VOLUME 1. ISSUE 1 – 2015

ISSN: 2206-1355

FINANCIAL PLANNING RESEARCH JOURNAL

Journal of the Financial Planning Association of Australia

Challenges facing financial planners advising ageing clients with diminished financial capacity
John Teale

Just how safe are 'safe withdrawal rates' in retirement?
Michael E. Drew & Adam N. Walk

The conflict between financial decision making and Indigenous Australian culture
Suzanne Wagland & Sharon Taylor

A (W)hole in financial budget: Budgeting's influence on the effective use of credit card debt in Australia
Sanja Ajzerle, Mark Brimble & Brett Freudenberg

Understanding the relationship between fund flows and past performance in Australian managed funds
Sudharshan Reddy Paramati, Di Mo & Rakesh Gupta

Griffith UNIVERSITY

FINANCIAL PLANNING ASSOCIATION *of* AUSTRALIA

Aims and objectives

With an ever more complex financial system, an increasing emphasis on self-funded retirement for Australians, the increasing size of Australia's managed funds pool, and persistent evidence of financial illiteracy, the importance of financial planning is clear. The financial planning profession however, lacks an academic platform for discourse on the issues of individual personal financial planning and wealth management that can debate issues of practice and policy, and bring rigor, independence and evidence to the discussion. Currently there are no journals that fit into this niche providing a forum for dissemination of research in the specific area of personal finance and investments in the Australian context.

The context of personal finance and investments for Australia is different from the rest of the developed economies because of the presence of mandatory superannuation, a large managed funds pool and a strong social security system. Because of these factors international journals in the area of personal finance and/or investments may not suit an Australian audience. In addition, the rapid developments in regulatory and professional standards within the context of personal finance suggests there should be some interest in, and need for, independent, peer reviewed research in this area.

The Financial Planning Research Journal (FPRJ) aims to publish high-quality, original, scholarly peer reviewed articles from a wide variety of personal finance, investment and taxation disciplines. These include, but are not restricted to, economics, finance, management, accounting, marketing, taxation, behavioural finance, financial literacy, financial education and law. The issue is that they are of interest to the practice and policy of financial planning in Australia.

FPRJ is the research journal of the Financial Planning Association of Australia and is published by the Department of Accounting Finance and Economics, Griffith Business School, Griffith University, Australia. JPFI publishes two issues a year – in March and in September with approximately six papers in each issue.

Visit our website at **griffith.edu.au/financial-planning-research-journal** for further information.

Editorial board

Publisher details

FPRJ is published by Griffith University (Brisbane, Queensland, Australia) on behalf of the Financial Planning Association of Australia.

Other journal information

Opinions and comment on papers published in FPRJ presented as Letters to the Editor are welcome. Correspondence in connection with the FPRJ should be addressed to The Editor via email (editor.fprj@griffith.edu.au).

FPRJ is the journal of the Financial Planning Association of Australia, Sydney NSW 2000. FPRJ is published two times each year providing an outlet for research into financial planning and its related areas. No part of the material published in the FPRJ may be reproduced without the permission of the author and FPA Australia.

This publication is issued on the understanding that: (1) FPA Australia, the editors and Griffith University are not responsible for the results of any action taken on the basis of information in this publication, nor for any errors or omissions; (2) FPA Australia, the editors and Griffith University expressly disclaim all and any liability to any person in respect of anything and of the consequences of anything done or omitted to be done by any such person in reliance, whether whole or partial, upon the whole or any part of the contents of this publication; (3) If legal advice or other expert assistance is required, the services of a competent professional person should be sought; and (4) the views expressed in this publication are those of the contributors and not necessarily those of FPA Australia, the editors or Griffith University. Acknowledgement of the author or authors, FPA Australia and FPRJ is required.

If you wish to advertise an upcoming research event (forum, symposium, conference) of relevance to the aims of FPRJ please email the editors with the details for our consideration (editor.fprj@griffith.edu.au).

Guidelines for contributors to the FPRJ

The FPRJ Editorial Board welcomes original, applied and topical articles on matters of interest to the financial advice community across Australia, New Zealand and Asia that will inform the practice and/or policy of the profession. Articles will be submitted to a double-blind review process and may be returned to authors with suggestions/comments for consideration and revision. The Editors will consult with authors as closely as possible about changes.

Authors should submit complete papers that do not exceed 5,000 words not including the title page, abstract, tables, figures, charts, footnotes and reference list. The word count must be stated on the title page. Papers should be original works that are not under review at another journal. Submit your manuscript to fprj.editor@griffith.edu.au.

Other submission requirements include:

- The title page should include a concise and informative title; the names and affiliations of all authors; the name, mailing address, telephone number, fax number, and email address of the author (or corresponding author, if more than one author); word count; and any acknowledgments to those who assisted the authors, in a footnote asterisked to the title.
- The second page should repeat the title so that papers may be refereed anonymously. This page should also include an abstract and up to five keywords. The text of the article should begin on the third page.
- The abstract (not more than 100 words) should highlight the paper's relevance to the area of financial planning.
- Manuscripts should be submitted in Microsoft Word format, use 1.5 spacing, A4 paper size, 12 point Times New Roman font, 2.5 cm margins on all sides, and do not justify the right margin. Number all pages consecutively beginning with the title page and add line numbers to every page.
- Non-English words, such as *et al.*, *ex-post*, *ad hoc*, *per capita*, *Zeitgeist*, or *au fait*, should be italicised.
- Short quotations should be in double inverted commas. Longer quotations should be indented and given without quotation marks.
- Full-stops and question marks should be followed by a single space.
- Charts, figures and text must be in black and white. There must be no use of colour.
- Tables and figures should be located at the end of the article. Make it clear where tables are to be inserted in the text, e.g. (Table 1 here).

- The Harvard system of referencing is to be used. Examples:

  Books: Pyle, David J. (1997) *China's economy – from revolution to reform, Macmillan, Hampshire & London.*

  Book chapters: Basu, P. K. and Basu, S. (2003) 'Income generation program and empowerment of women – a case study in India', in Raghbendra Jha (ed.) *Indian Economic Reform*, Palgrave-Macmillan, NY, 2003.

  Journal articles: Knight, J. and Shi, L. (1996) 'Educational attainment and the rural-urban divide in China', *Oxford Bulletin of Economics and Statistics*, 58:1, pp. 83-118.

  Internet source: Henry, K. (2004) *Australia China Economic Directions – Long Term Trends in the Australian Economy* (unpublished speech at the Australia China Free Trade Agreement Conference, Sydney, 12 August), http://www.treasury.gov.au/documents/875/PDF/Australia_China_FTA.pdf (accessed on 04/01/2005).

Authors are advised that if submitted papers are accepted for publication in FPRJ, then the authors will be required to complete a copyright assignment form and provide a 600-word synopsis of the paper for publication in Financial Planner Magazine.

Visit our website at **griffith.edu.au/financial-planning-research-journal** for FPRJ Author Guidelines and copy deadlines.

From the editors

We are delighted to present the first issue of Financial Planning Research Journal. This issue of the journal is a significant step in commencing and furthering academic debate in the area of personal finance and financial advice.

We thank Griffith University and Financial Planning Association for providing a platform for debate in this area. We expect to foster lively debate in the discipline and at times expect this debate to be controversial.

The first issue contains five articles on a wide range of topics. The first article in this issue is by Professor Teale which deals with the issue of challenges faced by financial planners while advising ageing clients with diminishing financial capacity. The article deals with the complex issue financial planners face and provides guidance to detect the conditions and issues and how to deal with this.

The second article in this issue is by Professor Drew and Dr Walk who deal with the issue of safe withdrawal levels for retirees and provides international perspective of the withdrawal rates and the rates of return thus challenging widely accepted 4% rule for retirees.

The next article is by Wagland and Taylor – these authors look at the conflict between financial decision making and indigenous culture within the Australian context. The article looks at the financial education programs that are targeted towards indigenous Australians and their efficacy.

The article by Ajzerle *et al*. looks at the effective use of credit card on house hold budget for different groups of individuals in Australia. Findings suggest individuals who have a budget but do not follow their budgets have least effective use of credit card debt.

The final paper in this issue is by Paramati *et al.* and they look at the eividence on reallocation of assets among superannuation fund investors. Study finds that investors may not be seeking proper financial advice and reallocating assets based on purely past returns.

We hope you enjoy the inaugural issue of the Financial Planning Research Journal.

Dr Rakesh Gupta and Professor Mark Brimble

Contributors to this edition

Adam Walk	Griffith University
Di Mo	Griffith University
John Teale	University of New England
Mark Brimble	Griffith University
Michael Drew	Griffith University
Rakesh Gupta	Griffith University
Sanja Ajzerle	Astro Financial Planning
Sharon Taylor	Western Sydney University
Sudharshan Reddy Paramati	Griffith University
Suzanne Wagland	Western Sydney University

FPRJ Partners

Griffith UNIVERSITY

FINANCIAL PLANNING ASSOCIATION of AUSTRALIA

FINANCIAL PLANNING EDUCATION COUNCIL
FINANCIAL PLANNING ASSOCIATION of AUSTRALIA

CHALLENGES FACING FINANCIAL PLANNERS ADVISING AGEING CLIENTS WITH DIMINISHED FINANCIAL CAPACITY

John Teale

University of New England, P.O. Box 375, Bli Bli, Qld 4560

Tel: 0419 308 488, Email: jte16096@bigpond.net.au

ARTICLE INFORMATION

Article History:
Submitted 28 July 2015,
Revision: 14 October 2015
Acceptance: 28 October 2015

Key words:
Financial planners, Financial advice, Alzheimer's disease, Dementia, Best interest.

ABSTRACT

Old age can be associated with declining cognitive abilities and the development of Alzheimer's disease and dementia. These conditions generally result in a reduced ability to make sound financial decisions, that is, a reduced financial capacity. This reduction is an important issue for financial planners, but reduced financial capacity is often difficult to detect. Moreover, severe legal consequences can result for financial planners who provide what is later deemed to be inappropriate financial advice to clients with these conditions. Consequently, this article aims to help financial planners understand this condition and the actions to take when it is detected.

Acknowledgement: I thank Professor Chad Perry for his guidance and assistance. Errors are my own.

Introduction

The ageing process can be associated with neurological conditions such as stroke, Alzheimer's disease, dementia and other progressive neurological disorders associated with ageing that cause a decline in financial capacity (Marson 2013). These disorders raise particular challenges for financial planners because new skills and processes are needed when dealing with this demographic (Karp & Wilson 2011). Financial planners must recognise clients with this condition before advising on a range of financial matters (Dew, 2015), which include investing to provide adequate retirement income, funding to live in retirement villages, health care and much more.

Research on ageing and associated diminished financial capacity has been published in psychology journals, for example, *American Journal of Geriatric Psychology*, *Neurology* and *Generations*. However, that research focuses on the medical reasons for diminished financial capacity and not on the implications for financial planners providing financial advice to their aged clients.

So this paper seeks to address those implications for financial planners. The implications are discussed in four sections that focus attention on the reduced financial capacity of many in this group. The first section discusses the growth of the ageing population and explains the reasons for an associated decline in the financial capacity of many in this group. The next section provides a definition of this condition, identifies the abilities that signify financial capacity, and identifies a test to avoid confusion with lack of financial literacy. Then the third section highlights the common law courts' ruling on the validity of contracts involving individuals with diminished capacity. This section also identifies the liability issues facing financial planners for failing to detect the presence of diminished financial capacity, the 'red flags' that could indicate its presence, and the guiding principles to be used when diminished financial capacity is detected. Finally, the fourth section discusses important challenges faced by financial professionals.

The ageing population and its implications

The numbers of people aged over 65 years are increasing in many countries and will continue to increase. The US Census Bureau (2015) estimated that the population of those 65 and over in the United States represented 12 percent of total population or approximately 45 million people, but they hold approximately 34 percent of the nation's wealth (Pilon, 2011). By 2050 those 65 and over will represent 21 percent of the US population or 86.7 million people and the wealth held by older households will also rise.

This ageing trend and associated concentration of net wealth is similar in Australia. There are 3.3 million people aged 65 and over representing 14.4 percent of the population, which will increase to 23 percent or approximately 8.3 million people by 2050. The Australian household net worth in 2013 totalled $6.45 trillion and so the net wealth held by older adult households amounts to about $903 billion (ABS, 2013). In Great Britain, those aged 65 and over are estimated to represent 17 percent of the population in mid-2012, with 31 percent living in households with total individual household wealth greater than £500,000 (UK Office of National Statistics, 2011). These increases are largely because of increasing life expectancies in all developed countries with the exception of the former Soviet Union countries (World Health Organization, n.d).

However, this ageing process and longer life expectancies are resulting in an increase in elderly citizens experiencing a decline in cognitive processes, or suffering mild cognitive impairment (Stokowski, 2009). Mild cognitive impairment includes impairment in abilities such as language, memory and reasoning, although those with this condition can still perform most activities of daily living such as balance a check book and drive a car (Alzheimer's Association, n.d.). This ability to perform certain tasks can pose identification problems for financial planners because 22 percent of people aged 71 years or older who have mild cognitive impairment do not suffer from dementia (Plassman *et al.*, 2005). Dementia and Alzheimer's disease are more serious than mild cognitive impairment because they are associated with the decline in a person's cognitive processes. This decline includes difficulties with memory together with at least one other cognitive disturbance, such as difficulty with language or executive functions that include planning and carrying out tasks, abstract thinking, flexibility and decision-making (Stokowski, 2009; American Psychiatric Association, 2000). An effect of a decline in these cognitive processes would reduce a sufferer's ability to make sound financial decisions.

In brief, the 65 year old and over age group represent a significant and growing segment by household wealth of the populations of the United States, Australia and Great Britain. This group having longer life expectancies and declining mental health poses new challenges for financial planners when advising these clients with diminished financial capacity. This paper now turns to examining the meaning of financial capacity.

Diminished financial capacity

A person having the cognitive ability to make appropriate personal financial decisions has *financial capacity*. “Financial capacity [or decision making] refers to the ability to satisfactorily manage one’s financial affairs in a manner consistent with personal self-interest and values” (Gardiner, *et al*. 2015, p.82). This definition will be used throughout this research. Financial capacity involves a broad range of mental abilities, such as conceptual, pragmatic and judgemental abilities that are used across a range of everyday settings and that can vary across individuals based on their background and experience. For example, the financial skills and experience of a retired investment analyst will differ from those of a retired school teacher on a fixed income (ABA/APA Assessment of Capacity in Older Adults Project Working Group, 2005).

A decline in a person’s financial capacity does not mean that *all* aspects of this person’s decision making abilities are affected. Because this capacity has both performance and judgemental aspects (Marson, 2013), a decline in performance ability may not mean that the judgemental ability is affected, and vice versa. For example, an older person may be capable of carrying out financial transactions such as purchasing items, but not have the judgement required to spend within their financial means. Conversely, an older adult might have the judgement to assess the relative merits of competing demands on their financial resources, but lack the technical capacity to carry out financial transactions. However, an aged person may suffer mild cognitive impairment but not suffer a total loss of these abilities. This impairment could make it difficult for financial planners to recognise those with impaired decision making abilities so they need guidance on how to recognise financial capacity.

For a person to demonstrate financial capacity, he or she must be able to employ a number of cognitive abilities. There are at least nine domains of financial capacity that demonstrate financial capacity (Griffith, *et al.*, 2003, p. 454). These range from relatively simple tasks, such as being able to name coins and notes, carrying out cash transactions, to more complex tasks, such as making and explaining investment decisions. The nine investment decisions include: basic monetary skills, financial conceptual knowledge, cash transactions, checkbook management, bank statement management, financial judgment, bill payment, estate planning/wills and investment decision making.

This lack of financial capacity is usually associated with old age, Alzheimer’s disease, dementia and other diseases associated with normal ageing. So these diseases do lead to diminished ability and open ageing people to problems with financial management. For example, inability to manage their affairs or make appropriate investment decisions, inability for independent living, financial exploitation (fraud) most notably by friends and family, and the inability to make estate planning decisions. Advising on investment strategies and estate planning are important functions of financial planners. Therefore, the loss of financial capacity can pose difficulties for financial planners when advising these clients, but does a client’s confusion about their finances signal diminished financial capacity?

Once a person has Alzheimer's disease or mild dementia, skills such as understanding investment options and determining returns rapidly decline. However, financial capacity is not an all-or-nothing concept because it is task specific and mental abilities can fluctuate over time and can vary in the course of a day depending on a person's stresses and energy level (Marson, 2013). Furthermore, incapacity in one performance area does not automatically mean that capacity is lacking in another area as noted above and this is being recognised in the courts.

Courts in Australia have also recognised that financial capacity is not an all-or-nothing concept. For example, the Supreme Court of New South Wales ruled that a person who has been found incapable of managing their financial affairs may still be capable of making a will (McLelland, 1992). So a lack of understanding of financial concepts does not necessarily indicate diminished financial capacity because it may only signal a lack of financial literacy. The challenge for financial planners is in separating the two conditions and not making a misdiagnosis.

Since separating these two conditions can be difficult, a simple non-diagnostic test is needed. To avoid a misdiagnosis, three questions can test financial literacy in the elderly (Lusardi & Mitchell 2011, p. 3):

- Suppose you had $100 in a savings account which paid an interest rate of 2% per year (calculated at the end of the year). After five years, how much do you think you would have in the account if you left the money to grow: More than $102? Exactly $102? Less than $102? Do not know.
- Imagining that the interest rate on your savings account was 1% per year and the inflation rate was 2% per year. After 1 year, would you be able to buy: more than, exactly the same as, or less than to-day with the money in this account? Do not know.
- Buying a single company stock usually provides a safer return than a stock in a mutual fund. Is this statement: True? False? Do not know.

After getting answers to these three questions financial planners may be able to determine whether a client has a low level of financial literacy or a more serious condition.

In brief, financial capacity can vary between individuals depending on their past experience and education. A decline in this capacity does not necessarily mean that all decision making abilities are lost because a person may be able to perform everyday tasks but not be able to make financial decisions. This impaired ability can cause financial planners difficulties when making financial recommendations because confusion over financial matters may not be a sign of diminished financial capacity but a lack of financial literacy. However, asking clients to answer three questions aids financial planners in distinguishing between the two conditions.

Legal standards relating to capacity

But what legal standards are applied by the courts to determine capacity? Courts in common law countries apply different capacity standards to a wide range of such activities. These include entering into a valid contract, making a will, getting married, and responsibility for criminal conduct. For financial planners, the two most important activities are entering into a valid contract, and making a will.

Entering into a valid contract. Common law accepts that people have varying levels of capacity and as such, the courts make rulings taking into account the degree of incapacity experienced by a person in particular circumstances.

The following discussion is based on what applies under common law, which may vary under other legal codes. Common law of contracts recognises that the party's entering into a legal contract must have the capacity to do so. Common law recognises two capacity standards: non est factum, and soundness of mind.

When dealing with written contracts, the common law distinguishes between a person with mental incapacity who is unable to understand the general nature of a document and a person who has no understanding of the document at all (Bant 2009, p. 371). If the degree of incapacity is profound, the contract is void and held to have never existed since a person should not be held to a bargain when he/she has no idea of the document. However, this standard is not applied to all contracts.

When dealing with written contracts where the defence of non est factum is not available or unwritten contracts the soundness of mind standard is used. In this case, the level of incapacity is determined according to the particular transaction. The common law rule is that "each party shall have such soundness of mind to be capable of understanding the general nature of what he is doing by his participation" (Gibbon v Wright, 1954, p. 437). This common law rule means that if the capacity to achieve this standard fails, the contract can be set aside by the one seeking to avoid the contract obligations. These standards are particularly pertinent when making a will, which is an area many financial planners are involved in as part of their estate planning activities.

Making a will. The second important activity for a financial planner is making a will for a valid will must meet certain legal standards. The courts will judge the validity of a will if "at the time of execution the testator [person who made the will] possessed the requisite capacity and intention and if it meets certain formal requirements" (Hardingham, *et al.* 1989, p. 50). One formal requirement is for the testator to have testamentary capacity, because a testator may have a valid intention to prepare or change a will, but be deemed by the courts to not have the required capacity to do so.

A testator who has the required capacity and intention is said to have this testamentary capacity. However, if one of these elements is missing then the will is not upheld in the courts for it will not have been made with "sound mind, memory and understanding" (Banks v Goodfellow 1870, p. 565). The testator must be able to fully understand what he or she is doing in executing the will and realise the extent and character of the property they are dealing with (Hood, 1897). A testator must also be able to recognise the nature of the moral claims on their estate to which they ought to give effect (Banks v Goodfellow, 1870). Whether a person had testamentary capacity is a question of fact: if there is any doubt, the court will rule that the person did not have testamentary capacity when making the will. Therefore, recognising the existence of a client's testamentary capacity is an important issue for financial planners.

A failure by a financial planner to recognise a client's lack of testamentary capacity may also breach legislative provisions and court rulings. These provisions will apply to the making estate planning recommendations because a breach of these provisions may raise the risk of future legal action by the client's spouse, children or his or her heirs.

Liability issues for financial planners. In Australia, regulators have introduced legislation governing the provision of financial advice. This legislation requires financial planners to place the client's best interests at the forefront of their advice. Therefore, in order to ensure that the advice is in the client's best interests, financial planners need to be confident that the client is competent in making financial decisions involving often complex financial products and not being unduly influenced by a third party such as a friend or greedy nephew. (Clemens & Hayes, 1997).

Not recognising a client with diminished financial capacity may lead to severe liability issues for the financial planner. Because a legal determination involving financial services would focus on the person's ability to make certain transactions, such as understanding personal financial needs and goals, understanding investment and product choices, contracting for the purchase of a particular product, or giving a particular professional the discretion to manage an account (ABA, 2013). Therefore, a failure to recognise these diminished cognitive abilities and take appropriate action before providing financial advice may lead to severe legal consequences as the following criminal case illustrates.

In February 2012, Glenn Neasham, an independent insurance agent, was ordered to spend 90 days in jail on a felony-theft conviction for selling a complex annuity to an 83-year-old woman who prosecutors alleged had shown signs of dementia. In an interview, Mr. Neasham said the elderly woman, Fran Schuber, arrived at his office with her longtime octogenarian boyfriend, who had bought an indexed annuity from Mr. Neasham years before. The boyfriend, Louis Jochim, said in an interview that Ms. Schuber knew he was pleased with his annuity and wanted one as an alternative to a bank certificate of deposit. Mr. Jochom claimed that he considered that Ms. Schuber was mentally competent.

The criminal case, under a state law specifically protecting elderly people, is rooted in what happened next: Ms. Schuber and Mr. Jochim went to a local bank to withdraw $175,000 for the purchase. A bank manager then notified California's adult-protection officials, saying the woman seemed confused and influenced by Mr. Jochim, court filings show. Lake County Senior Deputy District Attorney, Rachel Abelson said in a court filing there was "sufficient evidence presented [at trial] to show that Fran Schuber was not capable of consenting to the transaction in question and evidence showed that [Mr. Neasham] knew that at the time." In an interview, Ms. Abelson said a $14,000, or 8%, commission "played into his criminal intent."

According to the insurer, Allianz, had Ms. Schuber pulled her money out within the first year of ownership, she would have had to pay a penalty equal to 12.5% of the principal. Had Mr. Neasham been more alert to Ms. Schuber's reduced financial capacity, he may have avoided this severe penalty. Although this conviction was later reversed on appeal in 2013, the Neasham trial ruling emphasises the possible consequences for financial planners of not determining a client's financial capacity before a sale. This recognition is needed before providing financial advice but there are certain red flags that may be helpful in indicating diminished capacity. These include: memory loss, communication problems, lack of mental flexibility, calculation problems and disorientation (Marson, 2013).

In addition to these red flags, there are certain behavioural triggers that can raise a financial planner's suspicion of memory loss or decline in financial capacity in older clients: missed office appointments, confusion about instructions, frequent calls to the office, repetitive speech and/or questions, missed paying bills, difficulty following directions, trouble with handling paperwork and difficulty recalling past decisions or actions. These triggers are not diagnostic, but should raise suspicions of cognitive problems that will give cause for a discussion of the issue with the client. However, there are practical issues that need to be considered when discussing financial products with aged clients suffering reduced financial capacity.

In brief, the capacity standards applied by common law courts are there to protect parties when entering into contracts and making wills, particularly those with reduced decision making abilities. The courts are beginning to impose severe penalties on financial planners who do not recognise a client's diminished financial capacity when arranging investment contracts. Therefore, financial planners need to be observant of red flags and behavioral triggers of memory loss indicating possible diminished financial capacity.

Practical implications for financial planners

The discussion above has implications for financial planners. Financial products can be difficult to understand by many people let alone by those with diminished financial capacity. This complexity imposes an ethical duty on financial planners to ensure that elderly clients have financial capacity. These ethical duties apply when:

- considering the appropriateness of investment products
- formulating protocols or procedures when advising clients with diminished financial capacity
- advising clients with diminished capacity through appropriate communications
- recognising the potential for fraud and abuse by trusted family members, friends, or strangers

Each of these four issues will be discussed in turn.

The appropriateness of investment products. Firstly, appropriateness of the investment products is a fundamental ethical requirement for financial planners. This requirement is even more critical when advising aged clients with impaired financial capacity, which is evidenced by the legal action brought against Glenn Neasham testifies. The appropriateness of investment advice can be judged against three measures: client's objectives, needs and personal circumstances.

A client's objectives and needs are identified during the discovery phase then incorporated in a written financial plan, which the advice must meet. Personal circumstances involves more than just the availability of financial resources to invest or meet emergencies, such as calls on a negative geared product following asset devaluation because this also includes the ability to make financial decisions. A sound financial decision can only be made if the client fully understands the product.

A client would not be able to fully understand the product if he or she had impaired financial ability. A financial planner is legally bound to protect a client's best interests and to exercise a fiduciary or trust-based duty when providing financial advice. Therefore, if a financial planner detects signs of dementia or other forms of diminished capacity then the client's best interests must be protected by the financial planner putting the client first and suspend the sale. Any further discussions should be conducted by involving their spouse, trusted family member or friend in the proceedings, thereby ensuring complete transparency. The fiduciary role also includes knowing how and when to refer a client to a health professional, social services agency or financial management services company, which will require well developed communication skills. This fiduciary duty is less likely to be overlooked if set procedures are put in place when clients with diminished financial capacity are detected.

Establishing protocols. Establishing protocols is also important for they avoid confusion and inconsistent dealings (Karp & Wilson, 2011), and so minimise the possibility of legal transgressions. There are a number of actions that can be included in a financial planner's protocols. For example, ask clients if they have a power of attorney and if so, include this document in the client's file and discuss the advantages and disadvantages of this document.

And, monitor the activities of an agent under a power of attorney to prevent its misuse and include procedures for having spouse or family members participate in decision making. Finally, document all activities, including a list of emergency contacts and permission to refer client to a health professional if required (Karp & Wilson, 2011).

However, protocols must not violate a person's common law rights to privacy. At common law, a person has a right not to have their personal affairs made public without their express approval. An invasion of privacy is a tort allowing an aggrieved party to bring an action against an individual who unlawfully discloses his or her affairs in such a manner so as to cause outrage or mental suffering, shame or humiliation (Black v Aegis Consumer Funding Group, Inc., 2001). Therefore, the firm's privacy policy must allow the financial adviser to reach out to a family member or to third parties if the firm suspects diminished capacity (Bandera, 2011). Finally, these protocols must ensure the firm's private policy does not violate any legislated privacy laws.

Providing appropriate advice. A third ethical requirement is to develop long-term relationships through a series of service encounters and the communication involved. The development of trust is important because the results of financial products given at point of sale may not become evident until many years into the future. This long-term nature of the relationship means that there will be a high degree of contact between the client and financial adviser therefore well-developed communication skills are needed by the financial adviser to maintain the relationship. These communication skills include several elements for example, empathy and listening skills, accurate explanation of fees and charges, being honest about risks and returns, and educating the client to encourage informed decisions (Sharma & Patterson, 1999).

The ability to communicate effectively and to gain the trust of aged clients gives the financial planner more opportunity to recognise the signs of diminished financial capacity by administering the simple tests described above. Good communication skills will also allow the financial planner to recommend forward planning to implement strategies, such as providing advice on powers of attorney, trusts and health directives. Furthermore, these communication skills will help financial planners awaken clients to the prevalence of mental decline associated with ageing, the associated costs of health care and specialised accommodation.

These costs can have a significant impact on the ability of retirees to fund their retirement over the long term and can have a major influence on the portfolio asset allocation. For example, adopting a dynamic lifestyle approach that advocates increasing the allocation of risky assets, such as stocks when a portfolio is not achieving a defined adequacy target or shifting the allocation to a more defensive allocation if the portfolio wealth is greater than the retirement target is more effective than a static pre-determined allocation strategy when used during the accumulation phase (Basu *et al.*, 2011).

This same approach has been shown to preserve portfolio wealth during the retirement draw down phase and help recover portfolio wealth following a significant health event (Drew, *et al.*, 2014). In addition, having good communication skills may provide opportunities for the financial planner to recognise the signs of undue influence by a trusted family member, carer or friend and whether they are being the victim of fraudulent activities by a third party.

The potential for fraud and abuse. The fourth implication for financial planners arises because fraudulent activities and abuse perpetrated against the elderly have become an everyday occurrence. Perpetrators employ a variety of methods to illegally obtain money and property from the unwary, particularly from the elderly. Fraud or consumer scams have been defined as “a fraudulent invitation, request, notification or offer, designed to obtain someone’s personal information or money or otherwise obtain a financial benefit by deceptive means” (ABS, 2008 p. 5). In general parlance, scams are committed against a particular system, while fraud is committed against an individual (Answers.com, n.d.), however, because they are commonly used to refer to the same activity, they will be used similarly in this research.

Fraud is one of three elements of economic crime that can be committed against older people. This economic crime is a threat to older people’s financial security, health and wellbeing. The other two being financial mismanagement and matters associated with enduring power of attorney and guardianship (Greycar & James, 2001). The most common forms of fraudulent activities committed against the elderly include: financial, housing, property stolen or misappropriated, being forced into surrendering rights or property or signing or changing a legal document, impersonation of the person to obtain property or services, carrying the cost of all domestic expenses without the contributions of other household members and being destitute and not receiving assistance from family and friends (US Department of Justice, 2015). This abuse is often perpetrated by a family member rather than by an outsider (Peterson, 2014).

Old age is often accompanied by declining mental abilities and this is often accompanied by social isolation. Social isolation can lead to loneliness, which makes the elderly more vulnerable to scams because they tend to be too trusting, gullible, live alone and don’t have someone watching over their finances (Sollitto, 2015). Elderly adults who struggle to maintain an independent lifestyle are also often exploited because they require assistance with shopping and meal preparation. This dependency gives potential perpetrators access to their finances, which may come as a shock to the elderly adult’s independent children. Notably, financial planners are not recognised as common culprits for financially abusing the elderly (Dew, 2015).

The children of elderly parents are often unaware their parents or sole parent are suffering from financial abuse because the parents find it difficult to discuss this abuse with their children. Older parents have a number of concerns, which lead to a reluctance to engage in financial conversations with their children. These concerns include a fear of: losing their independence, being placed in a nursing home, having their financial competency questioned, believing children want access to their money or pressuring them for money (US Department of Justice 2015).

Often a change in an aged parent’s behaviour can be a signal that possible financial abuse is occurring. There are several red flags that will give warning signals for possible abuse. These red flags include making: erratic or unusual transactions, frequent or large withdrawals, gifts to a caregiver and closing accounts despite heavy penalties (Dew, 2015). Further red flags indicating possible abuse can be detected by observing the interaction between elderly clients and their carers.

These interactions include carers not allowing the client to speak freely, the client appears to be intimidated by the carer, or indicating reluctance to allow the client to meet privately with you for a one-on-one meeting (Dew, 2015). Finally, a carer who is not responsible for the client's financial affairs shows keen interest in them. Any one of these interactions should signal a warning to the financial adviser.

A trusted financial planner is in a position to not only recognise possible financial abuse, but also to advise children of aged parents of the signs of financial abuse and the actions to take to protect their aged parents. They can also provide children with a range of services, such as advising on appropriate financial strategies and on the construction a financial plan to help children cope with the costs of ongoing care of their aged parents. Furthermore, if a financial planner detects financial exploitation or other abuse he or she must report the abuse to the appropriate authorities as required by their established protocols.

In brief, the complexity and variety of financial products imposes an ethical duty on financial planners to exercise their fiduciary duty and protect an aged client's best interests. This protection can be achieved by involving a family member or trusted third party in the discussions. However, written protocols need to be developed when dealing with clients with diminished financial capacity or when the financial planner suspects the client is being subject to fraudulent abuse. Furthermore, there are a number of red flags that may indicate such abuse and financial planners are able to provide important assistance to family when abuse is suspected. More research needs to be done to determine the levels of skills possessed by financial planners in recognising diminished financial capacity and the strategies they can implement to provide appropriate financial advice to their clients with this condition.

Summary and conclusion

In summary, the decline in the financial capacity of an ageing population caused by cognitive diseases such as Alzheimer's disease and dementia is an emerging problem for financial planners. Identification of reduced financial capacity is of particular importance for financial planners if they are to provide appropriate financial advice to this demographic.

The difficulty for financial planners is threefold. First, they are not trained psychotherapists and can only apply basic non-diagnostic tests to raise red flags to indicate the presence of reduced financial capacity. Second, the need for sound cognitive ability is required for making a variety of legal contracts, which includes making investment and estate planning decisions. Third, financial planners are subject to legislative, legal and ethical requirements to provide financial advice that is in the client's best interests. Therefore, recognition of clients with reduced financial capacity is of paramount importance.

The establishment of protocols will help to provide guidance when clients with reduced financial capacity are identified. Additionally, building trusting relationships with clients will allow financial planners to detect instances of fraud and abuse, and be in a position to alert family or authorities.

In conclusion, this research is important because it throws light on a decisional capacity that is of increasing importance for those affected, their families, and for their financial planners.

References

ABA (2013), *Recognizing and dealing with diminished capacity in older clients*, No. 10, viewed 1 May, 2015, http://www.americanbar.org/news/abanews/aba-news-archives/2013/10/recognizing_and_deal.html.

Alzheimer's Association (n.d.), *Mild Cognitive Impairment*, viewed, 12 May, 2015, http://www.alg.org.

American Bar Association Commission on Law and Ageing and American Psychological Association (ABA/APA) (2005), *Assessment of Older Adults with Diminished Capacity: A Handbook for Lawyers*, viewed 13 May, 2015, http://www.apa.org/pi/ageing/resources/guides/diminished-capacity.pdf.

American Psychiatric Association (2000), *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition. Washington, DC: American Psychiatric Association. Quoted in Stokowski, L.A. (2009), 'Cognitive Health for an aging population', viewed, 30 May, 2015, http://www.medscape.com/viewarticle/712095.

Answers.com (n.d.), *What is the difference between a scam and fraud?* viewed 13 June, 2015. http://www.answers.com/Q/What_is_the_difference_between_a_scam_and_fraud.

Australian Bureau of Statistics (ABS) (2008), *Personal fraud 2007*. cat. no. 4528.0., Canberra, ABS.

Australian Bureau of Statistics (ABS) (2013), *Household Wealth and Wealth Distribution, Australia*, 2011–12. cat. no. 6554.0, Canberra, ABS.

Bandera, J. (2011), 'Ethics in the wealth management practice', National Advisers Trust, viewed 18 May,2015, http://conference.nationaladvisorstrust.com/Portals/3/Ethics%20in%20Your%20Practice%20with%20Janet%20Bandera.pdf.

Banks v Goodfellow (1870) LR 5 QB 549.

Bant, E. (2009), 'Incapacity, Non Est Factum and Unjust Enrichment', *Melbourne University Law Review*, 33, p. 368.

Basu, A., Byrne, A. and Drew, M.E. (2011), "Dynamic lifecycle strategies for target date retirement funds". *Journal of Portfolio Management* 37(2), pp. 83-96.

Black v. Aegis Consumer Funding Group, Inc., (2001), U.S. Dist. LEXIS 2632 (S.D. Ala. Feb. 8, 2001).

Clemens, E., & Hayes, H.E. (1997). 'Assessing and balancing elderly risk, safety and autonomy: decision making practices of elder care workers', *Home Health Care Services Quarterly, 16*, pp. 3-20.

Darzins P., Molloy W. and Strang D. (eds), (2000), *Who Can Decide: The six step capacity assessment process*, Memory Australia Press: Adelaide.

Dew, R. (2015), *Advising and protecting clients with diminished mental capacity*, National Compliance Services, viewed 20 May, 2015, https://www.ncsonline.com/wp/advising-and-protecting-clients-with-diminished-mental-capacity/.

Drew, M.E., Walk, A.N. and West, J.M. (2014), 'Withdrawal capacity in the face of expected and unexpected health and aged-care expenses during retirement', Working paper, CSIRO-Monash: Melbourne.

Gardiner, P.A., Byrne, G.J., Mitchell, L.K. & Pachana, N.A. (2015), 'Financial capacity in older adults: a growing concern for clinicians', *Medical Journal of Australia*: 202(2), pp. 82-85.

Gibbons v Wright (1954), 91 CLR 423.

Greycar, A. & James, M. (2001), 'Older people and consumer fraud', Paper presented at the *4th National Outlook Symposium on Crime in Australia, New Crimes or New Responses convened by the Australian Institute of Criminology*, Canberra, pp. 1-10.

Griffith HR, Belue K, Sicola A, Sicola, Krzywanski, Zamrini, Harrell & Marson (2003), 'Impaired financial abilities in mild cognitive impairment: a direct assessment approach' *Neurology*, Vol. 60, No 3, pp. 449-457.

Hardingham, I.L., Neave, M.A. & Ford, H.A.J. (1989), *Wills and Intestacy in Australia and New Zealand*, 2nd ed. Law Book Company Limited,

Hood J. In *Will of Wilson* (1897) 23 VLR 197.

Karp, N. & Wilson, R. (2011), *Protecting older investors: The challenge of diminished capacity*, prepared for the AARP Public Policy Institute, viewed 4 May, 2015, http://www.aarp.org/content/dam/aarp/research/public_policy_institute/cons_prot/2011/rr2011-04.pdf.

Lusardi, A., and Mitchell, O.S. (2011), 'Financial Literacy and Planning: Implications for Retirement Wellbeing', In *Financial Literacy: Implications for Retirement Security and the Financial Marketplace*. Eds. A Lusardi and O.S. Mitchell, Oxford: Oxford University Press, (pp. 1-20).

Marson, D.C. (2013), 'Clinical and ethical aspects of financial capacity in dementia: A commentary', *The American Journal of Geriatric Psychology*, Volume 21, Issue 4, pp. 382-390.

McLelland J. (1992), *Re Estate of Margaret Bellew*, NSW Supreme Court, Probate Division (Unreported), 13 August.

Peterson, J.C. (2014), 'Financial exploitation of older adults: A population based prevalence study', *Journal of General Internal Medicine*, Volume 29, Issue 12, pp. 1615-1623.

Pilon, M. (2011), ‘Declining cognitive ability presents challenges to boomer finances’, Real Time Economics, editorial, viewed 6 May, 2015, http://blogs.wsj.com/economics/2011/06/10/declining-cognitive-ability-presents-challenges-to-boomer-finances/.

Plassman, B. L., Langa, K.M., Weir, D.R., Wallace, R.B. (2005), ‘The aging, demographics and memory study: study design and methods’, *Neuroepidemiology*, 25(4), pp. 181-191. Sharma, N. & Patterson, P.G. (1999), ‘The impact of communication effectiveness and service quality on relationship commitment in consumer personal professional services’, *Journal of Services Marketing*, Vol. 13 Issue: 8, pp. 151-170.

Sollitto, M. (2015), *Can elderly scams be presented?* AgeingCare.com, viewed 15 May, 2015, http://www.ageingcare.com/Articles/prevent-elderly-becoming-scam-victims-138455.htm.

Stokowski, L.A. (2009), ‘Cognitive health for an aging population’, Medscape Public Health, viewed: 30 May, 2015, http://www.medscape.com/viewarticle/712095. The Unites States Department of Justice (2015), *How can adult children develop a financial management plan with their parents?* viewed 19 May, 2015, http://www.justice.gov/elderjustice/support/warning-signs-of-diminished-financial-capacity.html.

UK Office for National Statistics (2011), *Mid-2010 Population Estimates*, viewed 25 May, 2015, http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Population+Change. US Census Bureau (2015), *People quick facts*, viewed 1 May, 2015, http://quickfacts.census.gov/qfd/states/00000.html.

World Health Organization (n.d.), *World health statics 2014: Large gains in life expectance*, viewed 30 May, 2015, http://www.who.int/mediacentre/news/releases/2014/world-health-statistics-2014/en/.

JUST HOW SAFE ARE 'SAFE WITHDRAWAL RATES' IN RETIREMENT?

Michael E. Drew[1], Adam N. Walk

Department of Accounting, Finance and Economics, Griffith University

Email: Michael.drew@griffith.edu.au and a.walk@griffith.edu.au

ARTICLE INFORMATION

Article History:
Submitted 14 July 2015,
Revision: 2 October 2015
Acceptance: 28 October 2015

Key words:
Account based pensions;
four percent rule; retirement income

JEL: G11, G23

ABSTRACT

This study considers one of the cornerstone questions in the retirement income debate; namely, what's a safe withdrawal rate for retirement? This question is of particular importance to Australia's superannuation system, which is characterised by having compulsory contributions during the retirement saving (or accumulation) phase, but no compulsory requirement to annuitise lump sums at the commencement of the retirement income (or distribution/decumulation) phase. As a result, many retirees face a classic asset–liability mismatch, the need to fund relatively short- and medium-term retirement spending needs with a long-term investment strategy. This study tests one of the most popular heuristics that have arisen from the safe withdrawal debate, specifically the 4% rule. Our findings question the validity of this approach using historical international return data.

[1] We thank Luo Wang for research assistance. We also thank Samuel Bell, Associate Professor Robert Bianchi, Troy Rieck and participants at Finsia's Retirement Adequacy Roundtable (July 2013) for comments. We acknowledge the feedback from the editor, Dr Rakesh Gupta and the two anonymous reviewers that have improved the paper. We thank Finsia for their financial support as part of the 'Retirement Risk Zone' research campaign.

Introduction

This study considers one of the cornerstone questions in the retirement income debate; namely, what's a safe withdrawal rate for retirement? The much celebrated 4% Rule has become a popular heuristic that has provided a quick shortcut to 'solving' this most difficult of retirement planning problems.

The pioneering work in the field was contributed by Bengen (1994).[2] Using historical simulation, the study shows that the retirement portfolios of people who retired during the period 1926 through 1976 and withdraw 4% of the initial balanced portfolio value every year (adjusted for inflation) could be sustained for at least three decades.[3] The second group of studies that provide support to the 4% Rule are known as the Trinity studies.[4] These studies use a simple, but highly informative, approach to investigate withdrawal rates with respect to different asset allocations, and several time horizons. In their most recent paper, Cooley, Hubbard, and Walz (2011) consider an observation period from January 1926 through December 2009. This study suggests that retirees who plan to make annual inflation adjusted withdrawals should stay within the 4% to 5% range.[5]

As we entered the 21st century, the sequence of major events that have occurred in the first decade included: 9/11; the dot.com bubble; the sub-prime crisis and the GFC. This unfortunate succession of events across the early 2000s resulted in a level of wealth compression in investment portfolios not seen for many years. This period of heightened volatility underscored the importance of path dependency to the sustainability of retirement income (Basu and Drew, 2009; Basu, Doran and Drew, 2012). It has given rise to a far more critical assessment of the 4% Rule (and its variants).

The work of Spitzer, Strieter, and Singh (2007) and Spitzer (2008) has been important in developing a line of argument that suggests the 4% Rule may be an oversimplification of a complex process that involves the analysis of risk tolerance, asset allocation, withdrawal size and expected returns. Using a bootstrap approach, these studies examine a myriad of withdrawal rates finding that the fixed 4% rule is not always safe and that dynamic approaches to the withdrawal rate may assist the retiree. Harris (2009) finds that sequencing risk is a key determinant of the sustainability (or otherwise) of safe withdrawal rates, with rates varying in the range of two to four percent.[6]

[2] The seminal study of Bengen (1994) considered safe withdrawal rate for a US investor using year-on-year returns from 1925 for a 50/50 stock/bond portfolio. Bengen (1994) assumed half the portfolio was allocated to the S&P 500 and half in intermediate term government bonds.
[3] The much celebrated 4% Rule has become a popular heuristic that has provided a quick shortcut to 'solving' this most difficult of retirement planning problems.4 Using a 30-year holding period, William Bengen (1994) calculated that a 4.1 percent withdrawal rate would allow the retiree to survive the worst market declines, hence the rise of the 4% Rule.
[4] All three authors are Professors of Finance at Trinity University in San Antonio, Texas.
[5] Cooley, Hubbard, and Walz (2011) note that for retirees who are willing to accept greater risk of portfolio ruin, portfolios with at least 50% allocated to stocks can provide a withdrawals rates upwards of seven percent.
[6] See Drew, Walk and West (2015) for a discussion on the role of unlisted asset classes (property) on sequencing risk.

Pfau (2010) conducted the first major study to examine the issue of safe withdrawal rates from a larger selection of countries. This study replicates the methodology of Bengen (2006) by using the Dimson, Marsh, and Staunton (2012) data from 1900 through 2008 for 17 developed countries. The analysis provides some interesting results finding that the 4% withdrawal rate is not safe when using the original Bengen (2006) maximum safe withdrawal rate criterion. The findings show that, even with the assumption of perfect foresight, the maximum safe withdrawal rate exceeds 4% in only 4 of the 17 countries, range between 4% and 2% in a further eight countries, and are less than 2% in five countries.

Data and method

In order to provide positive insights into what is, at its core, a normative question, our review of the literature suggests that it is prudent for researchers to investigate capital markets that have very, very long historical data series and, if possible, markets with different return distributions. For this reason, we have non-randomly selected five countries to stress test the 4% Rule. We ranked all 19 countries in the Dimson, Marsh and Staunton (2012) database in descending order based on their respective annualised performance (real accumulated returns) of stock returns for the period 1900 through 2011 (a total of 112 years) and those countries representing the key percentile levels (minimum; first quartile; median; third quartile and maximum) are selected to test safe withdrawal rates under different asset allocations and investment horizons (Table 1).[7]

Given the centrality of inflation (and its relationship to stocks, bonds and bills through time), we use real returns throughout the study. Specifically, instead of using nominal rates of return and then adjusting withdrawals each year for inflation, we elect to use real returns thereby avoiding the annual inflation adjustment. Annual withdrawal rates ranging from one percent through 10 percent (in increments of 100 basis points) are considered across investment horizons of 10, 20, 30, and 40 years. Given that Australians are living longer lives (and many Australians retire before 65 years of age), we argue it is important to include the 30 and 40 year horizons to provide positive insights into the robustness of safe withdrawal rates across longer horizons. We consider the Golden or 4% Rule for stock allocations ranging from 0% to 100% (in increments of 25%) for each of our representative countries (rebalanced annually, for brevity, we only report the 50:50 results in this paper) and report maximum safe withdrawal rates (or "SAFEMAX" as in Bengen, 2006).[8] Finally, we assume that retirees make an initial withdrawal at the commencement of each year. That is, the initial withdrawal amount is equal to the specified withdrawal rate times the starting balance of the portfolio (Pfau, 2010).

[7] As noted by Dimson, Marsh and Stauton (2012), The database contains annual returns on stocks, bonds, bills, inflation, and currencies for 19 countries from 1900 to 2011. The countries comprise two North American nations (Canada and the USA), eight euro-currency area states (Belgium, Finland, France, Germany, Ireland, Italy, the Netherlands, and Spain), five European markets that are outside the euro area (Denmark, Norway, Sweden, Switzerland, and the UK), three Asia-Pacific countries (Australia, Japan, and New Zealand), and one African market (South Africa). These countries covered 89% of the global stock market in 1900, and 85% of its market capitalisation by the start of 2012.

[8] We examine safe withdrawal rates for five countries for the period 1900 through 2011. The long horizon nature of the DMS (2012) database allows for a range of overlapping retirement periods to be examined (specifically, 102 x 10 years; 92 x 20 years; 82 x 30 years; and 72 x 40 years) across varying asset allocations to stocks, bonds and bills for each country.

Table 1: Ranking of Annualised Performance (Stocks, real accumulated returns)

Ranking	Country	Annualised Performance (%)	Standard Deviation	Reward/Risk Ratio
#1	**Australia**	**7.22**	**18.23**	**0.40**
#2	South Africa	7.21	22.49	0.32
#3	United States	6.19	20.20	0.31
#4	Sweden	6.11	22.87	0.27
#5	**New Zealand**	**5.76**	**19.66**	**0.29**
#6	Canada	5.69	17.22	0.33
#7	United Kingdom	5.20	19.94	0.26
#8	Finland	5.01	30.41	0.16
#9	Denmark	4.85	20.90	0.23
#10	**Netherlands**	**4.81**	**21.76**	**0.22**
#11	Switzerland	4.13	19.73	0.21
#12	Norway	4.08	27.33	0.15
#13	Ireland	3.72	23.06	0.16
#14	**Japan**	**3.62**	**29.78**	**0.12**
#15	Spain	3.42	22.21	0.15
#16	France	2.87	23.45	0.12
#17	Germany	2.86	32.18	0.09
#18	Belgium	2.39	23.57	0.10
#19	**Italy**	**1.68**	**28.99**	**0.06**

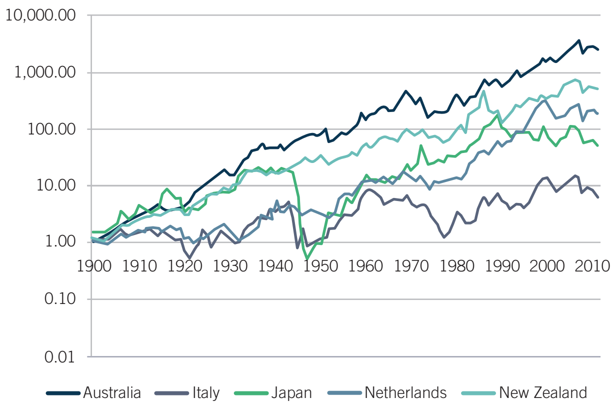
Source: DMS (2012)

We have highlighted (bold and underline) five countries: Australia (“AUS”); New Zealand (“NZL”); Netherlands (“NLD”); Japan (“JPN”); and Italy (“ITA”), in the table as they represent annualised performance levels that most closely correspond to key percentiles in the distribution of the annualised performance of stock markets over the long run.[9]

Figure 1 shows the evolution of $1 invested in each of these countries over the full length of the data set (note the logarithmic scale on the y-axis).

[9] We use the standard three-letter country codes defined in ISO 3166-1 interchangeably throughout this study, part of the ISO 3166 standard published by the International Organization for Standardisation (“ISO”).

Figure 1: Evolution of $1 invested in 1900 (n=5, logarithmic scale base=10)

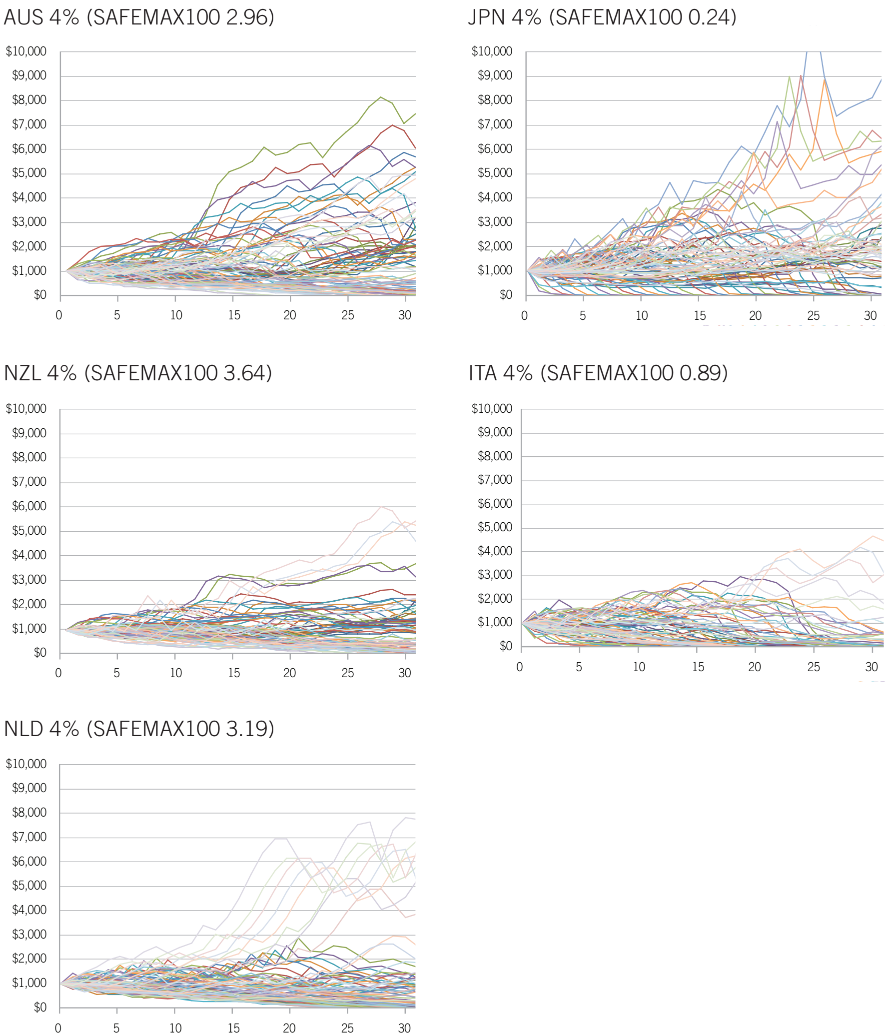


Results

Turning specifically to the 30 year planning horizon, we report SAFEMAX results (that is, the maximum withdrawal rate that ensured portfolio survivability) for a 50:50 growth/defensive asset allocation (Figure 2). Even with the stellar performance of Australian equities historically, we find success for the 4% Rule in the shortest of timeframes, with horizons greater than a decade exposing the hypothetical investor to some chance of ruin (SAFEMAX for Australia is estimated at 2.96%, some 100 basis points below the golden rule).

For completeness, we also report SAFEMAX results for New Zealand (3.64%), the Netherlands (3.19%), Japan (0.24) and Italy (0.89). A wider range of asset allocations, investment horizons and payout rates are provided in the full report (Drew and Walk, 2014).

Figure 2: Heat maps of SAFEMAX results (50:50, 30 Years)



Australia heat map

Payout	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
10yrs	100%	100%	100%	100%	100%	100%	98%	93%	86%	82%
20yrs	100%	100%	100%	98%	88%	67%	53%	40%	29%	21%
30yrs	100%	100%	99%	82%	60%	37%	27%	17%	7%	5%
40yrs	100%	100%	93%	58%	40%	28%	17%	7%	4%	1%

New Zealand heat map

Payout	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
10yrs	100%	100%	100%	100%	100%	100%	100%	96%	94%	84%
20yrs	100%	100%	100%	100%	92%	71%	46%	32%	26%	11%
30yrs	100%	100%	100%	88%	52%	29%	16%	10%	6%	1%
40yrs	100%	100%	100%	58%	32%	10%	3%	3%	0%	0%

Netherlands heat map

Payout	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
10yrs	100%	100%	100%	100%	100%	100%	100%	99%	85%	70%
20yrs	100%	100%	100%	100%	82%	55%	42%	33%	20%	12%
30yrs	100%	100%	100%	70%	43%	22%	13%	9%	6%	4%
40yrs	100%	100%	96%	42%	17%	3%	0%	0%	0%	0%

Japan heat map

Payout	**1%**	**2%**	**3%**	**4%**	**5%**	**6%**	**7%**	**8%**	**9%**	**10%**
10yrs	94%	92%	92%	91%	91%	91%	89%	85%	84%	78%
20yrs	84%	82%	80%	80%	75%	68%	55%	43%	28%	18%
30yrs	76%	71%	68%	62%	57%	44%	26%	11%	10%	7%
40yrs	67%	50%	49%	47%	42%	28%	14%	11%	8%	6%

Italy heat map

Payout	**1%**	**2%**	**3%**	**4%**	**5%**	**6%**	**7%**	**8%**	**9%**	**10%**
10yrs	100%	99%	95%	95%	93%	86%	80%	76%	67%	64%
20yrs	100%	89%	82%	53%	49%	41%	36%	27%	15%	5%
30yrs	95%	85%	43%	24%	18%	12%	7%	4%	1%	1%
40yrs	86%	49%	18%	10%	1%	0%	0%	0%	0%	0%

Discussion

Our results confirm that whatever you think you need as superannuation nest egg, it is almost certainly going to be less than you actually need. The conversation is a difficult one in that, for many investors, their focus is on the asset side (particularly, the return portion) of the equation, not the liability side. We posit that the first challenge in tipping the scales in the retiree's favour is to get the framing right, moving from a 'pot of gold' (asset) mindset to an 'income replacement' focus (liability).

It's time for a difficult conversation. Let's assume (somewhat heroically) that a couple has a retirement nest egg of $1m today. How can we begin to assist retirees with framing reasonable expectations given different starting balances?

The Association of Superannuation Funds of Australia ("ASFA") has developed the ASFA Retirement Standard benchmarks that estimate the annual budget needed by Australians to fund either a comfortable or modest standard of living in retirement. It is updated quarterly to reflect inflation, and provides detailed budgets of what singles and couples would need to spend to support their chosen lifestyle. We argue that these benchmarks are a critical component to improving the framing of retirement income decisions. The ASFA Retirement Standard (June Quarter 2013) shows that, in general, a couple looking to achieve a 'comfortable' retirement needs a budget of $56,406 a year, while those seeking a 'modest' retirement lifestyle need a budget of $32,656 a year (ASFA, 2013).[10]

For the purposes of providing a practical perspective to the safe withdrawal debate, we can consider (on a $1m starting balance), a real income requirement of 3.27% (that is, 3.27% of $1m = $32,700 p.a. for 30 years) for a modest income level; and a 5.64% for a comfortable income (5.64% of $1m = $56,400 p.a. for 30 years).

We can consider the ASFA benchmarks as forming a retirement income channel through which retirees are attempting safe passage (in this case, safe passage is avoiding portfolio ruin). Even if we exclude the countries with the lowest safe withdrawal rate results (Japan and Italy), the results on a starting balance of $1m for a couple suggest that the ASFA modest range is vastly more sustainable than the comfortable equivalent. Even at this withdrawal rate, history suggests that a couple would still face somewhere between a 10 to 30 percent chance of portfolio ruin for a 30 year horizon. As a form of 'ready reckoner', we include in the table below different starting points, and their safe withdrawal equivalent percentage.

[10] For a more detailed view of the expenditure components in the ASFA Retirement Standard (and the methodological approach, see: http://www.superannuation.asn.au/resources/retirement-standard

Table 2: Withdrawal rates equivalents for varying starting values

Starting Balance	ASFA Modest $32,656	ASFA Comfortable $56,406
$250,000	13.06%	22.56%
$500,000	6.53%	11.28%
$750,000	4.35%	7.52%
$1,000,000	3.27%	5.64%
$1,250,000	2.61%	4.51%
$1,500,000	2.18%	3.76%

In short, holding a 50:50 portfolio over 30 years, the highest SAFEMAX100 rate we report in this study is from New Zealand at 3.64%. This suggests that even using the BEST result from our sample, a couple with a starting balance of $1.5m would, using history as a guide, still face some probability of portfolio run. We again acknowledge the limitations of the 4% Rule, particularly its deterministic nature. In the real world, retirees face an array of expenses, the frequency of which range from well-known (such as utility bills, insurance costs, general living expenses) to some which are stochastic or random in nature (for instance, major unanticipated health events).

However, the 4% Rule can be used as a very helpful heuristic for retirees (a mental shortcut to assist in our understanding the challenge of income planning). Like many shortcuts they can provide imperfect answers to help us better understand complex problems. As noted by Scott, Sharp, and Watson (2009), the 4% Rule imposes an opportunity cost on retirees and is therefore is inefficient. We would certainly echo their view. The 4% rule helps us initially engage cognitively in the retirement income problem which, as we have seen from this study, is simultaneously complex and dynamic in nature.

Retirement income planning: the next steps

We have limited skills in forecasting whether or not the retiree gets the 'bad' draw out of the cosmic investing world. We know that if the sequence of returns is against us (particularly when the largest amount of our nest egg is at risk) and the timing is wrong, the reality is that some investor is going to get the worst outcome.

However, there are many levers that can be coordinated to tip the scale in the favour of the retiree, including more dynamic approaches to the:

- **Withdrawal rate** (mortality updating, regular mid-point reviews and updating of the cash flow profile of retirees);
- **Asset allocation** (our results suggest that going defensive doesn't necessarily work and can potentially lock in a bad outcome; being judicious about selling expensive assets through time and not being a forced seller due to liquidity needs; liability-driven investment);
- **Planning horizon** (working longer and phased retirement results in saving more and shortening the income period; aged care costs; medical expenses; bequest motive);
- **Fees and after-tax management** (we need to start to think of the fee debate as something more than an expense, but rather a budget to assist retirees in managing their asset-liability mismatch. After all, retirees live on after fee, after-tax outcomes);
- **Scenario testing** (we need to regularly update our retirement expectations, that is, the liability we need to meet and the asset base with which we must achieve this, can be informed by a range of simulation techniques).
- **Risk management** (our findings highlight that a tail event in the early stages of the income phase almost ensures portfolio ruin. We insure for a range of events in our life – home and contents, life and disability – why would we not insure against tail events late in our accumulation phase and early in the income phase?).
- **Investment governance** (we need to ensure that we have trustees that can understand the asset-liability mismatch faced by retirees. As we have seen, the mismatch is a multi-dimensional problem; a complex interplay between market risk, longevity risk, and inflation risk. This requires more than, "did we beat peers" or "can we pick stocks?" We need to break our current obsession with the return characteristics of the asset side of the equation and move the fiduciary focus to liability management).

We acknowledge that this is not an exhaustive list. However, these are some of the key levers that our research findings suggest can fall within the gambit of 'known knowns'.

The days of searching for the retirement income silver bullet are over. In this study, the Golden or 4% Rule works for favourable sequences of returns (let's be honest, everything works in such markets), ignores asset values of the day and is decoupled from the dynamic nature of the asset-liability mismatch faced by many Australians. However, the 4% Rule does present us with an opportunity to form a baseline which can dramatically improve our framing of expectations of what's possible in retirement.

For the future, we need to move from a silver bullet approach (such as the 4% Rule) and instead employ a veritable arsenal of weapons (based on dynamism: withdrawal rates; asset allocation; planning horizon; fees and after-tax management; scenario testing; risk management; investment governance) to assist retires in managing and mitigating the asset-liability mismatch in retirement.

References

ASFA (Association of Superannuation Funds of Australia). (2013). ASFA Retirement Income Standard (June Quarter), Sydney.

Basu, Anup, Doran, Brett, and Drew, Michael E. (2012). Sequencing Risk: A Key Challenge to Sustainable Retirement Incomes, Finsia (Financial Services Institute of Australasia), Sydney.

Basu, Anup and Drew, Michael E. (2009). Portfolio size and lifecycle asset allocation in pension funds, *Journal of Portfolio Management*, vol. 35, no. 3, pp. 61-72.

Bengen, William P. (1994). Determining withdrawal rates using historical data, *Journal of Financial Planning*, vol. 7, no. 4, pp. 171-180.

Bengen, William P. (2006). Baking a withdrawal plan 'layer cake' for your retirement clients, *Journal of Financial Planning*, vol. 19, no. 8, pp. 44–51.

Cooley, Philip L., Hubbard, Carl M. and Walz, Daniel T. (2011). Portfolio success rates: Where to draw the line, *Journal of Financial Planning* vol. 24, no. 4, pp. 48-60.

Dimson, Elroy, Marsh, Paul, and Staunton, Mike. (2012). *The Dimson-Marsh-Staunton Global Investment Returns Database*, Morningstar Inc.

Drew, Michael E. and Walk, Adam N. (2014). *How Safe are Safe Withdrawal Rates in Retirement? An Australian Perspective*, Finsia (Financial Services Institute of Australasia), Sydney.

Drew, Michael E., Walk, Adam N. and West, Jason. (2015) Conditional Allocations to Real Estate: An Antidote to Sequencing Risk in Defined Contribution Retirement Plans, *Journal of Portfolio Management*, vol. 41, no. 6: pp. 82–95.

Harris, John. (2009). Market cycles and safe withdrawal rates, *Journal of Financial Planning*, vol. 22, no. 9, pp. 38-48.

Pfau, Wade D. (2010). An international perspective on safe withdrawal rates: the demise of the 4 percent rule? *Journal of Financial Planning*, vol. 23, no. 12, pp. 52-61.

Pfau, Wade D. (2011). Can we predict the sustainable withdrawal rate for new retirees? *Journal of Financial Planning*, vol. 24, no. 8, pp. 40-47.

Scott, Jason S., Sharpe, William F., and Watson, John G. (2009). The 4% rule – at what price? *Journal of Investment Management*, vol. 7, no. 3, pp. 31-48.

Spitzer, John J. (2008). Do required minimum distributions endanger "safe" portfolio withdrawal rates? *Journal of Financial Planning*, vol. 21, no. 8, pp. 40-51.

Spitzer, John J., Strieter, Jeffrey C., and Singh, Sandeep. (2007). Guidelines for withdrawal rates and portfolio safety during retirement, *Journal of Financial Planning*, vol. 20, no. 10, pp. 52-59.

THE CONFLICT BETWEEN FINANCIAL DECISION MAKING AND INDIGENOUS AUSTRALIAN CULTURE

Suzanne Wagland, Sharon Taylor

Western Sydney University, Locked Bag 1797, Penrith NSW 2751

ARTICLE INFORMATION

Article History:
Submitted 7th August 2015
Revision: 21 October 2015
Acceptance: 28 October 2015

Key words:
Indigenous; Financial Literacy; Culture; Resources.

ABSTRACT

Financial literacy or financial capability is widely agreed as being funda mental for financial wellbeing (Clitheroe 2004; Worthington 2008). This is particularly relevant in 21st century Australia, where the government's policy of self-funded retirement is a critically important issue. Previous research undertaken by the Australian and New Zealand Banking Group (ANZ) in Australia, suggests when it comes to financial matters, a large proportion of the population have insufficient levels of the financial knowledge and skills needed to manage their finances into the future. Australia's Indigenous population has been identified in the ANZ surveys as one of the groups, most at risk. Whilst education programs have been put in place to address these findings, subsequent studies in relation to Australians Indigenous population continues to demonstrate the poorest levels of financial literacy, with little to no identifiable improvement in measured skills over successive studies (ANZ 2003; 2005; 2008; 2011 and 2014).

Generally, traditional Indigenous culture is dominated by family and tribe rather than personal wealth gratification; in particular these cultural values relating to money are in direct contrast to western societal values. Our research paper, the first in a series, raises two questions. Firstly is the conflict between western and Indigenous culture an overlooked factor and might go some way to explaining the poor financial literacy levels among Australia's Indigenous population. Secondly, this paper raises questions that were highlighted in the existing literature as to the content and design of currently offered educational programs that are targeted at Indigenous Australians.

Introduction

The complexity of products and services within current financial markets means individuals today, require high levels of financial literacy skills to make good financial decisions and contribute to their future financial wellbeing. In Australia, financial knowledge and skills are increasingly important with the introduction, in 1992, of compulsory superannuation in the form of the Superannuation Guarantee Charge (SGC). The SGC has changed the dynamics of retirement planning for Australians, whereby future retirement income is now the responsibility of the individual, rather than that of government. Since individuals are now responsible for their future financial security, the concept of a financially literate population is a critically important issue. Consequently, in Australia, there is a consensus among governments and financial providers that financial literacy education must be a high ranking priority (ANZ 2011).

Research undertaken in Australia since the early 2000's has attempted to assess the level of financial literacy of the Australian population (ANZ Bank 2003, 2005, 2008 2011and 2014). However, findings indicate, that when it comes to financial literacy, a large proportion of the population have insufficient levels of the financial knowledge and skills needed to manage their finances into the future. The results of these studies also highlighted that Indigenous Australians have been identified as one of the categories most at risk with data indicating that this group has one of the poorest levels of financial literacy, with little to no improvement in measured skills over successive studies.

As a means addressing Australia's poor financial literacy skills, government, banks and private providers have initiated a number of educational programs, many of which are aimed directly to Australia's Indigenous population. However, research indicates there has been limited benefit, with surveys indicating the Indigenous population are still most at risk (ANZ Bank 2003, 2005, 2008, 2011 and 2014).

This paper reviews the existing literature related to financial literacy levels in Indigenous communities, and additionally describes the content and design of current financial literacy education programs developed to address these concerns.

When it comes to poor financial literacy levels amongst Indigenous Australian's, the existing literature suggest there are three major barriers, culture, remoteness of location and low socio economic background. Whilst these factors are relevant and discussed to some extent in this paper, our research concentrates on one issue, which is "culture" and its apparent minimal attention given in developing financial literacy education programs. This issue has been considered by previous researchers to be a crucial impediment. Previous research has suggested that these three barriers might explain why Indigenous Australians have poor outcomes when it comes to successful financial management and wealth accumulation. Such outcomes would be unacceptable in non-Indigenous society (Dockery 2010).

Background

Aboriginal and Torres Strait Island population: characteristics and context

To provide some insight into how the Indigenous population fit within Australian society, the following discussion highlights some of the issues of remoteness, unemployment and health issues that impact on the Australian Indigenous population.

In the 2011 Census, 548,400 people identified and were counted as being of Aboriginal and Torres Strait Islander origin, representing 2.5% of the Census count.

New South Wales had the highest count of Aboriginal and Torres Strait Islander people (172,600 or 32% of the national total), followed by Queensland (155,800 or 28%) and Western Australia (69,700 or 13%). Combined, these three states made up almost three-quarters (73%) of people who identified as being of Aboriginal and Torres Strait Islander origin. In contrast, the Northern Territory had the highest proportion of the population counted as being of Aboriginal and Torres Strait Islander origin (27%), while Victoria had the lowest proportion at less than 1% of the state total (Australian Bureau of Statistics 2011)

Aboriginal and Torres Strait Islander people, some 32 percent, live in the major cities and in urban settings (Australian Bureau of Statistics 2008). Interestingly the majority of Indigenous population are under 15 years of age, with only 3 percent 65 years and over. In comparison, the median age for non-Australians is 37 years and 19 percent are 15 years and under (Australian Human Rights Commission 2008).

Unfortunately, the statistics suggest many Aboriginal people are disadvantaged across most aspects of life. The Australian Bureau of Statistics (ABS) indicate the unemployment rate for Indigenous Australians is around 17 percent (2008), three times higher than the rate for non-Indigenous Australians at 5 percent (2008). Such high rates of unemployment are understandable in the context of low levels of education, with a modest 22 percent of Indigenous people completing Year 12. Furthermore, some 31 percent of Indigenous people aged 15 years and over reported high to very high levels of psychological distress, while 50 percent of Indigenous people aged 15 years and over have a disability or long-term health condition and some 69 percent were living in rented accommodation (Australian Bureau of Statistics 2010).

The most recent report, Overcoming Indigenous Disadvantage (OID) by the Productivity Commission, released in 2014, identifies mixed results for Australia's Indigenous people. Although there are some positive aspects such as life expectancy and child mortality rates which have improved, the rates of disability and chronic disease remain high. The OID report further indicates that economic outcomes have improved. Although progress has been slow, the research indicates Indigenous Australians have increased incomes, home ownership, and higher rates of full-time and professional employment. Consequently, there is lower reliance on income support. Although there have been greater post-secondary education outcomes, literacy and numeracy results, particularly in remote areas have changed little. Unfortunately, there was modest to no change in reading, writing and numeracy from 2008 until 2013 (Productivity Commission 2012).

Indigenous Australians and their first experience of money

Up until colonisation the Aboriginal population had no need for money. When colonised, the Indigenous inhabitants were thought to be few in numbers and uncivilised 'terra nullius'. As a consequence, since settlement, Indigenous Australians have been marginalised, disposed and displaced from their lands; many were forced into missions run by church organisations (Demosthenous, 2006) and devoid of any monetary responsibilities.

In the late nineteenth and early twentieth century, Indigenous labour, both men and women was relied upon by farmers and pastoral stations as their major workforce. Many of the jobs for women were cooking, cleaning and minding the children whereas Indigenous men helped with the jobs around the stations including mustering. Some Indigenous workers were paid in alcohol, clothing, and food rations. For those who did get paid in the form of money, most often, this was withheld by the government. Recently, the Queensland government has offered Indigenous people settlement in lieu of monies earned and withheld (Demosthenous, 2006) to correct previous injustices.

Literature review

Financial literacy literature

The definition for financial literacy is clearly stated by Schagen and Lines (1996) as

> "the ability to make informed judgments and to take effective decisions regarding the use and management of money" (Schagen & Lines 1996, p. 91).

The definition proposed by Schagen *et al.* (1996) has been adopted by the Australian Securities and Investment Commission (ASIC) who further elaborate by detailing the following skills and knowledge as constituting financial literacy:

- mathematical literacy and standard literacy (the ability to read for knowledge and write coherently and think critically about the written word)
- financial understanding – an understanding of what money is and how it is exchanged, where it comes from and goes
- financial competence – understanding of basic financial services, financial records (and importance of reading and keeping them), attitudes to spending and saving, and an awareness of the risks associated with some financial products and the relationship between risk and return; and
- financial responsibility – the ability to make appropriate personal life choices about financial issues, understanding consumer rights and responsibilities and
- the ability and confidence to access assistance when things go wrong (ASIC 2003).

There is general acceptance that improving financial literacy is critical for all Australians to reach their potential in managing money and future retirement (Bin-Sallik *et al.* 2004). Unfortunately, research indicates that the majority of the Australian population have insufficient knowledge and or expertise to make beneficial financial decisions, particularly about their superannuation (Beal and Delpachitra 2004; Moldofsky 2006; Worthington 2008). This is particularly true for those with low levels of education (Lusardi 2008). The Indigenous population of Australia is no different; a lack of financial skills and education inhibit and restricts their ability to manage their finances. These difficulties are further magnified by the remoteness and the low socio-economic status of the Indigenous population in Australia (Altman 2000; ANZ 2011).

Other research suggest the very basic concepts of money and mathematical literacy would need to be addressed as a first measure (Urbis Keys Young 2006; Huston 2010) before more complex financial knowledge and skills were introduced. Similarly, Bin-Sallik *et al.* (2004) suggest any educational programs designed to improve financial literacy and ultimately better living standards of Indigenous Australian's, needs to consider broad based financial learning. This idea is supported by the First Nation Foundation who has encouraged the development of programs aimed at providing a sound financial foundation upon which Aboriginal and Torres Strait Islander communities can ideally function.

Financial literacy education and Indigenous Australians

For outback Indigenous Australians, remoteness if a major barrier to new technologies, for example, the internet banking, ATM's and online application for credit within the finance sector can be advantageous for many customers in the cities. However, the sheer remoteness, of the majority of the Indigenous population who reside outside the major cities have limited access to credit, loans, internet access and financial services which must inhibit their financial ability (McDonnell and Westbury 2002; McDonnell 2003). Adding to these limitations or a consequence of, Indigenous Australians are amongst those in the lowest socio economic households in Australia (Godinho and Russell 2013). Hence this group may face financial exclusion from mainstream advice and programs generally available to most Australians.

In response, the Department of Families, Housing, Community Services and Indigenous Affairs, (FaCSIA), in 2004, provided support to Reconciliation Australia to develop the National Indigenous Money Management Agenda (NIMMA) the objective being to deliver better financial services and education to Aboriginal and Torres Strait Islander communities. This initiative continues to be the catalyst for ongoing dialogue, better awareness, greater resources and increases in consumer support and training for Australia's Indigenous population (Reconciliation Australia 2007). A number of educational programs have followed from this dialogue, for example the creation of the Outreach Team from (ASIC) previously mentioned, who have been working with Indigenous Australians about money matters and have designed a range of programs using online delivery systems which can be easily run in schools. Other existing programs include the Manage Your Income targeted specifically for Indigenous communities and run by Centacare.

For those residing in the Cape York Peninsula, there is the Cape York Partnership (CYP) who have initiated the MPower coaching and consulting (Aurukun) project, this provides the opportunity for a unique cultural experience with a well-established not-for-profit organisation to ensure individuals, in that area, receive face to face support to assist in managing their money. More recently, a new program the MoneyMob Talkabout program funded by FaHCSIA, has being developed to provide additional access to financial literacy education through the means of storytelling and using outdoor cinema, creating hands on games and other suitable activities (Financial Literacy Australia Ltd 2013).

Indigenous and Torres Strait Island culture

An understanding of the remoteness and low social economic background faced by Australia's Indigenous population appears to be reflected in current educational programs. However, it appears Indigenous culture fails to be considered in most of the educational programs. Considering Indigenous culture, when it comes to money is in direct contrast to how Western society values money, it seems implausible that culture is not a priority.

When it comes to the use of money, Indigenous culture, challenges main stream Australian societal norms. It is therefore important to understand how Indigenous communities view money and wealth creation generally.

The complexities of Indigenous culture and its impact may well be best summarised by Patrick Dodson who stated:

> It is very difficult for an Aboriginal to have total propriety right over anything. You are always obliged to share with your brothers in law, your fathers in law, family, to give things away but you would give it away without worrying about whether you would get a return for it. Because you know in the society there will be return sometime when someone is in a position to do so …. (The Age, 1989, p. 52)

Indigenous culture has a history going back many thousands of years. Although many Indigenous people live and participate in 21st century Australia, their culture and value system contradicts the western way of life, particularly in relation to financial matters. According to Indigenous beliefs

> [T]the physical environment of each local area was created and shaped by the actions of spiritual ancestors who travelled across the landscape. Living and non-living things existed as a consequence of the actions of the dreaming ancestors (Purdie *et al.* 2010 p. 26).

The connection to land is fundamental to Indigenous people, the concept of Indigenous land ownership was at the point of colonisation, and even today are at odds with western values in relation to property ownership and resulting legal systems. The dreaming stories created boundaries or territories and each individual belonged to certain territories within the family group. Consequently, the land was not owned but one belonged to the land (Purdie *et al.* 2010 p. 26).

Purdie states that these complexities continue as a result of the kinship system, which placed each person in relationship to every other person in the group and determined the behaviour of an individual to each person. The kinship system also took into account people external to the group (Purdie *et al.* 2010 p. 26). This relationship of sharing is a key part of the Australian Indigenous culture and reflected in attitudes to work and living and financial needs (Peterson and Taylor 2003). Resources including money are to be shared; individual needs cannot be prioritised ahead of the family, extended family or the community (Martin 1995; McDonnell 2003). This is part of the Indigenous culture, of kinship, exchange and sharing (Peterson 2005). For example, an Indigenous person, with surplus income is subject to demands by family and community for money (Godinho 2014). Such actions are in complete contrast to the financial decisions and norms practised by the majority of Australians (Harris 1990). This cultural difference, when it comes to the use of money, acts as huge inhibitor when trying to encourage Indigenous Australians to take charge of their individual financial decisions and accept the need to manage their money and their future wellbeing, as their primary responsibility and put any consideration for the community as a secondary consideration.

Even with some limited understanding of Indigenous culture, it is difficult to understand how the Western use of finance can be compatible. First, let us describe the traditionally or generally accepted term 'financial literacy'. As mentioned previously, in Australia, ASIC, the Financial Literacy Foundation and the Australian and New Zealand (ANZ) Bank have utilised a definition by Schagen and Lines (1996) as highlighted earlier.

> the ability to make informed judgments and to take effective decisions regarding the use and management of money (Schagen and Lines 1996)

This definition incorporates the understanding of money, savings and investment to make effective, understanding of financial terms and concepts, as well as the ability to use technology to make beneficial personal financial decisions (Reid, 2003). Such definitions and concepts appear to be in conflict with Indigenous culture and kinship. For example, 'Kin do have the right to make demands on each other for hospitality, food, financial help and other services' p. 15 (Keen 1994). Individual saving is seen as selfish and stingy (Senior, Perkins, & Bern, 2002).

There is evidence that some Indigenous Australians do resist the culture of sharing, using various strategies such as, earmarking money for different purposes or spending the money quickly on things, to keep money within the immediate family (Senior *et al.* 2002). However, this cultural resistance appears to be in the minority, generally saving money and keeping money within the immediate family is contradictory to Indigenous culture and their traditional way of life.

This raises the question, is it possible for financial education programs as traditionally perceived by most Australians a viable option to educate the majority if Indigenous Australians? Our study suggests that the impact Indigenous cultural needs to be better understood before financial literacy education programs can be designed. Additionally, for the many Indigenous Australians, who consider their traditional culture overrides western values the acknowledgment of the importance of "culture" is imperative if successful outcomes are to be achieved.

Research questions

Having reviewed the literature we believe two questions require further examination.

1. Does the conflict between Indigenous culture and successful financial management explain the apparent lack of improvement of financial literacy levels in Indigenous Australians for more than a decade?

2. Do existing financial literacy education programs specifically designed for Indigenous Australians incorporate "culture" as an integral element in the education program?

The role of ASIC in financial literacy education for Indigenous Australians

The Australian Government has taken steps to address the identified concerns from the ANZ Bank surveys by instituting a number of initiatives. The aim is to increase financial awareness and enhance financial knowledge through the Financial Literacy Foundation; this task was then transferred to the Australian Securities and Investment Commission (ASIC). ASIC have developed the National Financial Literacy Strategy for 2014-17, which aims to:

1. Educate the next generation, particularly through the formal education system

2. Increase the use of free, impartial information, tools and resources

3. Provide quality targeted guidance and support

4. Strengthen coordination and effective partnerships

5. Improve research, measurement and evaluation (ASIC 2014).

Through its websites such as Money Smart, education programs and resource lists, ASIC aims to increase the financial literacy of all Australians. These initiatives combine with a curriculum-based approach to teaching financial literacy in schools are the cornerstones of the 2014–17 National Financial Literacy Strategy. This strategy proposes increasing the number of trained teachers through ASIC's Money Smart program as well as developing greater resources for teachers and students to assist in reshaping the Australian Curriculum for Economics and Business. Additionally, ASIC is committed to increasing the number of vocational education and training (VET) students that are currently financial literacy education (ASIC 2014). Furthermore, ASIC and private providers have developed many educational programs across Australia as a means of increasing financial skills.

In an attempt to increase the financial literacy levels among our Indigenous population, ASIC has created a dedicated financial literacy webpage specifically to address the needs of Australia's Indigenous population. The website specifically written for the Indigenous population includes advice on many issues where money is involved and includes audio advice in English and a variety of different Indigenous languages. This site further provides lists of additional resources including related links such as, Money Talks, Indigenous publications, Indigenous consumer assistance, Network First Nations Foundation and the National Indigenous Consumer Strategy.

Additionally, ASIC has developed the Financial Literacy Outreach Education Team whose primary objective is to develop and deliver community education. The team's objective is to develop strategies that will help Indigenous Australians with making informed choices about different financial products like credit, debt, superannuation and insurance. The Outreach Team works closely with the Indigenous population in their desire to learn more about "money matters" (Reconciliation Australia 2011). In addition, ASIC also provides an Indigenous Help Line where assistance is given on money questions to do with banking, insurance, credit and superannuation.

To date there has been limited research that assesses the success or failure of ASIC's initiatives and private educational programs, ANZ Bank studies continue to see minimal improvement in financial literacy levels across all groups but especially Indigenous Australians. Others researchers have raised questions about the success of financial education (Gallery and Gallery 2010; Taylor and Wagland 2013) and the relationship between financial education and behaviour among the general population (Willis 2008; West 2012). In particular, when it comes to Australia's Indigenous population, there appears little research investigating the link between Indigenous culture and financial education outcomes. Although there are numerous issues that can inhibit and restrict Australia's Indigenous population from increasing their financial skills, this research questions whether due weight has been given to culture when designing current financial literacy programs.

In reviewing the resources currently available from the ASIC website, our study has identified a number of organisations and programs that provide assistance specifically for the Indigenous population. Initiatives have been undertaken by the National Australia Bank, who have partnered with a number of community organisations to support a national network of Indigenous Money Mentors. The ANZ and FaHCSIA have also fostered money management skills through their Money Business program which is delivered in over 160 communities in remote regional and urban Australia. The Indigenous Financial Services Network is another initiative of the Reconciliation Australia's National Indigenous Money Management Agenda (NIMMA) (Reconciliation Australia 2011).

Education in schools has not been neglected by the corporate and government sectors. For example, Education Partnerships (Schools) Pty Ltd is a program that provides strategic advice, implementation, marketing and communications support for financial literacy education in schools The Commonwealth Bank Foundation, has also initiated, the Start Smart Enterprise program, a financial literacy program for Australian schools.

Methodology

In this study a descriptive analysis was employed to review the Australian Government initiatives in responding to the findings of several ANZ Bank studies (2003; 2005; 2008; 2011 and 2014). In those studies Indigenous Australians represent one of the largest groups where the level of financial literacy has not improved in a decade. The government has chosen ASIC to be the major source of provision of information through the ASIC specific website for Indigenous Australians as well as being the central repository of resources especially designed to meet the identified need for Indigenous Australians the first step undertaken by the researchers was to review the ASIC website to determine the resources available. The second step was to take the comprehensive resources schedule supplied on the ASIC website as to the resources specifically developed for Indigenous Australians. This list is available in Appendix 1.

The next step was to examine every website of the organisations included in Appendix 1. These sites were then reviewed to determine the resources offered by the organisation, the education programs that have been developed.

Where educational programs were offered the programs were further examined to determine whether “Indigenous culture” had been an integral part of the learning design.

Finally a search was conducted of these programs to determine if and independent evaluation or review process had been undertaken which sought to determine the level of success of such programs through measurable outcomes.

Analysis

Review of educational programs for financial education

Lahn (2008) suggests that our educational framework does not suit all Australians. This may be particularly relevant to Indigenous Australians whose culture challenges accepted norms of non-Indigenous Australians.

Although there is limited research when it comes the success or failure of financial education programs for Indigenous Australians, a small experimental learning approach running at six Indigenous communities in South East Queensland appears to have some success. The program incorporated a range of activates including exercise, games and homework tasks applied to the groups personal experience when it comes to money. Although, the sample size was small and participants self-reported they indicted an increase in self-confidence when it comes to money (Brimble and Blue 2013).

A review of current educational programs available specifically for Indigenous Australians finds little emphasis has been put on culture. Of the seventeen programs reviewed only two programs appear to consider culture as an essential consideration in the design of the programs.

The first of these is a program developed by First Nations Foundation (FNF) in 2011 called My Moola. FNF is a not-for-profit public company limited by guarantee. FNF aims:

> to ensure that Indigenous Australians have the skills to be in a position to protect the things that they value and to sustain culture and a sense of identity, they need to build the capacity to be equal players in the mainstream economy. 'Closing the gap' in critical areas of financial and economic participation is also a key to improved health, employment and education outcomes, enabling First Australians to live full and productive lives – living, learning and earning (FNF Website)

My Moola was established with the support and assistance of Credit Union Australia, Arnold Bloch Leibler and the ANZ Bank.

FNF have identified that financial literacy is one of the major causes of social exclusion for Indigenous Australians. FNF state that in a report by the Centre for Social Impact in 2012, that 43.1% of Indigenous Australians surveyed were either severely or fully socially excluded compared with the national average of 17.2 %.

My Moola is designed to opening financial pathways and is specifically designed as an adult financial literacy program for members of Indigenous communities. The workshops are fun, interactive and delivered in a culturally safe environment. The My Moola program additionally, incorporates personal development and goal setting with financial literacy.

My Moola is an 8 module program over two days and has a holistic view to financial empowerment. This program considers the following perspectives:

- Explores Indigenous history and culture relating to money
- Increase participants skills in personal development related to goal setting and overcoming barriers to success
- Provide participants with an understanding of the impacts of financial decisions related to: expectations, needs, and aspirations
- Increase participants awareness and knowledge of costs, risks, and benefits of financial products and services
- Provide families with tools to develop a shared vision around culture, education and economic well-being

On 10 December 2014 First Nations Foundation (FNF) in collaboration with the Brotherhood of Saint Lawrence announced the 2014 My Moola program Evaluation Report. The report states:

> "financial literacy is still the major challenge and ongoing preventative work in dealing with the core issues….. which have intergenerational flow on effects."

Additionally, Dr Nikki Moodie, a key contributor to the report states:

> "The response we received from participants was over whelming and the results indicate that the program has made significant changes to the lives and financial competency of the participants
>
> …….My Moola has the capacity to provide unique and culturally appropriate support for Indigenous staff in all sectors"

The conceptual framework of My Moola is best illustrated in First Nations Foundation: Enhancing Indigenous Financial Capability Programs (2011) document. Diagram 1 below focuses on the interconnectedness that must be acknowledged in designing successful education programs for Indigenous Australians. The diagram describes the barriers that impinge on the successful financial capability strategies designed to increase levels of financial literacy in this group. It should be noted that the report highlights that there are several influencing factors. One of these factors "culture" must be addressed in designing and developing appropriate services to achieve successful outcomes.

Diagram 1: A framework for understanding barriers to indigenous financial capability

Source: http://www.fnf.org.au/financial-inclusion.html

The second program identifying culture as pivotal inclusion for financial literacy programs is one developed by the Cape York Partnerships. This program called MPower is strongly focused on coaching and education, for the needs and aspirations of Aboriginal and Torres Strait Islander clients.

This program concentrates on the 4Cs are:

> **Class:** teaches mainstream curriculum in English literacy and numeracy using Direct Instruction (DI) methods
>
> **Club:** provides artistic, musical and sport programs
>
> **Culture:** provides comprehensive Indigenous culture and language programs delivered by teachers and local cultural tutors, it also involves on country camps and activities
>
> **Community:** provides case management of each student's attendance, school readiness, health, nutrition, well-being and parent engagement, working closely with the Family Responsibilities Commission

The designers of this program consider it is individuals and families, not communities, who are the key agents of change in the move from passive welfare to self-reliance and economic freedom. The Cape York initiative fundamentally considers that communities are uplifted only when widespread individual and family change occurs.

"'Push' and 'pull' factors are needed to get individuals and families to change from passivity, dependence and dysfunction, to responsibility, self-reliance and functioning. Push factors might include increasing the conditionality of welfare payments; pull factors must include providing opportunities and investment in capability-building."

Furthermore on their website, the Cape York Partnership Agenda is "……unashamedly child-centred – improving the future for children is a clear moral priority. We are forging a new path that puts children, families and homes very much at the centre".

The Cape York Welfare Reform package seeks to:

- Improve the abilities of individuals and households to manage income and household budgets
- Be engaged in children's education and family health
- Be better parents
- Take pride in the family home

Under the Cape York Welfare Reform trial, the development of an Opportunity Hub (O-Hub) focuses on the empowerment of individuals and families, so they can change their own and their children's lives. Through O-Hubs, people can access opportunity products such as MPower for financial literacy; Student Education Trust (SET) to assist parents to plan and save to support children's education; and parenting support services. O-Hub might offer that first step to taking control of their money through use of the MPower program.

The O-Hub provides an environment for building self-reliance and responsibility. Its focus is to bring welfare dependent individuals and families up to a level of basic functionality with the support of opportunity products and programs this includes income management and budgeting. MPower supports individuals and families to manage money for basic material needs; builds capabilities through financial literacy and behaviour change; and builds assets through saving and disciplined money management.

MPower objectives are clearly stated on their website include:

- To assist families to manage money so that basic material needs (food, clothing, shelter etc.) can be sustained
- To enable families to manage money generally
- To enable families to build assets and realise aspirations through saving and disciplined money management

In respect of child's education the Direct Instruction (DI) method has three essential components:

- "class", the core DI program, which delivers 20 hours of literacy and numeracy teaching every week;
- "club", which gives lessons in sports and music; and "culture", a subject-group that includes local languages and traditional and environmental knowledge, and has a syllabus designed by the academy's own team. Club and culture are taught after normal school hours, in optional lessons that extend the school day by 90 minutes:
- "culture", provides comprehensive Indigenous culture and language programs delivered by teachers and local cultural tutors, it also involves on country camps and activities attendance is almost universal.

The Cape York programs delivered to children embed into the curriculum an our cultural program which represents the cultures of different communities groups across Cape York Peninsula and the Torres Strait Islands. In designing these programs family and community members are invited to engage in teaching traditional cultural dances, singing, language and arts. These education programs previously mentioned including financial literacy emphasis that culture is an important component of an Indigenous school, which moulds education and culture into a holistic approach to each child's growth.

Summary of findings

A review of the literature relating to the benefits of a financially literate population has been well been established as being extremely important for all Australians. Although both government and private providers have made a significant effort to increase the level of financial knowledge and skills in programs across the country, it would appear that there is insufficient assessment of what works and what does not work when it comes to the financial literacy of Indigenous Australians. The ANZ (2011) Bank surveys would suggest there has being generally little improvement over the last decade. Furthermore, when it comes to Australia's Indigenous population, it would appear there needs to be a concerted effort to understand Indigenous culture, its impact and importance when designing future programs if we are to overcome an underlying issue that inhibits the successful outcomes.

The paper is limited to a review of research findings and an examination of specific financial literacy programs that are currently specifically designed to address the low financial literacy levels evidenced in Indigenous Australians. After examining these current programs it has demonstrated that the concept of cultural biases has to a large extent not been given due consideration and in most cases ignored. Only two of the current programs on offer actually address Indigenous culture in the design of their program. It is no surprise to note theses have been identified as two of the most successful programs when measuring their outcomes from the objective reviews that have been undertaken.

The next stage in this research will be to interview focus groups of Indigenous Australians as well as the providers of these identified existing programs to see how strategies can be developed to address this fundamental aspect of Indigenous communities, and allow the redesign of financial literacy programs that provide the desired successful outcomes for our Indigenous Australian population.

Future research

Whilst our research has been limited to considering only one barrier that is "culture', further research needs to be conducted in relation the remaining identified barriers. Another avenue of future research could focus on testing participants of a sample number of programs. This would occur before and after completion of the chosen education program in order to measure any demonstrable outcomes.

Appendix 1: List of financial literacy programs specifically to assist Indigenous Australians

Organisation	Description	Culture addressed in Program
Program Australian Securities and Investments Commission (ASIC) • ASIC manages the Money Smart website, and has a section targeted specifically at Aboriginal and Torres Strait Islander Australians.	Specifically designed for Indigenous Australians, Moola Talk based on comic style in presenting information Budget Planners – Money Smart Superannuation Issues – MOB. Also information on NILS Loans to community Indigenous Outreach Program.	Indigenous culture not addressed*
Centacare Wilcannia-Forbes • Provides Manage Your Income program, which offers training in financial literacy specifically for Aboriginal communities.	Manage Your income Manage Your Life Information Only	Indigenous culture not addressed*
Education Partnerships (Schools) Pty Ltd Start Smart Enterprise, a financial literacy program for Australian schools and an initiative of the Commonwealth Bank Foundation. (www.educationpartnerships.com.au)	Indigenous financial Literacy Think Tank (2011). First Nation Foundation developed Start Smart – Information Only.	Indigenous culture not addressed*
Financial Counsellors' Association of NSW (FCAN) • FCAN delivers a fully accredited culture-specific course for Aboriginal financial counsellors, through funding from FaHCSIA, Fair Trading NSW.	No existing courses for General Community. Only courses for trainee Financial Counsellors.	N/A
Indigenous Consumer Assistance Network (ICAN) • ICAN provides consumer education, advocacy and financial counselling services to Aboriginal and Torres Strait Islander consumers across the nation. (www.ICAN.org.au)	Mentoring Program for Financial Counselling, Money Management services strategy. Grants for Projects.	Indigenous culture not addressed*
Torres Strait Regional Authority • Community Training Program and a Community Development Employment Program. (www.tsra.gov.au)	Non-specific financial literacy courses.	Indigenous culture not addressed*

Money Business • ANZ and FaHCSIA to build the money management skills and confidence of Indigenous people. (www.anz.com and www.fahcsia.gov.au)		
Indigenous Consumer Assistance Network (ICAN) • ICAN provides consumer education, advocacy and financial counselling services to Aboriginal and Torres Strait Islander consumers across the nation. (www.ICAN.org.au)	Funded by Financial Literacy Australia 2015. Twenty four Workshops 10-20 students over 4 years.	Indigenous culture not addressed*
Cape York Partnerships • MPower is strongly focused on coaching and education, for the needs and aspirations of Aboriginal and Torres Strait Islander clients.	MPower extremely successful works on collective unity and collective good of the family. Arukun provides individual instruction based on a three group system Class, Club, Co House. The first of these Class offers 20 hours on literacy. Also O-Hub provides for family opportunities.	Culture identified as a major element of the course
Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA) • The Department's Financial Management Program aims to build financial resilience and wellbeing among Indigenous communities. (www.fahcsia.gov.au)	Program based on project funding. Basic Financial Management Program. Also provides some services.	Indigenous culture not addressed*
Financial Counselling Australia (FCA) • As part of its Reconciliation Action Plan, FCA has committed to increasing the attendance of Indigenous financial counsellors and financial literacy workers at the FCA annual conference and for the last two years has hosted an Indigenous -focused day. (www.financialcounsellingaustralia.org.au)	Non-specific Programs. No existing courses.	Indigenous culture not addressed*

First Nations Foundation (FNF) • FNF is an Indigenous not-for-profit organisation with a vision of financial inclusion for Indigenous Australians. (www.fnf.org.au)	My Moola 2014. 2 day Program.	Culture identified as a major element of the course
Traditional Credit Union (TCU) • TCU provides financial services and counselling to Indigenous people in the Northern Territory, in the communities of Wadeye and Milingimbi.	Indigenous Bank. No formal Courses. Visit communities. Provides information on needs basis.	Indigenous culture not addressed*
National Australia Bank (NAB) • Support a national network of Indigenous Money Mentors. (www.nab.com.au/Indigenous)	Money Mentors to give Indigenous Australians face-to-face support with money management. Training is coupled with access to safe and affordable microfinance products and services. It means Indigenous Australians can learn by doing, and take control of their finances. Indigenous Money Mentors proactively connect Indigenous Australians with service providers in areas such as health, housing, family, employment and education that are able to improve overall wellbeing.	Indigenous culture not addressed*
MilbaDjunga • MilbaDjunga is an online interactive consumer and financial literacy resource piloted with Indigenous students at schools in Queensland, the Northern Territory and Western Australia in 2011. (www.milbadjunga.net.au)	Based in Queensland. Non-specific programs. Financial literacy only incorporated generally in programs offered.	Indigenous culture not addressed*
Matrix on Board • Matrix on Board launched MoneyMobTalkabout – a financial literacy education program for remote-dwelling Aboriginal people – with funding from FaHCSIA in April 2010.	Three units in Community Services Program. Not specifically addressed to Indigenous Australians. Some elements of Social Structure and role of power and Money.	Indigenous culture not addressed*

* *Based only on information from website at one point in time, measured against limited criteria. Information on many sites undergoing regular modification.*

References

(The) Age (1989), Black Australia, 2nd ed., David Syme & Co., Melbourne.

Altman, J. (2000), The economic status of Indigenous Australians. Canberra: Australian National University. Centre for Aboriginal Economic Policy Research (CAEPR) Discussion Paper no. 193/2000.

Australian Bureau of Statistics (2008), National Aboriginal and Torres Strait Islander Social Survey, 2008 Catalogue 4714.0 – Canberra: Australian Bureau of Statistics.

Australian Bureau of Statistics (2010), The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples, Australia, Catalogue 4704.0 Canberra: Australian Bureau of Statistics.

Australian Bureau of Statistics (2011), Census (2011), Community Profiles, Canberra: Australian Bureau of Statistics.

Australian Human Rights Commission (2008), A statistical overview of Aboriginal and Torres Strait Islander peoples in Australia, viewed 11 February 2014, http://www.humanrights.gov.au/publications/statistical-overview-aboriginal-and-torres-strait-islander-peoples-australia-social

ANZ and Roy Morgan Research December, (2011).The Social Research Centre, Australian Bureau of Statistics 2006. Population Distribution, Aboriginal and Torres Strait Islander Australians, Australia, Catalogue 4705.0 Canberra: Australian Bureau of Statistics.

Australian & New Zealand Bank (2003), ANZ Survey of adult financial literacy in Australia, Final Report, viewed 16 July 2005, http://www.anz.com/aus/aboutanz/Community/Programs/FinLitResearch.asp.

Australian & New Zealand Bank (2005), ANZ Survey of adult financial literacy in Australia, Final Report, viewed 16 July 2014, http://www.anz.com/aus/aboutanz/Community/Programs/FinLitResearch.asp.

Australian & New Zealand Bank (2008), Investing & super, viewed 16 May 2014, http://www.anz.com/aus/Invest-And-Insure/Education/Retirement/Retirement-Income-Streams.asp.

Australian & New Zealand Bank (2011), ANZ Survey of adult financial literacy in Australia, Final Report, viewed 16 July 2014, http://www.anz.com/aus/aboutanz/Community/Programs/FinLitResearch.asp.

Australian & New Zealand Bank (2014), ANZ Survey of adult financial literacy in Australia, Final Report, viewed 16 December 2014, http://www.anz.com/aus/aboutanz/Community/Programs/FinLitResearch.asp.

Australian Securities and Investment Commission (ASIC) (2003), Financial literacy in schools, viewed 19 January 2009, www.asic.gov.au/asic/pdflib.nsf/.../FinLit.../FinLit_schools_DP.pdf.

Australian Securities and Investment Commission (ASIC) (2014), The National Financial Literacy Strategy 2014-17, viewed November 2014, http://www.financialliteracy.gov.au/strategy-and-action-plan/strategy-2014

Beal, D & Delpachitra, S. (2004), 'Community Understanding of Superannuation', Agenda, vol. 11, no.2, pp.127-142.

Bin-Sallik, M Adams, I and Vemuri, S. R. (2004), Strategies for improving Indigenous Financial Literacy in Schools, *The Australian Journal of Indigenous Education*, vol. 33

Brimble, M and Blue, L. (2013), Tailored financial literacy education: An Indigenous perspective, *Journal of Financial Services Marketing*, vol. 18, pp.207-209

Centre for Social Impact (2012), CHANGE: A Case for Change Why we need to change the way we generate social impact, viewed October 2015, www.csi.edu.au

Clitheroe, P. (2004), In Consumer and Financial Literacy Taskforce, Australian consumers and money: A discussion paper (pp. i-x). Canberra: The Taskforce, Australian Government

Demosthenous, C., Robertson, B., Cabraal, A. and Singh, S. (2006), Cultural identify and financial literacy: Australian Aboriginal experiences of money and money management. Paper presented at the Financial Literacy, Banking and Identity Conference RMIT University; 25-26 October, Melbourne, Australia.

Dockery, A. M. (2010), Culture and wellbeing: The case of Indigenous Australians. Social Indicators Research, 99(2), 315-332. doi: http://dx.doi.org/10.1007/s11205-010-9582-y

First Nations Foundation (2011), Enhancing Indigenous Financial Capability Programs, viewed October 2015, https://www.reconciliation.org.au/wp-content/uploads/2013/12/2011-Enhancing-Indigenous-Financial-Capability-Programs.pdf

Financial Literacy Australia Ltd (2013), Matrix on Board – Money Mob Talkabout, viewed October 2014, http://moneysmartweek.org.au/awards/matrix-on-board-money-mob-talkabout/

Gallery, G. and Gallery, N. (2010), Rethinking financial literacy in the aftermath of the global financial crisis. Griffith Law Review 19(1): 30-50.

Godinho, V. and Russell, R. (2013), Telling the 'Money-Story' the Right Way: A Model for Studying Sustainable, Indigenous Financial Inclusion, Global Cities Research Institute, RMIT University, Melbourne, Presented at the Australia People and the Planet (2013), Conference Proceedings Transforming the Future, RMIT University, Melbourne, Australia, 2-4 July. http://global-cities.info/news-events/conferences-forums/conferences-proceedings

Godinho, V. (2014), Cultural Identity and Financial Well-being in Indigenous Australia, RMIT University, viewed 13th October 2015, https://www.tasa.org.au/wp-content/uploads/2014/12/Godinho.pdf

Harris, S. (1990), Two way Aboriginal schooling. Canberra: Aboriginal Studies Press.

Huston, S.J. (2010), Measuring financial literacy. *The Journal of Consumer Affairs* 44(2): 296-316.

Keen, I. (1994), Introduction, Being Black: Aboriginal Cultures in Settled Australia, Aboriginal Studies Press, Canberra.

Lahn, J. (2008), Aboriginal people, money and financial literacy: Shepparton in a national context. My Moola Opening Financial Pathways Program Evaluation Report 2007-2009. Centre for Aboriginal Economic Policy Research, The Australian National University.

Lusardi, A. (2008), Household Saving Behaviour: the role of financial literacy, information, and financial education programs. Paper presented at the Implications of Behavioural Economics for Economic Policy; 27-28 September, Boston, Massachusetts.

McDonnell, S. (2003), Chasing the money story: An evaluation of the Tangentyere bank pilot project and its relevance to Indigenous communities in central Australia. Canberra: Australian National University. Centre for Aboriginal Economic Policy Research (CAEPR), Working Paper.

McDonnell, S. and Westbury, N. (2002), Banking on Indigenous communities: issues, options and Australian and international best practice. Canberra: Australian National University. Centre for Aboriginal Economic Policy Research (CAEPR), Working Paper 18/2002.

Martin, D. (1995), Money, business and culture: issues for Aboriginal economic policy. Canberra: Australian National University. Centre for Aboriginal Economic Policy Research (CAEPR), Discussion Paper 101.

Moldofsky, L. (2006), Race is on to teach skills across the region, governments and companies are seeing the benefits of raising levels of financial literacy. *Financial Times*, 9 November: pp. 1.

Moodi, N. Roost, F and Doomer, E. (2014), MyMoola Report from the Evaluation of an Indigenous Financial Literacy Program, viewed 14 October 2015, http://www.fnf.org.au/uploads/6/3/1/1//6311851/my_moola_2014_-_digital_version_-_final.pdf

Peterson, N. (2005), What can pre-colonial and frontier economies tell us about engagement with the real ecomony?, Indigenous life projects and the conditions of development. In D. AustinBroos and G.

Peterson, N. and Taylor, J. (2003), The modernising of the Indigenous domestic moral economy: kinship, accumulation and household composition. *The Asia Pacific Journal of Anthropology* 4(1/2): 105-122.

Productivity Commission (2012), Overcoming Indigenous Disadvantage Report, http://www.pc.gov.au/gsp/overcoming-Indigenous-disadvantage

Purdie N, Dudgeon P and Walker R (2010), Working Together: Aboriginal and Torres Strait Islander Mental Health and Wellbeing Principles and Practice, Australian Government Department of Health and Ageing, viewed 15 June 2014, http://aboriginal.telethonkids.org.au/media/54847/working_together_full_book.pdf

Reconciliation Australia (2007), National Indigenous Money Management Agenda, viewed November 2014, http://www.fnf.org.au/uploads/6/3/1/1/6311851/nimma_project_-_nimma_project_documents_-_file_2.pdf

Reconciliation Australia (2011), Enhancing Indigenous Financial Capability Programs, First Nations Australia, Prepared for the Indigenous Financial Services Network.

Reid, C., (2003), Financial literacy: The teachers' perspective, A presentation by Christine Reid, Executive Officers, Business Educators Australasia, to the ASIC Stakeholder Forum, Sydney, 24 July 2003. [Internet Document] [cited 16-12-2010] available from http://www.fido.asic.gov.au/fido/fido.nsf/lkuppdf/FIDO+PDFW?opendocument&key=Christine_Reid_finlit_presentation_pdf

Schagen, S & Lines, A. (1996), Financial literacy in adult life, Report to the Nat West Group Charitable Trust, Slough: National Foundation for Educational Research (NFER).

Senior, K., Perkins, D. & Bern, J. (2002), Variation in material wellbeing in a welfare based economy, The South East Arnhem Land Collaborative Research Project, The University of Wollongong.

Taylor, S. and Wagland, S. (2013), 'The solution to the financial literacy problem: what is the answer?' *Australasian Accounting Business and Finance Journal*, vol 7, no 3, pp 69-90.

Urbis Keys Young (2006), National Indigenous Money Management Agenda (NIMMA):

Community Consultations. Prepared for Reconciliation Australia. Melbourne, Australia: Urbis Keys Young, Final Report: Confidential for NIMMA Indigenous Banking Reference Group.

West, J. (2012), Financial literacy education and behaviour unhinged: combating bias and poor product design. *International Journal of Consumer Studies* 36(5): 523-530.

Willis, L.E. (2008), Against financial-literacy education, Iowa Law Review 94(1): 197-285.

Worthington, A. (2006), Predicting financial literacy in Australia, *Financial Services Review*, vol. 15, no. 1, pp. 59-79.

Worthington, A.C. (2008), Knowledge and perceptions of superannuation in Australia, *Journal of Consumer Policy* 31: 349-368.

A (W)HOLE IN THE FINANCIAL BUDGET: BUDGETING'S INFLUENCE ON THE EFFECTIVE USE OF CREDIT CARD DEBT IN AUSTRALIA

Sanja Ajzerle[a], Mark Brimble[b] and Brett Freudenberg[c]

[a] Griffith University, Brisbane, Queensland
Tel: +61 7 3735 7111, Email: sanja@astrofinancialplanning.com.au

[b] Corresponding author: Associate Professor Mark Brimble,
Griffith Business School, Griffith University, Brisbane, Queensland
Tel: + 61 7 3382 1355, Email: m.brimble@griffith.edu.au

[c] Griffith University, Brisbane, Queensland
Tel: + 61 7 3382 1196, Email: b.freudenberg@griffith.edu.au

ARTICLE INFORMATION

Article History:
Submitted 30 Octobet 2015,
Revision: 21December
Acceptance: 23 December 2015

Key words:
Personal debt, budget, credit card, effective debt

D14; E51

ABSTRACT

Credit card debt has become intrinsic to the way of life and are accepted as part of modern day living. This paper examines to what extent personal budgeting can influence the effective use of Australian credit card debt. The findings suggest that the most effective credit card debtors are those who consider they do not need a budget due to low income and expenses followed by those without a budget but often earning in excess of $180,000 p.a. Participants with the lowest effective use of credit card debt are those who do have a budget but rarely follow it.

Introduction

Unlike previous generations, credit card debt today is used as a preferred payment method to purchase everything, including groceries and services (Kamleitner & Kirchler, 2007; Lea *et al.*, 1993; Yilmazer & DeVaney, 2005). The Australian Bureau of Statistics (ABS) (2009) identified that 55 percent of Australian households incur credit card debt, and a number of studies observe that not only has personal debt become socially acceptable, but also that some consumers observe it as a life saving instrument (Ahmed, Amanullah, & Hamid, 2009; Kamleitner & Kirchler, 2007; Starr, 2007). Indeed at the end of August 2015 there were more than 16 million credit card accounts with more than $50.5 billion in outstanding end of month balances in Australia (RBA, 2015).

If used properly, personal debt can simultaneously bring prosperity to the financial institutions and also to consumers (Berg, 2005; Watkins, 2009). Advantages to consumers include use in offset strategies, security (easy access in emergency), efficient payment, funds transfer and recording keeping. However, personal debt is not without risks. When used inappropriately, personal debt has a tendency to be the most important contributing factor to distress, financial difficulty or even bankruptcy, particularly when experiencing cash flow difficulties (Baek & Hong, 2004; Berg, 2005; Cava & Simon, 2005; Kamleitner & Kirchler, 2007). Despite this, little is known about the influence of the effective use of credit card debt in Australia. This raises the question of how effectively credit card debt is used by Australian consumers and the extent to which personal financial budgeting affects this.

There have been a number of prior studies concerning credit use, one which focused on credit card misuse (Norvilitis & Santa Maria, 2002; Watson, 2009). A small study conducted by Norvilitis *et al.* (2006) indicated that individuals with an extremely basic or non-existing financial knowledge do not understand the implications of accumulating excessive credit card debt. Others found that while credit cards enable consumers to satisfy their need for instant gratification as well as maintaining or improving their existing lifestyle (Griffiths, 2007; Kamleitner & Kirchler, 2007; Scott, 2007), there is little consideration of the costs (interest and fee) related to these purchases (Griffiths, 2007; Kamleitner & Kirchler, 2007; Scott, 2007). Despite these concerns, little attention has been given to the notion of 'effective use' of credit card debt and how this may be related to money management skills, in particular budgeting.

The purpose of this study is to examine the effect of simple personal financial management strategies (such as budgeting) have on the effective use of consumer debt, and in particular credit card debt. Given the growth in consumer debt and anecdotal evidence of consumers struggling with credit cards that advisers and the media report, we contend this is an important area to gain further understanding of the effectiveness of the use of debt and how simple personal financial management tools (e.g. budgets) impact upon this. In addition, we note that there is little empirical evidence on this issue in Australia to inform practitioners and policy makers.

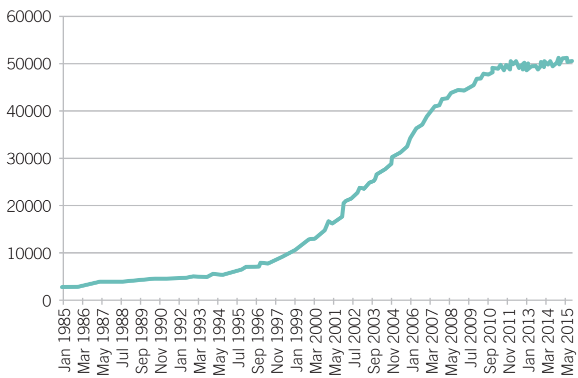
This paper details an Australian survey of 680 people which explored their use of credit card debt, and whether this was regarded as effective or ineffective in terms of having a tendency to increase an individual's financial wealth. The study then considers individuals' credit card effective debt score in terms of their financial management strategies, in particular personal budgeting. It was found that those individuals without a personal or family budget due to the low income and expense levels as well as those with a written budget that they follow 'most of the time', utilised credit card debt more effectively. In contrast, those individuals who have a written budget but rarely follow it use credit card debt less effectively.

The reminder of the paper is structured as follows. The next section contains a review of the literature, followed by a discussion of the data and method. This is followed by the results and discussion, with the final section including the limitations and future research before the paper concludes.

Credit card debt in Australia

The number of credit cards issued in Australia has consistently grown over since 1990s (RBA, 2015). This is reflected by the fact that a number of issued credit cards in Australia increased from 6.5 million in June 1994 to 16.1 million in August 2015 (RBA, 2015). During the same period, the Australian population increased at a slower rate, from 17.8 million in 1994 to 23.7 million in 2015 (ASB, 2002, 2008, 2015). Also the monetary value of Australian consumer's purchases and cash withdrawals obtained through credit cards increased approximately 11 times during the same period (RBA 2015) see figure below. In June 1994 credit card expenditure was $1.8 billion, but in June 2013 that expenditure was approximately $24.4 billion (RBA, 2015).

Figure 1: Credit card balances in Australia (RBA, 2015)



The growth of personal debt is partly attributed to the financial deregulation in Australia (Mandell & Klein, 2009), and it appears to be putting a financial pressure on Australians. Prior to major regulatory reform in the 1990s, when Australian financial institutions were heavily regulated, obtaining a credit card was more difficult (Green *et al.*, 2009; Griffiths, 2007). After financial deregulation personal lending criteria were relaxed, resulting in consumers become able to borrow more easily against the existing equity for consumption purposes with the potential to improve existing lifestyle (Kamleitner & Kirchler, 2007). For example, financial institutions frequently offer credit cards to consumers with a predetermined limit (Scott, 2007) without considering their financial position (Mandell & Klein, 2009). Processes for increasing credit limits on existing cards were also streamlined, increasing accessibility and enabling consumers to satisfy their need for instant gratification as well as maintaining or improving their existing lifestyle (Griffiths, 2007; Kamleitner & Kirchler, 2007; Scott, 2007). In addition, personal debt allows consumers to purchase desired goods and services they could not otherwise immediately afford (thus bringing purchases forward), and frequently without considering higher annual interest rates or penalties imposed by financial institutions (Griffiths, 2007; Kamleitner & Kirchler, 2007; Scott, 2007). Evidence suggests that Australian consumers are spending up to 50 percent of their after tax income to meet minimum repayment demands on existing personal debt, that includes credit card and other types of personal debt (Griffiths, 2007). This is approximately 1.7 times higher than 30 percent of consumers' gross income that was used as a gauge for the standard permissible debt servicing ratio (Griffiths, 2007). Further, statistics from the ABS (2009) indicate that approximately one-tenth of Australian consumers with a lower earning capacity spend more that 50 percent of gross income meeting their debt repayment demands.

Factors influencing debt

Research indicates that poor personal money management exhibited by careless budgeting, combined with a lack of knowledge and understanding of financial matters may predispose consumers to obtain personal debt (Lea *et al.*, 1995; Norvilitis *et al.*, 2003). In a study of 583 individuals classified as non-debtors, mild debtors or serious debtors, Lea, Webley & Walker (1995) found that participants with poor money management (for example, lack of budgeting to monitor spending, having no savings to assist with unexpected expenses or having unrealistic expectations of future income) were overcommitted with personal debt (Walker, 1996). In a study of 100 mothers of new babies, Walker (1996) found that those participants who implemented budgeting techniques to control additional expenditure due to a new baby experienced lower financial difficulties than those without a budget.

In addition, research suggests that credit cards are used for a wide range of purchases (daily living expenses to luxury goods and holidays) creating risk for consumers who utilise them as a source of financing (Kamleitner & Kirchler, 2007; Livingstone & Lunt, 1992; Schooley & Worden, 2010). Others distinguished credit card users between convenience (tend to pay outstanding balance monthly) and instalment credit card users (a form of financing with ongoing balances) (Ahmed *et al.*, 2009; Dellandale & Saporoschenko, 2004; Rutherford & DeVaney, 2009).

In the later case, the impact of instant gratification and/or lifestyle maintenance cannot be ignored with some not being able to manage temptations and overspending despite the financing costs (Borden *et al*., 2008; Dellandale & Saporoschenko, 2004; Flatherty, 2003, Kamleitner and Kirchler, 2007). Furthermore, this overspending can be exploited by marketing techniques employed by the retail industry and financial institutions offering 'enrichments' and rewards programs based on spending volume (Scott, 2010; Ahmed *et al*., 2009; Norvilitis & Santa Maria, 2002). Thus, behavioural influences appear to be a key part of personal debt accumulation.

This paper will contribute to this literature by considering the possible relationship between credit card debtors in Australia and budgeting methods as a key personal financial management tool. In particular we examine the question: *How does the use of personal budgeting influence the effective use of credit card debt?*

Data and method

This paper utilises a two stage mixed method approach to examine above stated research question. In Stage One semi structured interviews and focus groups are used to scope out effective use of consumer debt, the results of which informed the development of a survey used in Stage Two.

Stage one: Interviews

Stage One explored participants' opinions and personal experiences about debt, factors influencing debt and their insights on managing and controlling different types of personal debt. It incorporated two different samples, consisting of finance professionals and Australian consumers. A total of 22 (15 with finance professionals and 7 with consumers)[1] semi-structured interviews were conducted. A further 13 consumer individuals shared their beliefs and experiences in regards to debt by participating in three focus groups providing a total of 35 participants.

Stage two: Survey

The results of stage one informed the development of a three part survey. The first section was to collect data regarding participants' money management skills. The second section was divided into two parts: participant's perception of debt utilisation and debt related questions.[2] The final section focused on participants demographic data. The instrument was reviewed and pilot tested by ten individuals for jargon, improper vocabulary bias and ambiguity (Andrews *et al*., 2003). The instrument was distributed to consumers with the assistance of associations and businesses including professional associations, consumer advice organisations and financial services entities.

[1] The selection of finance professional participants was based on purposive sampling (Palys, 2008) from various finance occupations including bankers, financial planners, financial counsellors, mortgage brokers and university academic personnel specialising in finance subjects. The selection of the consumer sample was based on the convenience sampling (Anderson, 2010) resulting in a number of participants from different age groups, gender and nationality. This facilitated a variety of opinions and experiences from both professional and consumer participants.
[2] Survey participants indicated their responses by using a Likert-style scale of choices including strongly disagree, disagree, neutral, agree, strongly agree, not sure and not applicable (Neuman, 2011).

To gain an understanding of the relationship between credit debt and its effective or ineffective utilisation, participants were asked a range of questions measuring their attitude towards different debt categories.[3] Only responses to those questions were used to generate the credit card 'Effective Debt Score' (EDS). Participants' debt attitude was measured by using a Likert-style scale of choices, ranging from strongly disagree, disagree, neutral, agree, strongly agree to not applicable (Neuman, 2011).[4] A list of 29 questions were used to calculate participants' EDS are detailed in the Appendix. The sample was then split out at the median credit card EDS which was 3.44 out of five. Those scoring above 3.44 would have a tendency to use debt effectively, whereas those below do not.

A total of 823 participants commenced the survey with 680 entirely completing it, providing 82.6 percent of usable survey responses. Of these, 613 participants (90.1%) reported they utilised personal debt, whilst 67 participants (9.9%) were debt free. Of those with incurred personal debt, 334 (49.1%) reported a current credit card debt, ranging from $1 to over $10,000 (see Table 1). The sample of credit card debtors is well distributed across gender, age, marital status, children, income and occupation (see Table 2). The credit card debtor sample was categorised into four groups, depending on their budgeting methods (see Table 4)[5].

In terms of credit use, 334 participants (45 percent of males and 55 percent of females) had credit card debt (see Table 2). Credit card debt was reported to be used more by participants aged 25 to 34 (29%), 35 to 44 (29%) and 45 to 59 (24%), and much less by participants aged 18 to 24 (11%); and considerably less by participants over 60 years of age. Further, credit card debt was used more by married or defacto participants (71%), followed by single participants (22%) and divorced or widowed participants (8%).

[3] These factors were drawn from the literature and the stage 1 focus groups.

[4] Only responses for strongly disagree, disagree, neutral, agree and strongly agree were used to calculate the EDS of credit card debt. For effective credit card debt responses, coding options ranged from 1 for 'strongly disagree' to 5 for 'strongly agree'. Ineffective personal debt responses were coded the opposite. For example, survey question "I have used my credit card to purchase sale items without paying the credit card balance in full when due" was classified as an ineffective use of credit card debt. Hence, each participant that had 'strongly agree' with this statement was coded with 1, whereas responses 'strongly disagree' were coded with 5. Responses 'not sure' and 'not applicable' were ignored when calculating credit card EDS.

[5] Participants utilising a written budget that was followed most of the time were classified under Group 1, whilst participants with a written budget that was rarely followed were part of Group 2. Group 3 consisted of participants with no budget. Participants that indicated no utilisation of budgeting methods due to the low income and expenses were classified under Group 4.

Table 1: Current credit card debt value of participants

Credit card debt	N	Percentage
$0	346	50.9%
$1 - $1,000	32	4.7%
$1,001 - $5,000	105	15.4%
$5,001 - $10,000	47	6.9%
Over $10,001	52	7.6%
Paid in full	90	13.2%
Other*	8	1.2%

* Includes responses for 'Prefer not to answer', 'Not sure', and 'Don't care'

In terms of the four budget groups, it appears that females were more likely to prepare a budget (see Table 2). Group 1, where participants followed a written budget most of the time consisted of 65 percent females, whereas Group 2 where a written budget was rarely followed consisted of 63 percent females. A higher percentage of participants between 18 and 24 years of Group 4 where a budget is not maintained due to the low income and expenses incurred a credit card debt when compared to the pooled sample. They may represent mature age children still living at home, with their parents paying for a large proportion of their living expenses (such as accommodation and food). Most credit card debtors had completed a university degree (42 percent undergraduate and 25 percent postgraduate degrees). However, 33 percent of Group 4 indicated Year 12 as a higher level of completed education, which may be indicative of them considering that their income is low or they are still currently studying at the tertiary level.

Overall the sample is considered to be generally representative, however the higher than usual proportion of the sample with post-graduate qualifications should be considered when generalising our results (ABS, 2008b).

Table 2: Descriptive statistics of credit card debtors

		Pooled		Group 1		Group 2		Group 3		Group 4	
		N	%	N	%	N	%	N	%	N	%
		334	**100%**	**125**	**37%**	**57**	**17%**	**134**	**40%**	**18**	**5%**
Gender	Male	149	45%	44	35%	21	37%	74	55%	10	56%
	Female	185	55%	81	65%	36	63%	60	45%	8	44%
Age	18-24	37	11%	13	10%	7	12%	10	7%	7	39%
	25-34	98	29%	39	31%	19	33%	35	26%	5	28%
	35-44	97	29%	35	28%	18	32%	43	32%	1	6%
	45-59	80	24%	31	25%	12	21%	34	25%	3	17%
	60+	22	7%	7	6%	1	2%	12	9%	2	11%
Marital status	Married/Defacto	236	71%	86	69%	38	67%	104	78%	8	44%
	Single	72	22%	27	22%	12	21%	25	19%	8	44%
	Separated/Divorced	23	7%	11	9%	6	11%	4	3%	2	11%
	Widow/widower	3	1%	1	1%	1	2%	1	1%	0	0%
Children	No	203	61%	78	62%	33	58%	80	60%	12	67%
	Yes	131	39%	47	38%	24	42%	54	40%	6	33%
Education	Year 10	10	3%	2	2%	1	2%	4	3%	3	17%
	Year 12	38	11%	15	12%	7	12%	10	7%	6	33%
	Vocational	62	19%	27	22%	14	25%	20	15%	1	6%
	University (bachelor)	141	42%	56	45%	23	40%	58	43%	4	22%
	Postgraduate (PhD)	83	25%	25	20%	12	21%	42	31%	4	22%
Occupation	Financial planners	27	8%	11	9%	4	7%	12	9%	0	0%
	Bankers	2	1%	1	1%	1	2%	0	0%	0	0%
	Accountants	43	13%	15	12%	2	4%	25	19%	1	6%
	Mortgage brokers	1	0%	0	0%	0	0%	1	1%	0	0%
	Financial counsellors	12	4%	5	4%	5	9%	2	1%	0	0%
	Professionals	22	7%	9	7%	2	4%	11	8%	0	0%
	Clerical and administration	102	31%	40	32%	21	37%	36	27%	5	28%
	Technicians and trade	25	7%	12	10%	3	5%	9	7%	1	6%
	Self-employed	7	2%	2	2%	1	2%	3	2%	1	6%
	Hospitality workers	1	0%	0	0%	0	0%	1	1%	0	0%
	Medical workers	9	3%	3	2%	2	4%	4	3%	0	0%
	Sales workers	18	5%	8	6%	2	4%	6	4%	2	11%
	Machinery operators	1	0%	1	1%	0	0%	0	0%	0	0%
	Labourers	1	0%	0	0%	0	0%	1	1%	0	0%
	Students	29	9%	8	6%	6	11%	8	6%	7	39%
	Education (lecturers)	30	9%	9	7%	7	12%	13	10%	1	6%
	Other	4	1%	1	1%	1	2%	2	1%	0	0%

Income (Individual)	$0 - $18,200	19	6%	7	6%	3	5%	6	4%	3	17%
	$18,201 - $37,000	38	11%	16	13%	6	11%	8	6%	8	44%
	$37,001 - $80,000	144	43%	56	45%	28	49%	54	40%	6	33%
	$80,001 - $180,000	81	24%	33	26%	14	25%	33	25%	1	6%
	$180,001 +	39	12%	11	9%	1	2%	27	20%	0	0%
	Not applicable[1]	13	4%	2	2%	5	9%	6	4%	0	0%
Income (Partner)	$0 - $18,200	44	13%	18	14%	4	7%	19	14%	3	17%
	$18,201 - $37,000	29	9%	7	6%	4	7%	16	12%	2	11%
	$37,001 - $80,000	94	28%	43	34%	19	33%	28	21%	4	22%
	$80,001 - $180,000	68	20%	21	17%	12	21%	35	26%	0	0%
	$180,001 +	6	2%	2	2%	1	2%	3	2%	0	0%
	Not applicable[1]	93	28%	34	27%	17	30%	33	25%	9	50%

This table presents summary descriptive statistics of a sample of 334 credit card debtors

[1]Includes responses for ‘Prefer not to answer’, ‘Not sure’ and ‘Don’t care’

Group 1 = I have a written budget that I follow most of the time
Group 2 = I have a written budget which I rarely follow
Group 3 = I don’t have a budget
Group 4 = I don’t need a budget as both my income and expenses are low

Results and discussion

The first stage (interviews and focus groups) revealed a range of factors that influence consumer behaviour in relation to credit card use. A key issue is the agreement on the importance for consumers' welfare (and the Australian economy) and that debt is effectively, but often that is not the case. It was noted that without debt, consumers' expenditure would be limited to their savings or disposable income, consequently preventing access to wealth building strategies that could assist with interest offsets, tax deductions, capital growth and dividend paying investments. This was also linked to the purchase of a family home which may not be achievable without obtaining a debt. Other uses of debt (purchase of products and services such as holidays or consumables that provides no residual asset in value) were deemed ineffective use of debt and that credit cards were often used in this regard, and promoted over spending. It was acknowledged however that, in terms of financial difficulty, utilising credit card debt, for a short period only, could be appropriate.

Key to the successful use of these instruments was disciplined budgeting and the type and level of personal debt obtained. This is because an effective budget assists with planning, monitoring and controlling of consumers' expenses and disposable income, thus minimising the possibility of overspending. While acknowledging this, many participants admitted to not consistently monitoring their income and expenses levels with several pointing out that budgeting is time consuming. Furthermore, seeking the assistance from finance professionals (when in financial difficulty) was not a priority of consumer participants. These points informed the development of the effective debt measurements for credit cards.

It also highlights the potential and perceived role of budgeting, yet the dichotomy that most participants, while acknowledging these, either do not budget or do so with little consistency.

In terms of the survey data, most participants indicated that they did not have a budget (Group 3: 40.1%) followed by Group 1 (37.4%) where participants followed their written budget most of the time (see Table 3). Of these in Group 3, approximately 83 percent spent an hour or less each week managing their finances. They were mainly males (52%), aged 35 to 44 (35%), married or in defacto relationship (77%), without children (63%) with university degree (42% with bachelor and 29% with postgraduate degree) and mostly performing clerical and administration duties (30%). Similarly, a majority of participants of Group 1 [with an existing budget followed most of the time] spent an hour or less a week managing their finances (75.2%). In contrast to Group 3, these participants of Group 1 were females (68%), aged 25 to 44 (with 31% aged 25 to 34 and 30% between 35 and 44). However, they were also without children (62%), with university degree (43% with a bachelor degree) and clerical or administration workers (34%).

Table 3: Budgeting methods

Questions – General debt	Pooled		Group 1		Group 2		Group 3		Group 4	
Total credit card debtors	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
	334	**100%**	**125**	**37.4%**	**57**	**17.1%**	**134**	**40.1%**	**18**	**5.4%**
Hours spend managing finances										
Less 1 hour	159	47.6%	47	37.6%	31	54.4%	68	50.7%	13	72.2%
1 hour	109	32.6%	47	37.6%	16	28.1%	44	32.8%	2	11.1%
2 hours	47	14.1%	21	16.8%	9	15.8%	15	11.2%	2	11.1%
3 hours	8	2.4%	4	3.2%	0	-	3	2.2%	1	5.6%
More than 3 hours	11	3.3%	6	4.8%	1	1.8%	4	3.0%	0	-
Meeting an unexpected $1,000 expense										
Credit Card	122	36.5%	41	32.8%	26	45.6%	53	39.6%	2	11.1%
Increase credit card limit	9	2.7%	4	3.2%	3	5.3%	1	0.7%	1	5.6%
Savings	169	50.6%	67	53.6%	20	35.1%	71	53.0%	11	61.1%
Other	34	10.2%	13	10.4%	8	14.0%	9	6.7%	4	22.2%
Credit card debt										
Usually paid in full when due	90	26.9%	37	29.6%	10	17.5%	36	26.9%	7	38.9%
Up to $1,000	32	9.6%	10	8.0%	5	8.8%	13	9.7%	4	22.2%
$1,000 - $5,000	105	31.4%	39	31.2%	17	29.8%	45	33.6%	4	22.2%
$5,001 - $10,000	47	14.1%	20	16.0%	7	12.3%	18	13.4%	2	11.1%
$10,001 - $20,000	32	9.6%	9	7.2%	12	21.1%	11	8.2%	0	-
Over $20,001	20	6.0%	7	5.6%	3	5.3%	10	7.5%	0	-
Not sure	1	0.3%	1	0.8%	0	-	0	-	0	-
Don't care	1	0.3%	0	-	1	1.8%	0	-	0	-
Prefer not to say	6	1.8%	2	1.6%	2	3.5%	1	0.7%	1	5.6%

Group 1 = I have a written budget that I follow most of the time
Group 2 = I have a written budget which I rarely follow
Group 3 = I don't have a budget
Group 4 = I don't need a budget as both my income and expenses are low

Groups 1, 3 and 4 preferred method of meeting an unexpected expense of $1,000 was to use savings (53.6%; 53% & 61%). In comparison, 45% of Group 2 would use a credit card to meet the unexpected expense. Group 4 had the lowest reliance on the use of credit card to the unexpected expenses (11.1%), even though they had the highest percentage (5.6%) indicating that they would need to increase their credit card limit to meet the unexpected expense.

It is of interest that participants without a written budget, due to low income and expenses, also pointed to using their existing savings (61.1%) when meeting an unexpected expense.

Of these, 54 percent were males, married (78%), with Year 10 (17%) and Year 12 (33%) as their higher level of education. It may be that these people are more aware of their budget circumstances and thereby control their spending and save for a 'rainy day'. This may be more related to psychological factors of control or something else, which will be explored in upcoming research. However, 22% of Group 4 indicated that they would use 'other' to meet the unexpected expense – which may relate to borrowings from friends/family or payday lending.

Whilst the number of individuals (38.9% in Group 4 and 29.6% in Group 1) usually paid the outstanding credit card balance in full each month, only 17.5 percent of Group 2 [with a written budget that is rarely followed] did the same. This would suggest that Group 2 were more inclined to carry an outstanding balance each month incurring interest, when compared to other three groups. It would appear that Group 2 are more inclined to rely on their credit card to meet unexpected expenses and carry forward an outstanding balance. It appears that the illusion of having a budget (but not following it) is more detrimental, as they may think by taking the time to initially formulate a budget that it will look after itself, and they do not then have the responsibility to monitor their income and/or expenses.

Approximately 31.2% percent of Group 1 and 33.6 percent of Group 3 participants reported a credit card debt between $1,000 and $5,000. However, the results suggest that Group 3 (7.5%) that had no budget were most likely to incur an outstanding credit card debt in excess of $20,000. A high level of their income may be one of the reasons for this occurrence. Group 3 reported to earn the highest income as 20 percent had an individual annual income over $180,000 and 26 percent of their spouses earned between $80,001 and $180,000 per annum, when compared to other three groups (see Table 2). It appears that those on a high income do not perceive themselves as needing a budget, this may be because their regular high income can meet their credit card debt and spending. It would be interesting to consider what would happen should their income stream cease.

Further examination of the survey responses pointed to a discrepancy between participants believing they benefit from credit card debt whilst actually they incurred fees and charges on unpaid balances each month. For example, 65 percent of those with a written budget that is rarely followed (Group 2) and 66 percent of those without a budget (Group 3) responded 'strongly agree' or 'agree' to the survey question *"I benefit from the interest free period that my credit card gives me"*. This is despite that 82.5 percent of participants in Group 2 and 73.1 percent of those in Group 3 carry an outstanding balance each month. This may demonstrate how those participants have limited understanding of how credit cards operate including the calculation of fees and charges, minimum payments, consequences of cash advances or they know that they should have paid the balance each month. It is argued that this mis-perception between how they think and what is in fact occurring is of particular concern. It may be this non-alignment between thoughts and actions that could lead to ineffective use of credit card debt.

In order to ascertain the effectiveness of the minimum repayment warning that financial institutions have included on credit card statements from July 2012, participants with credit card debt were asked to rate the following question *"The Minimum Repayment Warning on my credit card statement made me aware of the interest cost"*.

While 42 percent of participants in Group 2 ‘strongly agreed’ or ‘agreed’ with this statement, only a minority of them (17.5%) paid in full the outstanding credit card balance each month. This may lead to the suggestion that some participants tend to tolerate incurring interest for the convenience credit cards offer, or that they use credit card debt as an easy source of credit or they may not be able afford to pay the outstanding balance. In comparison, half of participants (50%) without a budget due to low income and expenses ‘strongly agreed’ or ‘agreed’ with that statement whilst they were most likely (38.9%) of all groups to pay the outstanding balance in full when due. It could be that Group 4 has the greatest alignment between their thoughts and actions, as due to their low income levels they need to monitor their spending (even without a formal budget).

Responses to the survey question *“I sometimes buy items (e.g. clothes) with my credit card that I would not normally buy if I didn’t have a credit card”* appear to indicate that following a budget may prevent overspending. This is because 54 percent of those with written budget followed most of the time ‘disagreed’ or ‘strongly disagreed’ with the survey question, compared to only 35 percent of those who rarely followed a written budget.

In regards to the credit card EDS, it appears that Group 1 (3.45) [where participants followed a written budget most of the time]; as well as participants of Group 3 (3.51) [where participants did not have a budget] and Group 4 (3.53) [where participants did not have a budget due to the low income and expenses] scored above the median value of 3.44. This would indicate that they have a tendency to use credit card debt more effectively. It is of interest that Group 4 had the highest credit card EDS (3.53). However, for Group 1 they are just above the median value – thus questioning how important the use of the budget that they follow in the effective use of credit card debt. This suggests the complexity of one’s financial affairs may drive the usefulness of a budget. In contrast, participants of Group 2 (3.09) [that rarely followed a written budget] scored below the median value, indicating a less effective use of credit card debt (see Table 4).

Table 4: Credit card effective debt score (EDS)

Group	Group 1	Group 2	Group 3	Group 4
EDS	3.45***	3.09	3.51***	3.53*

* denotes statistical significance at the 5% level
** denotes significance at the 1% level
*** denotes significance at 0.5% level.

Group 1 = I have a written budget that I follow most of the time
Group 2 = I have a written budget which I rarely follow
Group 3 = I don’t have a budget
Group 4 = I don’t need a budget as both my income and expenses are low

The conducted t-tests indicated that there was a statistical significant difference between those participants in Group 1 [written budget followed most of the time] and Group 2 [written budget rarely followed]: $t\,(182) = 3.155$; $p < 0.001$. Also, the t-test $t\,(191) = -3.623$; $p < 0.05$ showed that participants of Group 2 utilise credit card debt significantly less effectively than those in Group 3 as well as those in Group 4 ($t\,(75) = -2.158$; $p < 0.05$).

Overall, the examination of the credit card debtor sample found a significant difference between the median credit card EDS and Group's EDS. Participants of Group 2 [written budget rarely followed] with credit card EDS of 3.09 were the only group that scored below the median value of 3.44. Findings that Group 3 [without a budget] scored 3.51 and of Group 4 [without a budget due to the low income and expense levels] scored above those in Group 1 (3.45) [written budget followed most of the time] would tend to indicate that following a budget is not by itself a determinative of effective credit card use rather ones awareness of their financial circumstances and the overall approach and attitude to personal financial management. Thus, in some cases not having a formal budget may be compensated for by a greater awareness of income, expenses, use of credit card debt together with a greater degree of discipline and self-control. In the case of Group 2 (having a budget that is not followed), the opposite affect may be true, by luring consumers in to a false sense of financial control and confidence.

Limitations and future research

The current research has several limitations. First, the scope is limited to the Australian residents over 18 years of age with personal debt. Second potential limitation was participants' education levels as participants with tertiary education were overrepresented. Third limitations included the electronic nature of the survey questionnaire since Australians without the internet access or limited knowledge how to operate a computer would have prevented some individuals participating. This may also be part of the reason for the lower percentage of participants over 60 years of age. Finally, the data was self reported by participants, which may result in reporting errors.

Given these findings it would be interesting to consider the locus of control of participants and how this is related to the effective use of debt, as well as budgeting. Future research could include measuring the financial capability, the demographic characteristics of participants' family and friends as well as the current level of their assets, outstanding debt levels and the level of their income level to search for possible relationships.

Future research could use case studies about everyday people that have increased their wealth with personal debt, especially amongst participants with both low and high income levels. Conducting case studies research would tend to eliminate self reporting limitations. Another possible future research topic could be to study the efficacy of the information sources and to what extent participants find the sources useful and reliable with their effective use of personal debt.

Conclusion

The availability and use of credit cards in Australia has become prevalent, with a greater percentage of Australians being able to access and use this type of personal debt. Credit cards provide a ready and easy source of credit that has become a common form of purchasing in the modern world. However, this convenience comes at a cost as credit card debt can carry the highest rate of interest, which can compound daily. It is because of the combination of ease of access and interest rates, that credit card debt may cause people undue hardship as they purchase things spontaneously that they do not really need and/or struggle to pay off the outstanding balance at the end of each month.

It is important to have a greater understanding about what are the characteristics that would tend to indicate if people use credit card debt more effectively than others, and thereby increase their personal wealth.

This study of 680 Australians found that those with a budget that they followed most of the time had the third highest effective use of credit cards (represented by their EDS). However, those with the highest effective use were those who regarded that their income and expenses too low to warrant a budget. It may be that these people due to their low wealth automatically place spending restrictions on themselves without the need for a formal documentation/budget. Further, those participants may observe using credit cards as a payment method as unreal expense whereas using cash money may seem more realistic to maintain and focus on maintaining positive cash flow.

Interestingly, it appears that those with the lowest effective use of credit card debt are those who do have a written budget which is rarely followed. It may be that these people are luring themselves into a false sense of financial control. This is further demonstrated by this group being more likely to use their credit cards to meet an unexpected expense of $1,000 (45.6%), or increase their credit card limit (5.3% – which would indicate that their credit card is already 'maxed out'), and are the least likely to rely on savings (35.1%). Also, this group is less likely to pay off their credit card in full when it is due (17.5%). Hence, it appears that having a 'pseudo' budget may be worse for these people as it gives them a false impression that they have their spending under control, and that for a budget to be effective it must actually be followed most of the time.

Consequently, it appears that the [w]hole of the story in terms of budgeting and the effective use of credit card debt is a mixed story. Although, it does appear if someone does go to the trouble of formulating a budget but rarely follows it, then this could lead to a hole in the financial budget through the ineffective use of debt.

References

Ahmed, A., Amanullah, A., & Hamid, M. (2009). Consumer perception and attitude towards credit card usage: A study of Pakistani consumers. *Journal of Comparative International Management*, 12(1), 47-57.

Anderson, C. (2010). Presenting and evaluating qualitative research. *American Journal of Pharmaceutical Education*, 74(8), 1-7.

Andrews, D., Nonnecke, B., & Preece, J. (2003). Conducting research on the internet: Online survey design, development and implementation guidelines. *International Journal of Human-Computer Interaction*, 16(2), 185-210.

Australian Bureau of Statistics (2002). Australian National Accounts: Financial Accounts, March 2002 (No. 5232.0). Retrieved from http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/370A7B6380EDF765CA256BE60000735A/$File/52320_mar%202002.pdf.

Australian Bureau of Statistics (2008). Australian Historical Population Statistics: Population Size and Growth (No. 3105.0.65.001). Retrieved from http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3105.0.65.0012008?OpenDocument.

Australian Bureau of Statistics (2008b). Australian Social Trends 2008: Education across Australia (No. 4102.0). Canberra, Australian Capital Territory.

Australian Bureau of Statistics (2009). Australian Social Trends: Household debt (No. 4102.0). Canberra, Australian Capital Territory.

Australian Bureau of Statistics (2011). Census Dictionary (No. 2901.0). Retrieved from http://abs.gov.au/ausstats/abs@.nsf/lookup/2901.0Chapter7602011.

Australian Bureau of Statistics (2015). Australian Demographic Statistics (No. 3101.0). Retrieved from http://www.abs.gov.au/ausstats/abs@.nsf/mf/3101.0.

Baek, E., & Hong, G.S. (2004). Effects of family life-cycle stages in consumer debts. *Journal of Family and Economic Issues*, 25(3), 359-385.

Berg, D.R. (2005). Good debt – bad debt. Sackbusiness, 26(8), 29-29.

Borden, L.M., Lee, S.A., Serido, J., & Collins, D. (2008). Changing college students' financial knowledge, attitudes, and behavior through seminar participation. *Journal of Family and Economic Issues*, 29(1), 23-40.

Cava, G.L., & Simon, J. (2005). Household debt and financial constraints in Australia. *The Australian Economic Review*, 38(1), 40-60.

Dellandale, S., & Saporoschenko, A. (2004). Factors in gaining compliance toward an acceptable level of personal unsecured debt. *The International Journal of Bank Marketing*, 22(4), 279-290.

Flatherty, M. (2003). Using debt wisely. *Physicians Financial News*, 21(10), 2-2.

Gaines, F.J. (1986). The mathematics of borrowing money. *The Mathematical Gazette*, 70(451), 14-18.

Green, H., Harper, I., & Smirl, L. (2009). Financial deregulation and household debt: The Australian experience. *The Australian Economic Review*, 42(3), 340-346.

Griffiths, M. (2007). Consumer debt in Australia: Why banks will not turn their backs on profit. *International Journal of Consumer Studies*, 31(3), 230-236.

Kamleitner, B., & Kirchler, E. (2007). Consumer credit use: a process model and literature review. Revue Européenne de Psychologie Appliquée, 57(4), 267-283.

Lea, S.E.G., Webley, P., & Levine, R.M. (1993). The economic psychology of consumer debt. *Journal of Economic Psychology*, 14, 85-119.

Lea, S.E.G., Webley, P., & Walker, C.M. (1995). Psychological factors in consumer debt: Money management, economic socialization, and credit use. *Journal of Economic Psychology*, 16(4), 681-701.

Livingstone, S.M., & Lunt, P.K. (1992). Predicting personal debt and debt repayment: Psychological, social and economic determinants. *Journal of Economic Psychology*, 13, 111-134.

Mandell, L., & Klein, L.S. (2009). The impact of financial literacy education on subsequent financial behavior. *Journal of Financial Counseling and Planning*, 20(1), 15-24.

Monticone, C. (2010). How much does wealth matter in the acquisition of financial literacy? *Journal of Consumer Affairs*, 44(2), 403-422.

Neuman, W.L. (2011). Social research methods: Qualitative and quantitative approaches. Boston: Pearson Education Inc.

Norvilitis, J.M., & Santa Maria, P. (2002). Credit card debt on college campuses: causes, consequences, and solutions. *College Student Journal*, 33(3), 356-363.

Norvilitis, J.M., & Szablicki, P.B., & Wilson, S.D. (2003). Factors influencing levels of credit-card debt in college students. *Journal of Applied Social Psychology*, 33(5), 935-947.

Norvilitis, J.M., Merwin, M.M., Osberg, T.M., Roehling, P.V., Young, P., & Kamas, M.M. (2006). Personality Facotrs, money attitudes, financial knowledge, and credit-card debt in college students. Journal of Applied Social Psychology, 36(6), 1395-1413.

Palys, T. (2008). Purposive sampling. In L.M. Given (Ed), The SAGE Encyclopaedia of qualitative research methods (Vol 2, pp. 526-529). Thousand Oaks, CA: Sage Publications Inc.

Parliament of Australia. (2005). Consenting adults deficits and household debt. Canberra, ACT: The Senate Printing Unit, Parliament House.

Reserve Bank of Australia (2015). Statistical tables: Payment system: Credit and charge statistics C1. Canberra, Australian Capital Territory. Retrieved from http://www.rba.gov.au/statistics/tables/index.html.

Rutherford, L.G., & DeVaney, S.A. (2009). Utilizing the theory of planned behaviour to understand convenience use of credit cards. *Journal of Financial Counseling and Planning*, 20(2), 48-92.

Schooley, D.K., & Worden, D.D. (2010). Fueling the credit crisis: Who uses consumer credit and what drives debt burden? *Business Economics*, 45(4), 266-276.

Scott, D. (2010). What would Veblen say? *Leisure Sciences*, 32, 288-294.

Scott, R.H. (2007). Credit card use and abuse: A Veblenian analysis. *Journal of Economic Issues*, 41(2), 567-574.

Starr, M.A. (2007). Saving, spending, and self-control: Cognition versus consumer culture. *Review of Radical Political Economics*, 39(2), 214-229.

Taylor, S., Juchau, R., Houterman, B., & McDonald, T. (2007). Financial planning in Australia. Reed International Books Australia.

Walker, C.M. (1996). Financial management, coping and debt in households under financial strain. *Journal of Economic Psychology*, 17, 789-807.

Watkins, J.P. (2009). Corporate profits and personal misery: Credit, gender and the distribution of income. *Journal of Economic Issues*, 43(2), 413-422.

Watson, S. (2009). Credit Card misuse, money attitudes, and compulsive buying behaviours: A comparison of internal and external locus of control (LOC) Consumers. *College Student Journal*, 43(2), 268-275.

Yilmazer, T., & DeVaney, S.A. (2005). Household debt over the life cycle. *Financial Services Review*, 14(4), 285-304.

UNDERSTANDING THE RELATIONSHIP BETWEEN FUND FLOWS AND PAST PERFORMANCE IN AUSTRALIAN MANAGED FUNDS

Sudharshan Reddy Paramati, Di Mo, Rakesh Gupta

Griffith Business School, Griffith University, Queensland, Australia 4111

Corresponding author: Dr Rakesh Gupta,
Griffith Business School, Griffith University, Brisbane, Queensland
Tel: +61 7 3735 7593, Email: r.gupta@griffith.edu.au

ARTICLE INFORMATION

Article History:
Submitted 6th November 2015
Revision: 10th December 2015
Acceptance: 18th December 2015

Key words:
Fund flows, Past performance, GFC, Managed funds.

ABSTRACT

This study aims to understand the prevailing literature which examined the effect of past performance of funds, risk of the funds, choice of fund legislation and the global financial crisis on the fund flows among the different asset classes in Australia. The empirical findings of previous studies document that retail funds are more sensitive to the past performance of funds than those of wholesale segment. These studies further argue that risk of the funds seems to be ineffective in explaining the fund flows. Findings also report that the choice of fund legislation has resulted in attracting more funds into the managed funds. Finally, in the post global financial crisis period, there is a significant inflow of funds into the managed and equity funds.

Introduction

In 2007, Australian Finance Group (AFG) Global Funds Management Index reported that on average Australians had the highest per capita investment in managed funds i.e. AU$ 63,794 as compared to the second highest of AU$ 43,458 of the US. The Australian managed funds industry is one of the largest in the world. Managed funds allow investors to pool their money together and invest into a variety of asset classes. The managed fund industry belongs to the investment sector, and includes superannuation funds, the statutory funds of life insurers, public unit trusts, and managed investment schemes. There are two main contributors for the growth of managed funds industry in Australia: the deregulation of financial markets in the 1980s and the successful story of 23 years old compulsory superannuation guarantee contribution scheme. The compulsory superannuation contributions started in 1992 with a modest rate of 3% of ordinary earnings paid by their employers. Superannuation contributions are currently at 9.5% and are expected to increase to 12% by July, 2025.

At the end of March 2013 quarter, the total managed fund assets were valued at AU$2,094 billion, of which AU$1,526 billion was comprised of superannuation funds (ABS, March 2013). The superannuation assets have been significantly increasing in the recent past. For instance, at the end of June 2015 quarter, superannuation assets become AU$ 2.02 trillion (ASFA, June 2015). Despite substantial growth in superannuation funds in Australia, there are not many empirical studies, which examined the asset allocation and flow of funds into these managed funds. Therefore, in this study we aim to focus on the existing literature in relation to the superannuation funds investment into the managed funds. Particularly, we aim to summarise the empirical findings of Gupta and Jithendranathan (2012 and 2015) whose studies mainly focused on investigating the fund flows and past performance of managed funds in Australia and also addressing the issue of superannuation fund choice legislation and global financial crisis (GFC) on fund flows.

Superannuation is simply a mean of saving and investing to accumulate wealth which will be used in the retirement period. In Australia, superannuation funds are broadly classified into four categories such as; corporate funds, industry funds, public sector employee funds and lastly retail funds. Among these funds, retail funds are the largest of the Australian managed funds, with an estimated value of over AU$ 1,129 billion as of March, 2013. These funds are established by the banks, insurance companies and investment firms. This sector further classified into wholesale and retail segments, with about AU$529 billion and AU$574 billion, respectively as of March, 2013. Again among these two sub-funds, retail funds cover the superannuation funds, retirement investment funds and discretionary investment funds. On the other hand, wholesale funds mainly comprises of other funds (Gupta and Jithendranathan, 2015).

Australian superannuation scheme is one of the largest in the world, and an important instrument in social planning for supporting Australia's aging population (Ali *et al*. 2015). For the past two decades, significant reforms have been taken place in the superannuation sector. Traditionally, many Australian employers offered the defined benefit (DB) plan to their employees.

Under DB plan, the employees' future benefit is determined by a specific formula; therefore, employees have no active control over their retirement fund. Since 1998, participants were given option to switch from DB plan to Defined Contribution (DC) Plan. The assets under DC plan are controlled by the worker. Therefore, the employees bear investment risks. With the rapid growth of superannuation investment choices, individuals have more options to allocate their retirement fund. However, lacking of the superannuation knowledge, the evidence shows that majority of individuals prefer to maintain the default option (Fear and Pace, 2009). The studies of Australian superannuation confirm this finding by showing fewer than 10% of participants actively choose their asset allocation (Senate Select Committee on Superannuation and Financial Services (SSCSFS)).

In general, investment decisions by the investors are made based on the past performance of superannuation funds. The funds that have performed well in the past can attract more investments, whereas the funds that are underperformed in the past can experience significant cash outflows. A number of studies have empirically examined the relationship between the fund flows and past performance of mutual funds in the US. For example, Ippolito (1992) documents that the mutual fund investments are primarily determined by the recent performance of the funds. The similar findings also reported by Sirri and Tufano (1998). Further, Goetzmann and Peles (1997) suggest that there is a significant association between fund flows and past returns. However, authors argue that fund flows are highly connected to the top quartile of past returns.

Similar argument is also empirically tested in Australian context. For instance, Sawicki (2001) examined the relationship between fund flows and past performance of wholesale balanced pooled Australian superannuation funds. The results of this study confirm the positive and significant relationship between fund flows and performance. Using a sample of 398 Australian managed growth and stable funds, Frino *et al*. (2005) document a significant positive association between current net cash flows and past performance of the funds.

In 2005, the Australian Government introduced superannuation funds legislation choice to enable employees to move their superannuation savings from one fund to another fund of their choice. With this introduction, managed funds became more flexible and accessible for the members, thereby encouraging members to save more for their retirement; however that is not always the case. For instance, the empirical findings of Fear and Pace (2009) reveal that there is no evidence of significant fund switching after the introduction of choice legislation. The potential reason for lack of funds switching can be attributed towards the cost of switching. This argument is supported with the empirical findings of Sy (2011). Author reveals that the choice of fund legislation had the opposite effect on superannuation investors as most of the members chose the default strategy for asset allocation rather than choosing their own choice. The empirical findings of Gerrans (2012) show that fund members did not make any changes in their investment strategies during the recent GFC.

Overall, empirical findings of previous studies document the mixed results in regards to the determinants of fund switching. For instance, one group of studies document that past performance of funds has significant and positive influence on flow of the funds (Ippolito, 1992; Goetzmann and Peles, 1997; Sirri and Tufano, 1998; Sawicki, 2001; Drew *et al*. 2002; Lynch and Musto, 2003; Bilson *et al*. 2005; and Frino *et al*. 2005).

Another group of studies establish that the flow of funds are influenced by other factors such as, equities and fixed interest rate assets (Benson *et al*. 2007; and Gharghori *et al*. 2008). Finally, few other studies report that the flow of funds are determined by the behavioral biases (Guercio and Tkac, 2002; Speelman *et al*. 2007; Fry *et al*. 2007; Bailey *et al*. 2011). This study will summarise the prevailing empirical studies who examined the fund flow and past performance of managed funds in Australia, and the impacts of superannuation fund choice legislation and GFC on fund flows.

The rest of this paper is organised as follows: Section-2 describes the empirical findings of previous studies which were focused on the fund flows and past performance. The final section highlights the major findings of previous studies in the context of Australia.

Existing evidence on fund flows and past performance

The prevailing literature on the relationship between fund flows and past performance of managed funds is very limited in Australia. For instance, a recent study by Gupta and Jithendranathan (2015) empirically investigated to what extent cash flows into funds are affected by the past performance of funds, risk factor of the funds, the choice of superannuation fund legislation and recent GFC. This study uses quarterly data from 1991 to 2013. The empirical results of this study documents an interesting findings. For instance, in the case of retail funds, the effect of high excess returns is tested, and the result show that Australian equity funds and managed stable funds are positively affected while Australian fixed interest funds and Australian property security funds are negatively affected. Fund size has negative effect on all categories of assets while past net flows, as measured by the lagged net flows, show statistically positive effect. For the total retail fund, the effect of superannuation and legislation choice was tested, and the result show that some part of the managed funds were influenced positively by the choice of legislation. However, the choice variable has negative effect on alternative investments, Australian equity, Australian fixed interest, mortgage, and Australian property. This disparity could be trigged by the fact that the investors divert their investment to less risky investments rather than more risky investments. Similarly, the effect of global financial crisis was tested for total retail fund and the results show that only two categories of funds indicate negative signs to the crisis variable which are the low risk assets such as, cash and mortgage. On the other hand, Australian equity, managed funds and various overseas funds had positive signs for the crisis variable.

For superannuation funds, the excess return variable has a significant positive sign for Australian equities, mortgage, managed stable, overseas fixed interest, currencies and also global equity funds. The size of the fund has considerable negative effect on net fund flows of cash, diversified fixed interest, Australian equity, Australia small companies, managed balanced, overseas fixed income, and the Australia property securities. The effect of choice of fund legislation is tested for the case of superannuation funds and the result display that managed balanced, managed growth, managed stable, overseas fixed interest and currency, and mixed portfolio funds all had significant positive affect. While the choice of fund legislation is negatively affecting equity funds of both domestic and overseas. It is important notice that the choice of legislation has resulted in moving the superannuation investments more into the managed funds.

Furthermore, the effect of global financial crisis is tested and the result show that the crisis has a positive effect on the Australian equities, Australian fixed interest and managed growth funds. On the other hand, the crisis has negative effect on cash, mortgage, overseas property funds, Australian property and mixed portfolio. This is triggered by the fact that investor reduce their investment in the property sector.

In the case of non-superannuation funds, the results suggest that active returns have a considerable positive influence on the fund flows of only Australian equity and managed stable funds. While size has a significant negative effect on most categories of the funds. Likewise, the effect of the choice of fund legislation is tested for non-superannuation funds and findings indicate that mixed portfolio funds are positively affected by the choice of legislation, whereas most of other categories of funds are negatively affected. This may be caused by the fact that many superannuation investors have discretionary investments. For the same funds, the effect of global financial crisis was tested, and the result show that only mortgage and mixed portfolio funds are affected negatively, whereas other categories of funds are not affected.

For the wholesale fund, the effect of excess past returns was tested, and the result show that only managed balanced and managed stable funds are positively affected, while it is negatively affected the net flow of overseas fixed income funds. Further, findings suggest that the size of the fund has a negative impact on most of the categories. For the same funds, the effect of choice of legislation was tested, and the result reveal that the net fund flows of managed growth fund is positively affected, while Australia property security funds are negatively affected. Furthermore, the effect of global financial crisis was tested, and the result shows a positive effect on the net flow of equity fund and negative effect on the property and mortgage funds. These could be traced to the fluctuation in the housing market that led to financial crisis.

Another study by Gupta and Jithendranathan (2012) empirically examined to identify whether the investors base their investment decisions up on the past performance of the funds using various asset categories of managed funds in Australia. Authors utilised quarterly data from 1991 to 2008. The major findings of the study are described as follows. For retail fund, the effect of past excess returns was tested, and the results show a positive effect on 14 categories of funds out 15 categories, whereas only one category favor the fact that net cash flows show a negative effect on past excess returns. On the other hand, fund size negatively affects net cash flows. Furthermore, the coefficient of risk variable is only significant on cash funds and overseas funds, and negatively effects on net flow of funds. Similarly, for wholesale fund, the effect of past excess returns was tested on 13 categories of investments, and the results disclose that only 9 categories of investments show that net flows have positive effect due to the past excess returns and only when the average past excess returns are in two to three quarters. This may be caused by the fact that wholesale funds have a higher investment and may attract informed investor whose investment decisions will not be solely depends on the past performance of funds.

For the case of superannuation fund, the effect of past excess returns was tested and the results display that out of 10 categories of funds, only 6 categories of funds show that the relationship between past excess returns and net flows of funds are positive.

This may be caused by the fact that superannuation investors are at disadvantage because their investment choices are based on the employment contract. On the other hand, risk sign is positive on the net flow of funds and overseas funds avert the risk. Similarly, the effect of past excess returns was tested for the non-superannuation fund and result shows that the past excess returns for two or three quarters positively affect the net flow of funds. However, risk measures have negative effect on the net flow of funds. Finally, for the retirement retail funds, the effect of past excess returns was tested, and the result shows that risk coefficient does not have any significant negative effect on any of the categories. In the case of cash fund the risk variable has a strong positive effect on net flows, which is an indication of risk taking behavior. These results suggest that the findings are not consistent across different funds.

Conclusion

The purpose of this study is to review evidence from the empirical studies, which aimed to examine the effect of past performance of funds, risk factor of the funds, the choice of fund legislation, and the global financial crisis on the asset allocation. The empirical findings of Gupta and Jithendranathan (2012) documented that the retail investors base their investment decisions more rigorously based on the past performance of funds as compared to the wholesale segment. Further, authors reported that the retail investors prefer less risky assets as compared to the wholesale investors and also showed significant lower interest for overseas investments. These findings indicate that the retail investors prefer the assets, which performed well in the past. Similarly, the empirical results of Gupta and Jithendranathan (2015) reported that both retail and wholesale investors base their investment decisions based on the past performance of the funds. Authors suggest that the riskiness of the funds has very little impact on the flow of funds. In addition, findings revealed that the choice of fund legislation has significant influence in terms of moving more funds into the managed funds. Finally, authors documented that after the global financial crisis both managed funds and equity funds have witnessed more inflows. Evidence from these studies indicates that investors do not consider risk in their asset allocation decisions; this may be because investors do possess sophisticated understanding of the markets and they are reluctant to seek expert financial planning advice. Recent evidence suggests no more than 20% investors have an ongoing relationship with a financial adviser.

References

Ali, P., Anderson, M., Clark, M., Ramsay, I., & Shekhar, C. (2015). No thought for tomorrow: young Australian adults' knowledge, behaviour and attitudes about superannuation. *Law and Financial Markets Review*, 9(2), 90-105.

Bailey, W., Kumar, A., & Ng, D. (2011). Behavioral biases of mutual fund investors. *Journal of Financial Economics*, 102(1), 1-27.

Benson, K. L., Gallagher, D. R., & Teodorowski, P. (2007). Momentum investing and the asset allocation decision. *Accounting & Finance*, 47(4), 571-598.

Bilson, C., Frino, A., & Heaney, R. (2005). Australian retail fund performance persistence. *Accounting & Finance*, 45(1), 25-42.

Drew, M. E., Stanford, J. D., & Veeraraghavan, M. (2002). Selecting Australian equity superannuation funds: A retail investor's perspective. *Journal of Financial Services Marketing*, 7(2), 115-128. Fear, J., & Pace, G. (2009). Australia's 'Choice of Fund' Legislation: Success or Failure?. *Rotman International Journal of Pension Management*, 2(2).

Frino, A., & Heaney, R. (2005). Do Past Performance and Past Cash Flows Explain Current Cash Flows into Retail Superannuation Funds in Australia? *Australian Journal of Management*, 30(2), 229-244.

Fry, T., Heaney, R., & McKeown, W. (2007). Will investors change their superannuation fund given the choice?. *Accounting & Finance*, 47(2), 267-283.

Gerrans, P. (2012). Retirement savings investment choices in response to the global financial crisis: Australian evidence. *Australian Journal of Management*.

Gharghori, P., Sujoto, C., & Veeraraghavan, M. (2008). Are Australian investors smart?. *Australian Journal of Management*, 32(3), 525-544.

Goetzmann, W. N., & Peles, N. (1997). Cognitive dissonance and mutual fund investors. *Journal of financial Research*, 20(2), 145-158.

Guercio, D. D., & Tkac, P. A. (2002). The determinants of the flow of funds of managed portfolios: Mutual funds vs. pension funds. *Journal of Financial and Quantitative Analysis*, 37(04), 523-557.

Gupta, R., & Jithendranathan, T. (2012). Fund flows and past performance in Australian managed funds. *Accounting Research Journal*, 25(2), 131-157.

Gupta, R., & Jithendranathan, T. (2015). The impact of superannuation fund choice legislation and the global financial crisis on Australian retail fund flows. *Financial Services Review*, 24(3).

Ippolito, R. A. (1992). Consumer reaction to measures of poor quality: Evidence from the mutual fund industry. *Journal of law and Economics*, 45-70.

Lynch, A. W., & Musto, D. K. (2003). How investors interpret past fund returns. *The Journal of Finance*, 58(5), 2033-2058.

Sawicki, J. (2001). Investors' Differential Response to Managed Fund Performance. *Journal of Financial Research*, 24(3), 367-384.

Senate Select Committee on Superannuation and Financial Services (SSCSFS) (2000) Roundtable on Choice of Superannuation Funds. Canberra, ACT, Australia: Parliament of the Commonwealth of Australia.

Sirri, E. R., & Tufano, P. (1998). Costly search and mutual fund flows. *Journal of finance*, 1589-1622.

Speelman, C. P., Clark-Murphy, M., & Gerrans, P. (2007). Decision making clusters in retirement savings: Preliminary findings. *Australian Journal of Labour Economics*, 10(2), 115.

Sy, W. N. (2011). Redesigning Choice and Competition in Australian Superannuation. *Rotman International Journal of Pension Management*, 4(1), 52-61.

griffith.edu.au/financial-planning-research-journal

Griffith UNIVERSITY

FINANCIAL PLANNING ASSOCIATION *of* AUSTRALIA