process with an awareness of their financial consequences. From this broad

definition, financial literacy is further segmented to match each individual's circumstances, and their financial needs.

Financial literacy researchers have identified areas and targeted various programmes for improving the public's financial literacy levels. Since this research is geared towards identifying apprentices' financial literacy levels and needs, a modified approach is taken acknowledging that apprentices are at the stage in their life where once they are fully qualified their salaries will increase substantially requiring a comprehensive knowledge, skills and understanding of the financial issues. To this end, ANZ's model of financial literacy is used as a base model and adapted to study apprentices' financial literacy skills and knowledge and presented in the next chapter.

CHAPTER 3. METHODOLOGY AND DATA

As discussed in the last chapter the Consumer and Financial Literacy Taskforce (2004) identified that in the Consumer Behavioural Model factors such as external events, socioeconomic background, personal characteristics, skill levels and choices of information all contribute to the financial decisions of individuals. Firstly, economic, regulatory, cultural and political factors shape the external environment facing individuals. These external environment factors comprise of market forces regarding financial products and their characteristics as well as the information and product disclosure available to individuals. Secondly, the consumer's own socioeconomic and personal characteristics play a role in the decision making process of individuals. Finally, the events in the consumer's life, the stage consumer is at in his/her life and both good and bad experiences in particular with the financial products will influence a consumer's decision.

In addition, there are skills that individuals can learn to assist in the decision making process. These include prerequisite skills such as literacy and numeracy, planning skills such as budgeting, saving and planning, and risk management skills including insurance. Included in this category is also the information available to individuals to help in the decision making process. The consumer also requires the ability to access this information network. All these aspects come together to determine an individual's financial literacy. Some of these are beyond the scope of this research such as the external environment and to a lesser extent socioeconomic background and personal characteristics.

The ANZ (2003) report took into account similar variables in developing a model to determine the financial literacy levels within different segments of the Australian population. They developed a model to include the following variables, mathematical and standard literacy, financial understanding, financial competence and financial responsibility.

In doing so they broke up financial literacy into four different categories to determine the financial literacy of different sections of the population. The ANZ report was used

to determine the financial literacy levels of a cross section of the entire adult population of Australia. As a result the above categories covered the financial literacy needs of the entire population. This research study however, is only concerned with the identification of financial needs of apprentices and the areas of financial literacy that require improvement. For this study the four categories identified in the ANZ report supplemented with the areas identified by FSA are used as a guide in identifying financial literacy by some of the criteria to match the needs of apprentices, given their current financial position.

3.1 DEVELOPING THE MODEL AND QUESTIONNAIRE

3.1.1 The Model

After a thorough literature survey a general framework was decided upon to gauge financial literacy and the financial needs among apprentices in the western suburbs of Melbourne. This framework is based on the ANZ (2003) report that split financial literacy into 4 sections as discussed in Chapter 2. Though the ANZ report broke each section into basic and advanced components and tested the abilities of the respondents, due to the limited scope of this research and the fact that apprentices are at the beginning of their careers and only just starting to earn an income, only the basic competencies were taken into account.

These apprentices are at the stage in their life where once they are fully qualified their salaries will increase substantially. The questionnaire was designed to focus on the required skills and knowledge these apprentices will need to possess once they start earning larger sums of money. To assess the extent of their awareness of financial matters, the questionnaire also took into account the actions currently undertaken by apprentices. It is one thing to have some financial literacy but in order for it to be effective it must be put into practice. Since attitudes also play an important role in whether a consumer will undertake in the use of financial products and making an informed decision, an attempt is made to collect information on various characteristics as well.

Adapting the approach outlined in the ANZ report, these components were re-categorised to meet the required needs of apprentices into two categories, basic financial understanding and basic financial competency.

3.1.2 Development of Questionnaire

A questionnaire was developed to study basic financial understanding and financial competency levels of the apprentices' in the Western suburbs of Melbourne through defining various variables as outlined below:

3.1.2.1 Basic Financial Understanding

Basic financial understanding takes into account the necessary skills required for individuals to meet their daily financial requirements. It includes financial mathematics and a knowledge and understanding of payment methods.

- ***Basic financial mathematical skills***

Financial mathematical skills are considered a necessary and important component of financial literacy. Basic knowledge of financial mathematics is essential for managing one's finances comprising basic spending and saving to borrowing money and investing. Due to the fact that mathematics is compulsory in schools, it was assumed that apprentices could add and subtract so this was measured through the ease by which they can calculate a percentage discount off an item and the variable was given the name FINMATH.

- ***Basic knowledge and understanding of payment methods***

In investigating understanding of payment methods, the survey examined the key types of making payments, from its simplest form in cash to credit cards and EFTPOS, including frequency of use, to their understanding of the associated fees and charges for each method. The variables defined and include are:

- **USECASH**, how frequently cash is used for purchases
- **USEATM**, how frequently ATMs are used
- **KNOWSAV**, do they have a knowledge of a general savings accounts
- **USEEFTPOS**, how frequently EFTPOS is used for purchases

- **KNOWEFTPOS**, do they have a knowledge of the fees and charges for using EFTPOS
- **USECRED**, how frequently credit cards are used for purchases
- **KNOWCRED**, do they have a knowledge of the fees and charges for using a credit card

3.1.2.2 Basic Financial Competency

Financial competency refers to a range of capabilities, including behaviour and knowledge regarding basic financial services, financial records and information, spending money and budgeting, and basic risk principals.

- ***Basic knowledge of Superannuation***

A certain degree of knowledge of superannuation is required by all individuals. The extent of knowledge for an apprentice who is just starting out their working life is different to someone who has retired but they still require knowledge of superannuation to protect themselves from untrustworthy employers. The variable for determining if apprentices have knowledge of superannuation is SUPER.

- ***Able to read financial statements***

The ability to read financial statement allows individuals to have control over their personal finances. It allows them to determine their financial position and is a necessary part of the budgeting and planning process. It also enables the individuals to reconcile their finances and check accuracy of official records. Two variables were used to assess how frequently apprentices checked their bank statements, READSTATE and how often they use the internet to do so, INTERNET.

- ***Basic understanding loans and investments and risk principals***

Financial competence regarding risk and return was seen as the ability to understand the relationship between investment risk and return and also in the context of borrowing money. A variable was created to determine if there was a significant proportion of apprentices who had a personal loan called PERSONAL and also if they knew how to obtain a personal loan KNOWPERSONAL. A further variable INVEST was used to determine if they had any investments, either high interest accounts, term

deposits, managed funds or shares. Two more variables were used to determine if they understood basic investment and borrowing fundamentals, RISKRETURN for understanding the relationship between risk and return and COMPVSIMPLE for knowing the difference between how compound and simple interest rates are calculated.

- ***Able to source financial help and advice***

The ability to source financial help and advice allows the consumer to seek at times expert opinion on their financial matters. It is essential for being financially competent that they are able to seek out advice due to their changing needs and a changing financial product market. Two variables were used to determine if apprentices sought relatives for financial advice named RELATIVES, and ASKQUESTIONS if they sought out expert advice upon obtaining new financial products.

- ***Able to follow a budgeting, save regularly and control spending.***

A key part of being financially competent is to possess the ability to control one's spending and also being able to prepare a budget and also manage within the framework of this budget. Saving regularly enables individuals to be financially secure in the face of unforeseen expenditure outlays. This characteristic was explored using SAVEREG to determine how often those surveyed saved, BUDGET to see if they tried to within their budget and BUYIMPULSE for how often they made purchases on impulse which is an indication of probably going beyond their budgeted amounts.

- ***Attitudes towards one's general finance***

The attitude towards one's finances takes into account attitudes towards spending and savings as well as the understanding of budgeting, financial planning and having knowledge of one's financial position. The attitudes of apprentices were determined by evaluating their thoughts on financial issues and to establish if they believed the issue to be important enough. The areas assessed were budgeting, shopping around when making purchases, knowing one's current financial position, understanding that investing can greatly increase one's wealth and finally their attitude towards financial education.

- ***Assessment of their current overall financial position***

Inline with the surveyed material and the ANZ (2003) report it was endeavoured to determine the feelings of apprentices towards their current debt position, overall financial position and also if they have a good knowledge of their current financial position. The variables used for these are LEVELDEBT, FINSIT and KNOWFINSIT respectively.

3.2 QUESTIONNAIRE PRE-TESTING AND DATA COLLECTION

3.2.1 Questionnaire Pre-Testing and Selection of sample

The draft survey questionnaire developed based on the two categories discussed in section 3.1 was pre-tested on young adults to assess its usefulness and efficacy. After some minor modifications the main survey questionnaire was developed for collecting relevant data from apprentices. The survey questionnaire can be seen in Appendix 1.

The research focuses on the financial literacy levels of apprentices particularly in the western suburbs of Melbourne. It was considered fitting to take a sample of Victoria University Tafe sector which mainly covers the western suburbs of Melbourne. Another reason to select Victoria University Tafe was the ease of access to apprentices studying at the University. Owing to the time constraints and costs involved it was decided to collect data from a sample of the ‘Apprentices at VU’ population. A *cluster sampling* design was used in the selection of the sample for ease of data collection and to ensure a significantly larger sample size. Using a random process six classes (clusters) of apprentices were selected from a range of trades and years into apprenticeship. In total a sample of 84 apprentices was selected spread over the 6 classes.

3.2.2 Collection and Analysis of data

The data were collected using the questionnaire as discussed above by personally visiting the selected classes and explaining the aims of this research before distributing the questionnaire. Each member of the class was given a questionnaire to

complete and the survey scores were entered into a spreadsheet for analysis. In total 84 students were contacted to complete the questionnaire.

This was considered the most effective way to conduct the research and collect the required information on the perceived knowledge and attitudes of the apprentices. It was seen to be inappropriate to have a pass mark above which people were considered to be financially literate. Since there is no precise measurement in determining financial literacy, the survey aimed to discover the current level of capability of apprentices in understanding financial products and/or services.

Due to the fact that the qualitative data were collected as part of this research a ranking system was used in order to determine the knowledge and attitudes of apprentices to the two variables stated above. A 5 scale ranking system was used for the apprentices to answer in the survey to allow the students to report a range of their knowledge and attitudes. While a score of 1 meant that the apprentice rarely or not at all used a particular product or strongly disagreed with the statement, a score of 5 on the other end of the scale implied that the apprentice regularly used the product or strongly agreed with the statement.

Upon examination of the data it was found that the distributions of responses to all 5 individual scores were insufficient to reach a significant conclusion. To overcome this problem, 'dummy' variables were created such that answers of one, two and three were given a '0' (zero) value as they represented answers that didn't agree with the statement or the products were not used on a regular basis. A value of '1' (one) was given to those responses that received a four or five, representing those who agree with the statement or use the product frequently. Furthermore, for some questions, a zero was given to those who didn't have or use the product and a one to those who did. This method of recasting provided an easier and valid assessment of the responses.

Firstly, the frequencies were obtained for the variables using SPSS and the results tabulated. A set of hypotheses were then created to determine if there was a significant proportion of apprentices who agreed with or disagreed with a statement, or frequently used or infrequently used a given product. The hypotheses were

developed for each response with the null hypothesis being that the proportion of apprentices who agreed with a statement or frequently used a product was equal to the proportion that did not.

These hypotheses were then tested using the z-test to determine if the null hypothesis was either rejected or not rejected and the answers reported. Some further tests were also carried out using SPSS to create crosstabulation to evaluate the strength of relationships between two sets of responses.

In this chapter, an adapted version of the ANZ's concept of financial literacy is presented to suite apprentices. The four sections as suggested by the ANZ report were collapsed into two groups -Basic Financial Understanding and Basic Financial Competency - with each being further segmented for assessing financial literacy levels of apprentices. A questionnaire was developed and used to collect data from the apprentices living in the West Melbourne to determine their financial knowledge, understanding and attitudes as well as their current financial behaviour. The data was analysed using parametric and non-parametric statistical techniques. The results of the analysis are presented in the next chapter.

CHAPTER 4. RESULTS AND DISCUSSION

The characteristics of apprentices to study their financial literacy levels as identified section 3.1 were collected and the results from the survey were categorized in to two main areas, basic financial understanding and basic financial competency. These two areas were further assessed through various sub-categories. With basic financial understanding being made up of basic financial mathematical skills and basic knowledge and understanding of payment methods while the basic financial competency was studied through knowledge and actions, attitudes and overall feelings towards their finances. These results are presented below to analyse the financial skills and literacy levels of the surveyed apprentices.

4.1 BASIC FINANCIAL UNDERSTANDING

4.1.1 Basic financial mathematical skills

This skill was tested and follows for the sample group of apprentices.

H_0 : The proportion of apprentices who are competent in financial mathematics (P_1) is equal to the proportion of apprentices who are not competent (P_2). $P_1 = P_2$

H_A : The proportion of apprentices who are competent in financial mathematics (P_1) is greater than the proportion of apprentices who are not competent (P_2). $P_1 > P_2$

Table 1 Results on Financial Mathematical Skills

| Variable | P_1 | Z | Decision | Level of Sig |
|----------|-------|----------|----------|--------------|
| FINMATH | 0.881 | 5.554478 | Reject | 0.975 |

From the analysis of the survey data using one-sided hypothesis to test whether P_1 and P_2 are significantly different it became apparent that the proportion of apprentices who are able to calculate a discount easily P_1 is significantly greater than those who have trouble P_2 at a 0.025 level of significance. It can, therefore, be stated that

apprentices are normally competent in basic financial mathematical skills. A possible reason for this could be that mathematics is a compulsory subject in schools and taught as part of the curriculum for VCE students.

4.1.2 Basic knowledge and understanding of payment methods

A number of variables were studied to access this issue and hypotheses were tested of the following forum.

H_0 : The proportion of apprentices who are competent in financial mathematics (P_1) is equal to the proportion of apprentices who are not competent (P_2). $P_1 = P_2$

H_A : The proportion of apprentices who are competent in financial mathematics (P_1) is greater than the proportion of apprentices who are not competent (P_2). $P_1 > P_2$

Where, P_1 and P_2 are the proportion of sampled apprentices showing / not showing the various characteristics associated with the issues under consideration. The results of the hypotheses are presented in the following table.

Table 2 Results on Basic Knowledge and Understanding of Payment Methods

| Variable | P_1 | Z | Decision | Level of Sig |
|-----------|-------|----------|---------------|--------------|
| USECASH | 0.714 | 3.610330 | Reject | 99% |
| USEATM | 0.679 | 3.082574 | Reject | 97.5% |
| KNOWSAV | 0.619 | 2.122837 | Do not reject | 97.5% |
| USEFTPOS | 0.452 | 0.868939 | Do not reject | 99% |
| KNOWFTPOS | 0.595 | 1.714911 | Do not reject | 97.5% |
| USECRED | 0.190 | 4.824119 | Reject | 99% |
| KNOWCRED | 0.429 | 1.296148 | Do not reject | 97.5% |

Table 2 indicates that at a 99% significance level the number of apprentices who use cash on a regular basis is significantly greater than those who use cash infrequently (USECASH). This finding is supported up by the number of apprentices using ATMs (USEATM) on a regular basis also being significantly greater than those on an infrequent basis. The frequent use of ATM enables them to withdraw the cash to make purchases. Although this shows they are comfortable using ATMs it can also be a sign that they are not comfortable in using the other and more complex payment forms such as credit cards and EFTPOS.

The analysis further shows this indeed is the case with the variable USEEFTPOS, the proportion of apprentices using EFTPOS on a frequent basis equal to those using EFTPOS on an infrequent basis at a significance level of 97.5%. A possible reason for this is that the majority of apprentices do not have enough knowledge on how EFTPOS works and its benefits. This has been evaluated and shown in table 2 using the variable KNOWEFTPOS which indicates a lack of knowledge on EFTPOS.

In the sample surveyed, this lack of knowledge in more complex payment methods is also evident whilst analysing the use of credit cards. This is shown by the significance of variable KNOWCRED, at 97.5% it can be said that the proportion of apprentices knowledgeable about using credit cards is equal to those lacking in knowledge. This lack of knowledge on how credit cards operate and the benefits that follow can lead to apprentices not using credit cards at all or on an infrequent basis. This is supported by the results obtained on variable USECRED with the null hypothesis that those who use credit cards frequently are equal to those who use infrequently being rejected. As a result, the alternative hypothesis that the majority of apprentices use a credit card on an infrequent basis is not rejected.

If apprentices are made to have a greater understanding of credit cards, may be they will feel more comfortable in using them to make purchase. However, when further analysis of the data was carried out it indicated that there is a much higher number of apprentices with a good understanding of credit cards than those who use them on a regular basis. This implies that a significant number of apprentices at a 99% significance level have a good knowledge on credit cards but do not use them on a regular basis. There could be a number of reasons for this; it could be the type of purchases they make, their total number of purchases or it could be the fact that they see the downside of using or having a credit card outweighs the benefits.

The final attribute as outlined in the methodology to determine if apprentices have a basis understanding of payment methods was understanding how a general savings account worked. It can be said at 97.5% significance level that the proportion of apprentices who have a good knowledge of savings accounts is equal to the proportion that requires further knowledge. From this it can be seen that apprentices use cash and

ATMs on a regular basis but suffer from a lack of knowledge on general savings accounts.

4.2 BASIC FINANCIAL COMPETENCY

Survey data was analysed to study basic financial competency of the sampled apprentices. In this section, results are presented on the analysis of variables concerning basic financial competencies. The results are grouped into these sub-categories and presented below.

4.2.1 Knowledge and Actions

In all, fourteen variables were analysed to study this trait using hypotheses testing procedures and the results are presented in Table 3.

H_0 : The proportion of apprentices who are competent in financial mathematics (P_1) is equal to the proportion of apprentices who are not competent (P_2). $P_1 = P_2$

H_A : The proportion of apprentices who are competent in financial mathematics (P_1) is greater than the proportion of apprentices who are not competent (P_2). $P_1 > P_2$

Table 3 Knowledge and Actions Results

| Variable | P_1 | Z | Decision | Level of Sig |
|--------------|-------|----------|---------------|--------------|
| SUPER | 0.548 | 0.868939 | Do not reject | 99% |
| READSTATE | 0.611 | 2.517860 | Do not reject | 99% |
| USEINTERNET | 0.214 | 4.547188 | Reject | 97.5% |
| PERSONAL | 0.321 | 3.082574 | Reject | 97.5% |
| KNOWPERSONAL | 0.488 | 0.218156 | Do not reject | 97.5% |
| INVEST | 0.571 | 1.296148 | Do not reject | 97.5% |
| COMDVSIMPLE | 0.286 | 3.610330 | Reject | 99% |
| RISKRETURN | 0.429 | 1.296148 | Do not reject | 99% |
| SAVEREG | 0.619 | 2.122837 | Do not reject | 99% |
| BUDGET | 0.452 | 0.868940 | Do not reject | 99% |
| BUYIMPULSE | 0.250 | 4.098780 | Reject | 97.5% |
| SHOPAROUND | 0.452 | 0.868940 | Do not reject | 97.5% |
| RELATIVES | 0.679 | 3.082574 | Reject | 97.5% |
| ASKQUESTIONS | 0.619 | 2.122837 | Do not reject | 97.5% |

Results presented in Table 3 were obtained after testing hypothesis on proportion of apprentices with positive and negative attitudes towards these variables. The

proportion of apprentices who have a good understanding of superannuation is equal, at a 99% significance level, to the proportion of apprentices who do not have a good knowledge as shown by the variable SUPER indicating a significant number of apprentices with a lack of knowledge of Superannuation related issues.

Superannuation is something that they may not have encountered before and is something that is learnt via talking with either relatives or employers. This general lack of knowledge in superannuation may also suggest a lack of knowledge in other areas of one's personal finances that is not dealt with on a daily basis.

The variable READSTATE was used to determine the regularity of apprentices reading their financial statements. The results show that at a significance level of 99% the proportion of apprentices surveyed who read and check their financial statements is equal to those who do not check their financial statements. This significant proportion of apprentices without proper understanding of financial statements demonstrates firstly a reluctance to have an in depth knowledge of their current financial position and secondly that they are not aware that their financial statements may contain errors, resulting in a loss of money.

This is further supported by the results obtained on the variable USEINTERNET which indicates that a significant proportion of apprentices (99% significance level) infrequently use the Internet for general banking, to check statements and obtain their current financial position. One possible reason for a lack of using the internet as part of their banking is that they may not have readily available access to the internet.

Considering that in 2005 over 2.4 million households in Australia have access to the internet, it is surprising that there are a significant proportion of apprentices who do not frequently use internet banking (ABS 2005). The use of internet banking can provide a consumer with greater convenience and control over their finances and this area along with reading and checking financial statement should be looked at by financial educational programs aimed at teenagers. Further research in this area could provide a greater understanding of the use of internet banking by apprentices and other segments of society.

From testing the hypothesis on equality and inequality of proportions of apprentices for the variable KNOWPERSONAL it was found that (at a significant level of 97.5%) the proportions of apprentices who have and who do not have knowledge of how to obtain a personal loan were equal. Data indicates that about 51% of apprentices do not know how to obtain a personal loan. These apprentices are at the stage in their life where typically most young adults buy their first car. It is often necessary for people of their age group to take out a personal loan in order to purchase a vehicle. Therefore, it is important that apprentices should know how to take out a personal loan contrary to what the results are indicating.

Table 4 Crosstabulation results on PERSONAL and KNOWPERSONAL

| Count | | KNOWPERSONAL | | Total |
|----------|---|--------------|-------|-------|
| | | 0 | 1 | |
| PERSONAL | 0 | 0.476 | 0.202 | 0.679 |
| | 1 | 0.036 | 0.286 | 0.321 |
| Total | | 0.512 | 0.488 | 1.000 |

Further analysis of the data on the variable PERSONAL shows that the proportion of apprentices who do not have a personal loan is greater than the proportion that do at a 97.5% significance level. In looking at this using crosstabulation in conjunction with those who know how to undertake a personal loan, Table 4 shows that the majority of apprentices who have not taken out a personal loan do not know how to do so. This is quite a significant proportion and this is an area that should be looked at when developing educational programs aimed at this demographic.

While analysing apprentices' investment behaviour (INVEST), results presented in Table 3 shows that a significant proportion (at a 97.5% confidence level) of apprentices do not invest money in managed funds, shares or high interest accounts such as term deposits. This lack of investments could be a result of a number of things, one being simply that they don't have the knowledge of how to invest and its benefits. This could also be a result from apprentices not having the funds available to invest due to a lack of being able to save.

Further analysis into apprentices' knowledge of basis investment theories is shown by the variables RISKRETURN and COMDVSIMPLE. COMDVSIMPLE shows a significant proportion of apprentices (at a 99% significance level) have an understanding of interest rates as compared with those who have limited or no knowledge. However, apprentices grasp of the risk and return concept is not as good. An equal proportion of apprentices have an understanding of risk and return compared to those lacking understanding. These are key theories in investing and determining what types of investments to undertake and it can be said that half of apprentices are lacking knowledge in this area. This can explain why only a small percentage of apprentices have undertaken investments. A greater knowledge in this area could increase the number of apprentices investing a proportion of their finances to improve their financial asset position.

As previously stated, a reason why a significant proportion of apprentices have not undertaken investments is that they simply do not have the surplus finances available. To determine that the surveyed apprentices have a healthy financial position we can look at if they save on a regular basis, are able to follow a budget and control their spending habits. The results from the surveyed apprentices indicates that for the variable SAVEREG, the proportion of apprentices who save on a regular basis is equal to the proportions that don't save regularly (at a 99% significance level). This indicates that around half of the apprentices surveyed save on a regular basis. While using crosstabulation on INVESTMENT and SAVEREG to further analyse the data and the inherent relationship it became apparent that there is no significant relationship between the two variables.

Table 5 Crosstabulation Results on INVEST and SAVEREG

| Count | | SAVEREG | | |
|--------|---|---------|-------|-------|
| | | 0 | 1 | Total |
| INVEST | 0 | 0.179 | 0.250 | 0.429 |
| | 1 | 0.202 | 0.369 | 0.571 |
| Total | | 0.381 | 0.619 | 1.000 |

While analysing apprentices' budgeting habits (BUDGET) it became evident that the proportion of apprentices who try to follow a budget is equal to those who don't

budget at all or infrequently try to follow a budget (at a significance level of 99%). This result is similar to those who save on a regular basis and indicates that there is not a significant proportion of apprentices who have control over their financial cash flow which is a major part of being financially competent. This is an area of concern because if apprentices have a problem in this area it can lead them to financial difficulties. Although a significant proportion of apprentices do not actively manage their finances through saving regularly or budgeting, a significant proportion of apprentices have control over their spending and do not make impulse buying decisions as illustrated by the variable BUYIMPULSE.

As stated earlier, although a significant proportion of apprentices do not buy on impulse, variable SHOPAROUND shows a significant proportion of apprentices do not shop around when making major purchases in an effort to save money. This suggests that while some apprentices take time and put thought in making purchasing decisions almost half of apprentices are unwilling to shop around to find the best deal.

The analysis of sampled data on variables RELATIVES and ASKQUESTIONS shows that apprentices feel more comfortable in going to relatives for financial advice than seeking financial advice from financial institutions. A significant proportion of apprentices feel they can/do obtain financial advice from relatives, whereas the proportion of apprentices who seek financial advice from financial institutions is equal to those who don't seek their advice (both at a 97.5% significance level). It is understandable that they are able to seek out advice from relatives giving them confidence in dealing with their financial affairs.

4.2.2 Attitudes

The results on variables associated with attitudes of the surveyed apprentices are presented in Table 6 to determine apprentice's attitudes towards basic personal financial management.

Table 6 Apprentices Attitudes to Financial Literacy Results

| Variable | P ₁ | Z | Decision | Level of Sig |
|----------------|----------------|----------|---------------|--------------|
| IMPBUDGET | 0.679 | 3.082574 | Reject | 97.5% |
| INVESTINWEALTH | 0.595 | 1.714911 | Do not reject | 97.5% |
| IMPSHOP | 0.726 | 3.777581 | Reject | 97.5% |
| IMPFINPOS | 0.750 | 4.098780 | Reject | 97.5% |
| LEARN | 0.655 | 2.763070 | Reject | 97.5% |

The results on the variables IMPBUDGET, IMPSHOP, IMPFINPOS indicate that at a significance level of 97.5% a significant proportion of apprentices acknowledge the importance and the benefits of budgeting, shopping around and knowing ones current financial position. With the analysis indicating a significant proportion of apprentices have a positive attitude towards budgeting, we can compare this to the proportion of apprentices who actually do try to follow a budget. Table 7 shows the crosstabulation results between the variables IMPBUDGET and BUDGET.

Table 7 Crosstabulation Results on IMPBUDGET and BUDGET

Count

| | | BUDGET | | Total |
|-----------|---|--------|-------|-------|
| | | 0 | 1 | |
| IMPBUDGET | 0 | 0.214 | 0.107 | 0.321 |
| | 1 | 0.333 | 0.345 | 0.679 |
| Total | | 0.548 | 0.452 | 1.000 |

Using the data presented in Table 7, the proportion of apprentices who understand the significance of budgeting was tested against those who try to follow a budget. On the basis of the calculated test statistics (0.1084577), at a 99% significance level, the null hypothesis that the proportions are equal was not rejected. Thus indicating that of those surveyed with an understanding of the importance of budgeting a significant proportion of apprentices do not try to follow a budget.

The results reflect a poor attitude by the majority of those apprentices surveyed towards cash flow management, in that they understand the importance of budgeting but don't budget. It shows an attitude that they feel they don't need to budget and their finances will just work themselves out. This modest view about their personal finances is carried on when those surveyed were asked if they would like to learn about their personal finances as part of their apprenticeship. The data collected and

analysed indicated that a significant proportion of apprentices (at a 97.5% significance level) do not wish to learn about personal financial management.

4.2.3 Overall Financial Situation

Hypotheses were tested in the form:

H_0 : The proportion of apprentices who are competent in financial mathematics (P_1) is equal to the proportion of apprentices who are not competent (P_2). $P_1 = P_2$

H_A : The proportion of apprentices who are competent in financial mathematics (P_1) is greater than the proportion of apprentices who are not competent (P_2). $P_1 > P_2$

With P_1 equal to apprentices who are confident and P_2 equal to those apprentices who are not comfortable with the variables in this study.

Table 8 Assessment on Overall Financial Situation Results

| Variable | P_1 | Z | Decision | Level of sig |
|------------|-------|----------|---------------|--------------|
| KNOWFINSIT | 0.750 | 4.098780 | Reject | 97.5% |
| LEVELDEBT | 0.571 | 1.296148 | Do not reject | 97.5% |
| FINSIT | 0.357 | 2.517861 | Do not reject | 99% |

Upon testing hypotheses, it became apparent that the proportion of apprentices who keep an eye on their current financial situation is significantly greater than those who do not at a 97.5% significant level. This suggests that apprentices realise the importance of knowing one's current financial position and it is necessary to make good financial decisions. It was discussed earlier, a significant proportion of apprentices do acknowledge the importance of budgeting however, a significant proportion of these don't try to follow a budget. By combining these two findings it can be concluded that the majority of apprentices surveyed keep an eye on their overall financial position but don't actively manage their finances through budgeting.

The above analysis and discussion suggests that a significant proportion of apprentices are happy with their current financial position but does this also imply that they carry it across to their debt position? The results presented on LEVELDEBT indicate that the proportion of those who are happy with their current level of debt is not significantly different from those who show concern at a significance level of 97.5%. This finding is mirrored for FINSIT variable where the proportion of those

concerned with their current financial position happens to be equal to the proportion who are not concerned at a 99% significance level. The relationship between their feelings towards their debt levels and overall financial position was further explored using crosstabulation and presented in Table 9.

Results show that out of those who feel comfortable with their level of debt, close to half are also comfortable with their current financial position. This indicates that about half of the apprentices surveyed do not judge their financial position on whether they are comfortable with their level of debt. An alternative of those surveyed apprentices judging their financial position on their current level of debt is judging it on their asset position.

Table 9 Crosstabulation Results on FINSIT and LEVELDEBT

Count

| | | LEVELDEBT | | Total |
|--------|---|-----------|-------|-------|
| | | 0 | 1 | |
| FINSIT | 0 | 0.345 | 0.298 | 0.643 |
| | 1 | 0.083 | 0.393 | 0.357 |
| Total | | 0.429 | 0.571 | 1.000 |

Using the assumption that regular savers are happy with their current amount of cash and investment assets, the crosstabulation results in Table 10 indicate that around half are unhappy with their current financial position. This suggests that the majority of apprentices do not judge their current financial position on the amount of savings they have accumulated and their current asset position.

Table 10 Crosstabulation Results on FINSIT and SAVEREG

Count

| | | SAVEREG | | Total |
|--------|---|---------|-------|-------|
| | | 0 | 1 | |
| FINSIT | 0 | 0.310 | 0.333 | 0.643 |
| | 1 | 0.071 | 0.286 | 0.357 |
| Total | | 0.381 | 0.619 | 1.000 |

This poses the question of why apprentices feel they are in an unsatisfactory financial position. A crosstabulation analysis on LEVELDEBT and SAVEREG was carried out. The results presented in table 11 shows that of those who save regularly around half are uncomfortable with their current level of debt. This could suggest that apprentices are saving to meet their debt obligations and as a result they feel they are not in a good overall financial position. Another reason could be that they are not happy with their financial position due to a lack of income which has not been tested in this survey.

Table 11 Crosstabulation Results on LEVELDEBT and SAVEREG

| Count | | SAVEREG | | Total |
|-----------|---|---------|-------|-------|
| | | 0 | 1 | |
| LEVELDEBT | 0 | 0.167 | 0.262 | 0.429 |
| | 1 | 0.214 | 0.357 | 0.571 |
| Total | | 0.381 | 0.619 | 1.000 |

The results identified current state of affairs for apprentice's financial literacy levels. On the basis of our results, it appears that they have a general lack of knowledge and require improvements to make informed financial decisions. Complex payment methods such as use of Credit Cards and EFTPOS and financial products such as Superannuation, personal loans and interest rates are identified as areas where apprentices lack required knowledge skills. It was interesting to find that apprentices do understand the importance of financial issues of budgeting and knowledge of one's financial circumstances but choose not to actively participate in managing their own finances. Chapter 5 draws conclusions from these results and offers recommendations to developers of financial literacy programs to enhance their effectiveness

CHAPTER 5. CONCLUDING REMARKS

This study has surveyed a cross-section of apprentices in the western suburbs of Melbourne. The students surveyed ranged from 2nd year apprentices to 4th year apprentices from a variety of backgrounds. The study found that the financial literacy levels amongst apprentices were relatively low, showing a general lack of financial knowledge in areas applicable to people of their demographic. The survey of relevant literature identified two categories, basic financial understanding and basic financial competency applicable to apprentices to measure an acceptable level of financial literacy. The results show that the majority of apprentices could be considered not to have an acceptable level of financial literacy.

It was found that the proportions of apprentices were considered to have a basic financial understanding were equal to those considered with below par understanding. A significant proportion of apprentices use cash on a regular basis but are much less likely to use other more complex forms of payments such as credit cards and EFTPOS. This demonstrates a lack of understanding of the more complex forms of payments and as a result they persist to primarily using cash to make purchases. At the time the respondents went through school there was no financial education program in place. Mathematics is compulsory in schools and can be considered a reason that the apprentices surveyed were found to have an excellent knowledge in financial mathematics. Comparing this to other areas within financial understanding where they performed very poorly in financial payment methods. This suggests that students could benefit from a program designed to teach them about basic financial products and services as part of their schooling.

In determining the overall basic financial understanding of apprentices it became apparent that they require further learning in the more complex forms of payment methods such as credit cards and EFTPOS. Both of these products were not used regularly by the apprentices surveyed and could indicate that they are not comfortable in using them. This is backed-up by the results indicating apprentices realise they require further knowledge of EFTPOS and credit cards. This is further supported by the high use of cash by apprentices in making purchases, since cash is the simplest

from of payment and they all have grown up using it. Another possible reason for their preference in cash over EFTPOS and credit cards is that it gives them greater control over their spending. The results show around half of apprentices try to stick to a budget and could make cash payments as a way to control their spending. Apprentices' limited use of the more complex forms of payment could demonstrate a habit of using cash. They were brought up using cash and have not been shown how to use the other forms of payment methods to break this habit. An education program could introduce them to other payment methods so they become comfortable enough to use them on a more regular basis.

Apprentices exhibited mixed results when determining their basic financial competency. A significant proportion of apprentices don't have a good understanding of personal loans but when comparing this to those apprentices who have a personal loan we can see that those who do not have a personal loan have no knowledge of how to do so. This could indicate a general lack of interest in learning about areas of their personal finances that, at this point in time, do not currently need. Apprentices tend to show more interest in those areas of their personal finances where they are actively involved as highlighted by a significant proportion who seek out financial help from both relatives and so called experts working in the financial industry.

The report also found that a significant proportion of apprentices tend to save on a regular basis and resist the temptation to make impulse purchases. The fact that they save on a regular basis shows they do have the finances available to make impulse purchases but abstain from doing so.

The data collected also showed equality among apprentices in positive and negative attitudes towards the knowledge of superannuation, ability to use the internet shopping around for goods and also budgeting. From these findings that, it would be fair to assume that these apprentices show a tendency to stand clear off these complicated issues due to the fact of their limited education and experience. These are areas where apprentices could benefit from education programs aimed at these areas. A greater familiarity and knowledge in these areas can result in apprentices using Internet banking and being able to effectively budget. It will also provide them with a greater understanding of superannuation, its purpose and importance.

The survey responses found that apprentices' did not fully comprehend superannuation, its purpose and how it applies to them. Although a general knowledge of the issues discussed above are not required in day to day management of one's personal finances, apprentices still should know the reason why we have superannuation. The majority did not know that it is compulsory for their employers to contribute to their superannuation on their behalf and that they can make additional contributions.

It is evident from the results that a significant proportion of apprentices' realise the importance of being financially literate. However, the attitudes section shows that a significant proportion of apprentices do not wish to study personal finance as part of their apprenticeship. This indicates that although they realise the importance of being financially literate they do not wish to further educate themselves in this area. This in itself poses a problem for developers of appropriate educational programs.

In terms of apprentices' attitudes towards their overall financial position the majority of them seem happy and appropriately concerned with their current level of debt and financial situation. A similar result was also obtained for those who saved regularly and were happy with their financial situation. Therefore, it can be concluded with confidence that for an apprentice to feel comfortable with their current financial position they need to save regularly and be comfortable with their current debt level. As a result, a financial education program aimed at this demographic would be well advised to first target these areas in order to give them confidence in their financial position. Once this has been achieved they can then move on to improving their knowledge of payment methods and other more complex financial products.

The results further showed that approximately half of the apprentices understand that investing one's money can greatly increase one's wealth leaving the other half with a belief that this is not the case. This provides a very strong reason for developing and delivering an appropriate investment educational program to apprentices.

To sum up, it appears the apprentices overall financial literacy levels are quite low and there is a need for improvement in all areas of understanding their personal

finances. This is more important for the youth of today since they have greater choices for recreation and lifestyle and this has caused greater spending within this generation than previous generations. Their debt management skills are generally poor as they continue to spend in a greater number of ways including, in particular mobile phones and credit cards. Individual characteristics, including intuition, attitudes, motivations and our limited problem-solving capabilities shape the choices that we make. Attempts to improve financial literacy are more likely to succeed if we design tailored programs that acknowledge individuals as a diverse group.

This is an exploratory analysis into the financial literacy skills of young adults, focusing on apprentices. Further research with a larger sample size covering various geographical areas to allow for a complete and comprehensive analysis utilising analytical methods such as *factor analysis* and *discriminant analysis* may provide a greater insight into the financial literacy level of young adults. Such an exercise may also provide government and non-governmental developers of educational programs with other areas to target within this age group and effective methods of delivering these programs.

REFERENCES

- ABS (2005)** “8153.0 - Internet Activity, Australia, Mar 2005” Australia Bureau of Statistics. Site accessed 23rd May 2006.
(<http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/8153.0Main+Features+Mar%202005?OpenDocument>)
- AC Nielsen (Nov 2005)** “ANZ survey of Adult Financial Literacy in Australia” ANZ Bank
- Adult Financial Literacy Advisory Group (2000)** “Report to the Secretary of State for Education and Employment December 2000
- Atkinson, A. Kempson, E. (2004)** “Young people, money management, borrowing and saving: A report to the Banking Code Standards Board”, Personal Finance Research Centre.
- Australian Securities and Investment Commission (ASIC), (2004)** “Financial Literacy in schools”, ASIC Discussion Paper
- Australian Government Treasury (2005)** “Possible links between household debt, demand for imported goods and Australia’s current account deficit” Treasury submission to Senate Economics References Committee public inquiry
- Australian Securities and Investment Commission (ASIC) (Feb 2004)** “Summary of stakeholder responses to Financial literacy in schools” ASIC discussion paper, June 2003
- Basic Skills Agency (2004)** “Adult financial capability framework”, Basic Skills Agency, London.
- Beal, D.J. Delpachitra, S. B. (2003)** “Financial Literacy among Australian University Students”, Economic Papers (Economic Society of Australia).
- Braunstein, S. and Welch, C. 2002,** “Financial Literacy: an overview of practice, research and policy”, Federal Reserve Bulletin
- Breitbard, S. (2003),** “Jump-starting financial literacy”, Journal of Accountancy, volume 196, issue 6
- Bristol, K. Fehr, D. Johnson, L.R. (2003)** “Financial Literacy Training in an Academic Trading Room: Expanding Practical Education in Finance”, Working Paper No. 2003-02.

- Bundy, A. (2004)** *“Australian and New Zealand Information Literacy Framework principles, standards and practice” Second edition*, Adelaide: Australian and New Zealand Institute for Information Literacy.
- Chant Link & Associates (Nov 2004)** *“Volume 2: A Quantitative Report on Financial Exclusion”* ANZ Bank
- Chen, H. and Volpe, R. (1998)** *“An analysis of personal financial literacy among college students”*, Financial Services Review, volume 7, issue 2
- Commonwealth Bank Foundation (2006)** *“Australian Financial Literacy Assessment Report”*, CommFoundation Pty Ltd
- Conover, W.J. (1980)** *“Practical Nonparametric Statistics, 2nd Edition”*, John Wiley & Sons
- Consumer and Financial Literacy Taskforce, (2004)** *“Australian Consumers and Money: a discussion paper*, The Treasury Department.
- Correia, A (July 2002)** *“Information literacy for an active and effective citizenship”*, Paper prepared for Unesco, the US National Commission on Libraries and Information Science.
- Dean, K. (2005b)** *“Economic update, The State of Household Debt”*, ANZ Bank
- Financial Planners Association (2003)** *“Dollarsmart, A Financial Tool Kit for Teenagers”* FPA
- Financial Services Authority, (2005)** *“Measuring financial capability: an exploratory study”*, Research Report 37.
- Frederichs, M. Rohrke, A (2002)** *“Guide to Financial Literacy Resources”*, Reserve Bank of San Francisco.
- Friedman, P. (2005)** *“Banking the Unbanked, Helping Low-Income Families Build Financial Assets”*, The Finance Project
- Greenspan, A.** *“The importance of financial education and literacy”* Remarks (via videoconference) by Mr Alan Greenspan, Chairman of the Board of Governors of the US Federal Reserve System, before the National Council on Economic Education, Chicago, 26 October 2001.
- Härdle, W. (2004)** *“Nonparametric and semiparametric models”* Berlin, London, Springer
- Hilgert, M.A. Hogarth, J.M. Beverly, S.G. (2003)** *“Household Financial Management: The Connection between Knowledge and Behavior”* Reserve Bank Bulletin, volume 89, issue 7, July pp 309-322

- Hutton, S. and Seacers, J.** *“Young people, money and risk in early adult life”*
ESRC
- Lau, A. Chung, E. Hui, Y. (July 2005)** *“Quantitative research on financial literacy levels in Singapore”*, Media Research Consultants Pte Ltd Prepared for The MoneySENSE Financial Education Steering Committee
- Mandell, L. (2001)** *“Improving financial literacy: what schools and parents can and cannot do”*, The Jumpstart Coalition for Personal Financial Literacy.
- Mandell, L. (2004)** *“The State of Financial Literacy of Young African-American Adults in America”* State University of Buffalo and JumpStart Coalition
- Mason, C. Wilson, R. (2000)** *“Conceptualising financial literacy”*,
Loughborough University, Business School Research Paper 2000:7.
- Moore, D. (2003)** *“Survey of Financial Literacy in Washington State: Knowledge, Behavior, Attitudes, and Experiences”*, Washington State Department of Financial Institutions, Washington State University Social and Economic Sciences Research Center, Technical Report 03-39.
- Narin, R. Tippet, J. Kluvers, R. (July 2006)** *“Report on Stage 1 of the Partnership: The Presentation of “MoneyMinded” to Staff of five Not-for-Profit Organisations in the West of Melbourne”* ANZ Bank/Victoria University Financial Literacy Partnership.
- Peck, M. (2004)** *“Teach your children.....well”*, Journal of Financial Planning volume 17, issue 10
- Personal Finance Education Group** *“Annual Report 2005”*, pfeG
- Reserve Bank of Australia (2003a)** *“The Changing Australian Retail Payments Landscape”*, Reserve Bank of Australia Bulletin, July, pp 1-9.
- Reserve Bank of Australia (2003b)** *“Household Debt – What the data shows”*, Reserve Bank of Australia Bulletin, March 2003
- Roy Morgan Research, (2003a)** *“ANZ survey of Adult Literacy in Australia: final report”*, ANZ Bank
- Roy Morgan Research. (2003b)** *“ANZ Survey of Adult Financial Literacy in Australia: Stage 2: Telephone Survey Report”*, ANZ Bank
- Roy Morgan Research. (2003c)** *“ANZ Survey of Adult Financial Literacy in Australia: Stage 3: In-Depth Interview Survey Report”*, ANZ Bank
- Rickard, D.** *“ASIC submission to Australian Consumer and Money”*, ASIC response to CFL Taskforce paper.

Simone, J. (2004) *“A preliminary study of financial literacy opportunities at three Victorian universities”* Victoria University of Technology

Teitelbaum, H. (2003) *“How to write a Thesis, Fifth Edition”*, Thompson Peterson’s

Vitt, L. A. Anderson, C. Kent, J. Lyter, D. M. Siegenthaler, J. K. Ward, J.
“Personal Finance and the rush to Competence: Financial Literacy Education in the U.S.” Institute for Socio-Financial Studies

Worthington, A. C. (2004) *“The distribution of Financial Literacy in Australia”*
Queensland University of Technology, Discussion paper No 185, Nov 2004

Worthington, A.C. (2006) *“Predicting Financial Literacy in Australia”*,
University of Wollongong

Financial Literacy and Education Websites accessed and used in this report

<http://www.”MoneyMinded”.com.au/> *accessed November 2005*

<http://cfltaskforce.treasury.gov.au/content/home.asp> *accessed November 2005*

<http://www.financialbasics.org.au/> *accessed November 2005*

<http://www.360financialliteracy.org/> *accessed March 2006*

<http://www.understandingmoney.gov.au/> *accessed March 2006*

<http://www.jumpstart.org/> *accessed March 2006*

<http://www.business.vu.edu.au/fli/default.asp> *accessed May 2006*

<http://www.fl2010.org/> *accessed May 2006*

<http://www.financial-education-icfe.org/> *accessed March 2006*

<http://www.nefe.org/> *accessed April 2006*

<http://www.pfeg.org/> *accessed April 2006*

<http://www.mymoney.gov/> *accessed May 2006*

<http://www.basic-skills.co.uk/> *accessed March 2006*

APPENDIX – COPY OF THE SURVEY



**VICTORIA
UNIVERSITY**

**A NEW
SCHOOL OF
THOUGHT**

This survey is conducted by Joel Tworek for the requirements of an honours thesis on “Levels and Proficiency of Consumer Financial Literacy Levels among Apprentices in the Western Suburbs of Melbourne”. It is designed to collect information to determine the attitudes and knowledge of apprentices on the achievement of their financial literacy

A Survey into Financial Literacy of Apprentice at Victoria University

Please circle the most appropriate answer

- | | | | | | | | |
|--|--|----------|----------|----------|----------|----------|-----------------------|
| 1. Your current living situation is: | <i>With parents / shared accom / Renting</i> | | | | | | |
| | <i>Other</i> | | | | | | |
| 2. What is the main language spoken in you home | <i>English / Greek / Italian / Cantonese</i> | | | | | | |
| | <i>Other</i> | | | | | | |
| 3. If you were shopping for a new Ipod and the store had a 20% discount, would you be able to calculate the price correctly? | <i>With difficulty</i> | <i>1</i> | <i>2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>Easily</i> |
| 4. How often do you use cash to make purchases? | <i>Very rarely</i> | <i>1</i> | <i>2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>Frequently</i> |
| 5. How often do you use an ATM to withdraw cash? | <i>Very rarely</i> | <i>1</i> | <i>2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>Frequently</i> |
| 6. I know the fees associated with you savings account | <i>Strongly Disagree</i> | <i>1</i> | <i>2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>Strongly Agree</i> |
| 7. How often do you use EFTPOS to make purchases? | <i>Very rarely</i> | <i>1</i> | <i>2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>Frequently</i> |

| | | | | | | | |
|--|--------------------------|---|---|-----|---|----|-----------------------|
| 8. I know the fees involved in using EFTPOS | <i>Strongly Disagree</i> | 1 | 2 | 3 | 4 | 5 | <i>Strongly Agree</i> |
| 9. How often do you use a credit card to make purchases? | <i>Very rarely</i> | 1 | 2 | 3 | 4 | 5 | <i>Frequently</i> |
| 10. I know how a credit card works in term of interest paid and fees | <i>Strongly Disagree</i> | 1 | 2 | 3 | 4 | 5 | <i>Strongly Agree</i> |
| 11. I know how a credit card works in term of interest paid and fees | <i>Strongly Disagree</i> | 1 | 2 | 3 | 4 | 5 | <i>Strongly Agree</i> |
| 12. I have a good understanding of superannuation and it purpose | <i>Strongly Disagree</i> | 1 | 2 | 3 | 4 | 5 | <i>Strongly Agree</i> |
| 13. How often do you read and check your bank statements? | <i>Very rarely</i> | 1 | 2 | 3 | 4 | 5 | <i>Frequently</i> |
| 14. How often do you use the internet for banking and to check statements? | <i>Very rarely</i> | 1 | 2 | 3 | 4 | 5 | <i>Frequently</i> |
| 15. Do you have a personal loan? | | | | Yes | | No | |
| 16. I know how to go about taking out a personal loan | <i>Strongly Disagree</i> | 1 | 2 | 3 | 4 | 5 | <i>Strongly Agree</i> |
| 17. Have you undertaken investment in either high interest savings accounts, shares or managed funds? | | | | Yes | | No | |
| 18. I know the difference between compound interest and simple interest | <i>Strongly Disagree</i> | 1 | 2 | 3 | 4 | 5 | <i>Strongly Agree</i> |
| 19. When investing money, the higher the risk associated to that investment the higher the expected return | <i>Strongly Disagree</i> | 1 | 2 | 3 | 4 | 5 | <i>Strongly Agree</i> |

| | | | | | | | |
|--|--------------------------|---|---|---|---|---|-----------------------|
| 20. I try to follow a budget | <i>Very rarely</i> | 1 | 2 | 3 | 4 | 5 | <i>Frequently</i> |
| 21. I save money on a regular basis | <i>Strongly Disagree</i> | 1 | 2 | 3 | 4 | 5 | <i>Strongly Agree</i> |
| 22. I buy things impulsively | <i>Very rarely</i> | 1 | 2 | 3 | 4 | 5 | <i>Frequently</i> |
| 23. I am able to get good financial advise from my relatives | <i>Strongly Disagree</i> | 1 | 2 | 3 | 4 | 5 | <i>Strongly Agree</i> |
| 24. I ask questions about financial products when I sign up to them | <i>Strongly Disagree</i> | 1 | 2 | 3 | 4 | 5 | <i>Strongly Agree</i> |
| 25. Do you shop around to find the best financial product for me | <i>Very rarely</i> | 1 | 2 | 3 | 4 | 5 | <i>Frequently</i> |
| 26. Do you believe that it is important to have a financial plan? | <i>Strongly Disagree</i> | 1 | 2 | 3 | 4 | 5 | <i>Strongly Agree</i> |
| 27. I believe that in managing my finances it is important to prepare a budget | <i>Strongly Disagree</i> | 1 | 2 | 3 | 4 | 5 | <i>Strongly Agree</i> |
| 28. I believe that by undertaking investments you can greatly increase my financial position | <i>Strongly Disagree</i> | 1 | 2 | 3 | 4 | 5 | <i>Strongly Agree</i> |
| 29. Shopping around for the best financial products can save me a lot of money | <i>Strongly Disagree</i> | 1 | 2 | 3 | 4 | 5 | <i>Strongly Agree</i> |
| 30. I believe that it is important to know one's financial position | <i>Strongly Disagree</i> | 1 | 2 | 3 | 4 | 5 | <i>Strongly Agree</i> |
| 31. I would you like to learn how to manage my finances as part of this course | <i>Strongly Disagree</i> | 1 | 2 | 3 | 4 | 5 | <i>Strongly Agree</i> |

| | | | | | | | |
|---|--------------------------|----------|----------|----------|----------|----------|-----------------------|
| 32. I keep an eye on my current financial position | <i>Very rarely</i> | <i>1</i> | <i>2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>Frequently</i> |
| 33. I am comfortable with my current level of debt | <i>Strongly Disagree</i> | <i>1</i> | <i>2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>Strongly Agree</i> |
| 34. How do you feel about your current financial situation? | <i>Concerned</i> | <i>1</i> | <i>2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>Confident</i> |

Thank you for your time

Kind Regards,

Joel Tworek