Framing the Financially Literate Subject:

An Analysis of Financial Literacy Discourse in New Zealand

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Abstract

The purpose of this study is to analyse the discursive framing of the financially literate subject and their needs within New Zealand. The first part of the study identifies and traces key themes within the framing of the financially literate subject, using documents derived from OECD publications and NZ governmental institutions. Working with the critical conjunction of rhetorical analysis and critical discourse analysis informed in part by the work of Foucault, the role of financial literacy in contemporary New Zealand society is addressed through analysis of a case study based on a public debate in New Zealand about the ethics of investment in munitions by providers of the government-supported pension plan, KiwiSaver. The first part of the thesis puts KiwiSaver in a broader policy context by examining documents from the OECD that were influential in setting the framework, rationale and approach for the New Zealand government's initiatives to restructure pension plans and encourage a change in the population's savings habits and citizens' grasp of financial principles. As it happened, the introduction of KiwiSaver in 2007 coincided with the onset of the global financial crisis, which saw a shift in the framing of the validation of the financially literate subject from a saving imperative to a need to manage individual risks and protect the market. These capabilities of managing risk and protecting the market, depicted as inherent to financially literate populations, manifest through the expectation that all those who participate in the market would preserve it through informal regulation based on informed consumer choice.

The second part of the thesis presents a case study of public reaction to the media exposé of a financial scandal that broke in August 2016 when it was discovered that KiwiSaver funds were being invested in companies manufacturing illegal munitions. Through analysis of selected newspaper articles and Twitter commentary, the thesis emphasises the complexity of the relationship between the expectations of financial literacy on the part of the government, OECD and financial sector, versus the realities of the financial marketplace. In tension with the emphasis on individual responsibility within official and institutional discourses of financial literacy, the exchanges via Twitter reveal the desire for, and partial practice of, a more civic-focused, collective way of interacting via the financial markets. The case study serves to illustrate the apparatuses of power operating in the field of financial literacy. Analysing the discursive production of the financially literate subject and the imperative rhetoric surrounding financial literacy will provide a fuller understanding of the construction and conceptualisation of the financially literate subject, the social power relations inherent in the drive towards improved financial literacy, and the strategic goals being pursued. Ultimately, the thesis will contribute to our understanding of financial literacy as an ideological framework.

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Dad, this one's for you.

Table of Contents

List of Illustrations, Tables etc.

Part I: Financial Literacy in the Context of Neoliberal Governmentality

Chapter 1: Introduction

> Financialisation:
>
> "A pattern of accumulation in which profits accrue primarily through financial channels rather than through trade and commodity production." Greta Krippner (2005, p.174)
>
> "A process whereby financial markets, financial institutions and financial elites gain greater influence over economic policy and economic outcomes." Thomas Palley (2007, p.1)

If you are a New Zealander and still watch free-to-air television, you might have noticed an increase over the last few years in advertisements aimed at getting you to buy funeral insurance. The thought of taking out insurance to cover your own funeral costs, essentially financializing your own death, may be a little jarring to some, but the evolution of these types of microinsurance policies, often aimed at those from lower income groups, signifies just one way the global trend towards financialisation has embedded itself in our daily lives. Indeed, in any given week or day we might be encouraged to consider a home equity release product, a payday loan, or an app that enables us to trade on the stock market with a few phone swipes. The ubiquity of these products or services that individually tie us to the financial marketplace, that encourage us to seek security or the answers to personal problems in the markets, is helped by normalised neoliberal ideals, woven through the financialisation process. The normalisation of both neoliberal ideals and financialisation is aided in various other ways, from the push for improved financial literacy to the implementation of KiwiSaver. We are living in the age of finance.

We got here via a confluence of catalysing factors. The trauma of World War II left a space for change, for reimagining how countries might be rebuilt better and stronger. Into this space stepped economist Friedrich Hayek. His fear of the perceived threat of post-war socialism and Keynesian economic theory saw the Mont Pèlerin Society formed after its members first met in 1947. The like-minded scholars and politicians Hayek drew together had faith that what was best for the world was societies that prioritised market-based solutions, and they set about creating a network of people within top-level educational institutes, media outlets, and government institutes in both Europe and the Americas, all working to develop, support, and realise ideas and policies that would help establish a global free-market economy. State intervention, they believed, should be kept to a minimum. Springing from that initial meeting, the members of the Mont Pèlerin Society created what is considered the most significant incubation ground for neoliberal economic theory (Bjerre-Poulsen, 2014).

The opportunity for neoliberal economic theory to make its first significant forays into the world came in the 1970s, with the collapse of the Bretton Woods system, which had essentially tied exchange rates of ratifying countries to the US dollar, and the stagflation and OPEC oil embargo that hit the United States particularly hard. In the face of these significant economic problems, politicians and economists questioned the ability of Keynesian economic theory to guide their countries through. They looked for something different and the groundwork done by the Mont Pèlerin Society decades earlier had neoliberal economic theories in prime position. Once in place, these neoliberal economic theories provided the grease with which financialisation could more easily make its way into society's core (Krippner, Lemoine, & Ravelli, 2017; Lapavitsas, 2013). Further aiding the spread of financialisation over this time, technological advancements and developments in information technology helped not only speed up the rate at which global trading could take place, but also allowed for more complex and sophisticated financial tools, which in turn brought more sophisticated financial products into the marketplace. With neoliberal ideals influencing public policy and increased faith in the financial market's power to boost economic growth, more funds began to be channelled into the financial sector. This funding shift was a global trend. By 2007, "the stock of global financial assets relative to world GDP grew from about 100 per cent of world GDP in 1980 to 360 per cent" (Wade, 2009, para. 7). Globalisation and economic policies geared toward supporting the interests of the financial sector have helped financialisation establish deep and wide-spread roots not just in New Zealand society, but akso in societies around the world. My research is situated within this landscape.

As financialisation began to spread globally, economists also became progressively concerned with decreasing birth rates and increasing life expectancies in developed countries. In the late 1980s, the Organisation for Economic Cooperation and Development (OECD), an entity created to help the economic growth and world trade of member countries with market economies, began to release publications warning its member countries of the potential economic impact of ageing populations. The main thrust of the concern was that as those of the Baby Boomer generation retired and began to claim their government-funded pensions, with the decreasing birth rates, there would be fewer members of the population working to fund those pensions.

In a neoliberal, financialised environment, policy advice generating from the OECD focused primarily on recommendations for implementing defined contribution plans to help ease the burden that existing pension plans placed on the nation's coffers. This type of retirement provision fits well with neoliberal ideology as funding is not via taxation and the plans themselves are run by private enterprise. Government involvement is kept to a minimum and individuals are responsibilised to take the brunt of the risk. These types of plan also fit well in a financialised society as they have the potential to expose large numbers of the population to the financial marketplace, significantly increasing the resources available to those markets. The problem is, how do you get people to sign up to regular payments into a defined contribution plan if, as in the case of New Zealand, they are already entitled to a taxation-funded pension when they retire? Enter financial education.

To encourage people to opt into a defined contribution plan those people must first understand and believe that they need it. This was the initial driver behind the OECD's first recommendations for the implementation of financial education programmes. To get the populace to separately save for their retirement, retirement itself and existing taxation-based retirement funding needed to be problematised. While retirement funding issues brought about by an ageing population and a decreasing birth rate had been framed as issues facing the country as a whole, to have individuals take individual responsibility, the problem and its solution needed to be positioned as uniquely personal. Individuals needed to be exhorted to consider their own retirements, to learn and put in place the measures needed to help them attain their desired financial comfort levels post-retirement. Financial literacy programmes would not only help individuals see that their level of comfort post-retirement was in their hands, but they would also educate individuals on ways to achieve their desired post-retirement lifestyle. By emphasising the individual's responsibility to save for retirement, minimising the role of existing taxation-based retirement provisions, these financial education programmes offer another tendril through which neoliberal economic ideals become embedded in society. Working to ensure a population is financially literate also helps to indemnify a government looking to divest responsibility for a pension scheme situated in the financial marketplace, a scheme that government is asking individuals to take part in at their own risk. To further consolidate the link between financial literacy initiatives and market-based defined contribution pension schemes, as might be expected of financial literacy initiatives connected to an enrolment drive, measures created to gauge people's levels of financial literacy indicated that the type of literacy being valued was not the type that would help so much with day-to-day budgeting, but, rather, the type that would help people understand financial investments, testing and prioritising people's understanding of interest, inflation, and diversification.

While the OECD's push for financial literacy continued to be strongly connected to discussions regarding ageing populations, following the 2007/2008 global financial crisis, the rhetoric surrounding financial education shifted slightly, with the financially illiterate positioned as also representing a threat to the well-being of the financial market. Indeed, policies and funding for financial literacy education and initiatives have been justified by various versions of the notion that it is "the first line of defense in well-functioning markets" (Menzies, 2013, p.7). Accordingly, much research is currently focussed on testing the links between educational initiatives and improvements in financial literacy, and increased financial literacy and improvements in financial decision-making; however, very little research has been done on the social power relations woven through the epistemology of financial literacy. Within the landscape of financialisation, the discourse surrounding financial literacy has not simply helped to normalise notions of financial market utility; it has formed part of what Foucault terms a 'regime of truth', legitimizing the financial marketplace's prominence in society.

Literacy of any kind generally holds positive connotations. It denotes a certain level of proficiency and indicates that the possessor is reasonably self-sufficient when it comes to the field they are literate in. Having a population seeking and achieving higher levels of proficiency in financial literacy must, in turn, be seen as a positive for society. However, when the mechanisms working to promote financial literacy are closely tied to the drive to get individuals investing in the likes of KiwiSaver – New Zealand's defined contribution plan; when what is claimed on behalf of financial literacy does not actually link to any significant or real protections against potential future financial crises; and when the most significant beneficiary of a large percentage of working New Zealanders placing a portion of their savings into KiwiSaver is the financial market itself, it is important to examine those mechanisms in more detail.

Through this research I argue that the pervasive framing of the financially literate subject is a mechanism of power, helping to normalise and legitimise the financialisation of society. I discuss how those sanctioning the drive for financial literacy at higher levels can make broad claims about the need for and utility of financial literacy by conflating discussions regarding what financial knowledge is necessary, protections for retirement, market sophistication and market protection, while not entering into more probing discussions about whether the financial marketplace is robust enough to justify the faith being placed in it. Ultimately, I argue that the rhetoric of financial literacy looks to responsibilise the individual to help justify the increased financial risk they are being asked to shoulder when signing on to pension schemes like KiwiSaver. The framing of financial literacy positions it as a shield of sorts, protecting both the individual and the marketplace when, in fact, the reality of the financial marketplace is such that those increased levels of responsibility do not come with any real increase in power. In a neoliberal system that looks to government to protect the reach and freedoms of the financial market while also staying out of its business, power is in the hands of the market. The individual, despite having a comparatively limited say in where their KiwiSaver investments go beyond what type of fund they invest in, certainly will reap the rewards of 'good' investments – as will their investment companies, thanks to percentage fees – but they will shoulder any loss borne from 'poor' investments on their own as the investment companies will still take a percentage of the balance and they will still charge their standard account fees, regardless of poor or positive performance.

Framed as a sensible choice, a financially literate choice, KiwiSaver is a mechanism through which a large percentage of New Zealand's working population are made financial marketplace stakeholders. Via the IRD and their KiwiSaver providers, they can track the balance of their KiwiSaver investments, review the performance (in terms of profit-making) of their providers, and compare funds. Through annual reports, KiwiSaver investors are informed of the year's notable market movements and trends, as well as market volatilities, instabilities, and speculations that may have affected their fund's performance. The information provided has a finely tuned focus on profits and those things that have affected profits. With stakeholders regularly advised of the state of the financial market and their returns from it, KiwiSaver does more than simply provide a mechanism through which people can help fund their lifestyles post retirement; it also works to align the interests of a large percentage of the New Zealand public with the interests of the financial market. The claim may be that financial literacy acts as a form of protection for the financial marketplace against future financial crises, but KiwiSaver, whether intentionally or not, does much more significant work protecting the financial market, reinforcing its primacy within our economy by making stakeholders out of large numbers of the New Zealand population.

For the individuals whose funds are placed within a system that rails against regulation and is known for obfuscation, power and real agency may come in the form of a collective voice. Via a case study that analyses backlash against news of KiwiSaver investments in munitions, I hope to highlight how in this real-life interplay between the financial market and those who use it via KiwiSaver – those who are expected to be financially literate – there are tensions and uncertainties. Not only is there a certain level of reluctance to take on all that is assumed of the financially literate individual, there is also a measure of cynicism about the position the financial market holds in society. The munitions investment backlash shows how social media sites like Twitter offer a space for collective action, providing individuals with an opportunity to share knowledge and immediately and directly voice concerns. Through this space opportunity is also offered to subvert, rather than uphold, the dominant discourse that shapes expectations of the financially literate individual and the financial marketplace, and to call for a more civic focus on how the financial market operates.

Research Aims

The purpose of this study is to analyse the discursive framing of the financially literate subject and his or her needs by financial literacy initiatives, the New Zealand government, print media, the financial sector itself, and the general public. Working with the critical conjunction of rhetorical analysis and critical discourse analysis informed in part by the work of Foucault, the research will examine texts from the OECD, the New Zealand government, financial reporters, financial literacy initiatives, and Twitter to identify discrete expectations of the financially literate populace and apparatuses of power in operation within the field of financial literacy. Analysis of the discursive production of the financially literate subject and the imperative rhetoric surrounding financial literacy will provide a fuller understanding of the construction and conceptualisation of the financially literate subject, the social power relations inherent in the drive towards improved financial literacy, and the strategic goals pursued. Ultimately, the thesis will contribute to our understanding of financial literacy as an ideological framework.

Significance of this Study

Current discussion surrounding financial literacy is full of imperative rhetoric informing us of why it has growing importance as we continue in an increasingly complex financial age. Changes to pension arrangements with greater emphasis on defined contribution schemes that move the risk of the investment of pension funds from the government to the individual, increasing levels of consumer debt, the proliferation of easy to access credit products, and the global economic downturn and collapse of many finance companies, are alternately or collectively cited as the catalyst for growing interest and importance placed on the individual's financial literacy.

In New Zealand, KiwiSaver provides a major conduit for financial literacy. In KiwiSaver, New Zealanders are seeing types of retirement plans previously in the realms of the government or employer become a more personal responsibility, and in the rhetoric surrounding financial literacy it is the individual who is at the heart of global and national economic issues. The current narrative states that being financially literate means being financially responsible, and that financial responsibility does more than serve personal interests; it helps to safeguard the economy. By using the proposed texts as a case study, broader questions regarding financialisation, responsibilisation, and the power structures that enable the creation of these "normalised subjects" (Hardt, 1995, p.31) can be asked. Prior to beginning my research, I anticipated that this focus on the responsibilities of the individual in both KiwiSaver and financial literacy initiatives was a political move informed by economic ideology, but as may have been expected, the reality is more complex. Certainly, by normalising the focus on the individual in financial matters, collective and state responsibility can be downplayed. The analysis of the framing of the financially literate person proposed in my thesis will, at the very least, provide a better understanding of the expectations placed on financial literacy and the financially literate within New Zealand, as well as provide a better understanding of the ideologies driving the initiatives, and it will highlight how the general public has not been a passive receiver of financial literacy framing.

While my study is particularly interested in financial literacy as it is manifest in New Zealand, the findings should provide insights pertinent to the global situation. Worldwide the current rhetoric surrounding financial literacy is justifying the regulatory status quo of the financial markets and normalising the notion that financial literacy is important for the individual to function effectively in today's society. Within New Zealand, notions of financial literacy are managed and proliferated through various mechanisms, or apparatuses of power – from OECD publications presenting member countries with recommendations and findings regarding financial literacy, which have subsequently informed national surveys and initiatives, to overt financial literacy-promoting entities like the sorted.org.nz website, which is funded by the government via the Commission for Financial Capability. However, the stated benefits of financial literacy – the freedoms, security (personal, national, and global), and knowledge offered by improved financial literacy – are in tension with certain operational details of the mechanisms put in place to measure, manage, benefit from, and improve financial literacy. With financial schemes such as KiwiSaver now giving the financial market access to significant new sources of revenue, it is increasingly important we question each state-sanctioned step towards expanding a consumer choice model in a market that has shown its potential to destabilise economies on a global scale.

Methodology

Research Design

This research began with a desire to better understand the increased rhetoric surrounding financial literacy in New Zealand. The design of the research started with the key conceptual research question: what is the role of financial literacy in contemporary New Zealand society? This was then broken down into further sub-questions, looking to deepen understanding of how financial literacy functions as a concept and is framed within New Zealand society. To help flesh out the claims made on behalf of financial literacy, the first of these sub-questions was ‘how is the financial environment with and without a more financially literate populace imagined?’ As the use of the word “literacy” to denote competence, skill or knowledge in a specific area is relatively recent, I was also interested in how the use of the words “financial” (as opposed to, say, “mathematical”) and “literacy” (as opposed to, say, “knowledge”) inform how the concept is perceived. The question of why financial literacy has become so crucial in this era was also included in the sub-questions to gauge the nuances within the overtly-stated reasons for the increased interest in financial literacy. These questions tie into the next two sub-questions: ‘what is the social load being carried by financial literacy?’ and ‘what is valued within financial literacy?’ The final sub-question was ‘where might the spaces of resistance be?’ Overall, to better understand how financial literacy operates as an ideological framework within New Zealand society, these questions needed to be considered within each discrete discourse site, looking to reveal any potential consistencies or shifts in framing from site to site. Questions specific to the case study are listed in the relevant section.

To reach answers to these questions, a series of more specific questions needed to be formulated to help guide the textual analysis. These were focused on how each text specifically framed financial literacy, again looking not just to gain understanding of how that framing was reached, but how it fit within the network of financial literacy understanding within New Zealand. Here, I was interested in what was being claimed on behalf of financial literacy (skill base and aptitudes), the differences in the claimed capabilities or framings of the financially literate, and whether network effects were perceptible in the transmission of discursive framings of financial literacy from global to national and local contexts.

This research is not intended to be, nor can it be, an exhaustive examination of all discussions regarding financial literacy within New Zealand. Key sites of interest have been chosen to provide a better understanding, not simply of how financial literacy is framed, but its broader role within New Zealand society. These questions reflect the more exploratory, qualitative type of research project being undertaken.

Taking a qualitative research approach, my initial focus was on gathering written materials produced by the Commission for Financial Capability, the main entity within New Zealand tasked by the New Zealand Government with improving the financial literacy of the New Zealand populace. Here, I was interested not only in documents created for the general public, but also those available to the public, yet intended for government. Primarily using the related government websites, I kept my initial data collection to materials that were readily available and primarily intended for the general public as my interest was in how the government-supported notions of financial literacy are presented to the public, how these entities framed financial literacy, and the language they used to persuade the general public that they must be financially literate.

Initial review of these documents revealed a heavy reliance and strong adhesion to writings about financial literacy published by the OECD. As one of the things I sought to understand was where the drive for financial literacy was coming from, this led to a return to qualitative data collection and the gathering of materials published by the OECD with a focus on financial literacy. With most OECD publications readily available and searchable via their website, I was able to trace back to their first writings on financial literacy and gather their core financial literacy writings from that point to the present. When deciding which materials to collect, I concentrated on those with a focus on financial literacy and disregarded materials that only gave financial literacy a passing mention. As the OECD also publishes a lot of country-specific data, I also disregarded materials specific to countries other than New Zealand. This process gave me a collection of writings with a broad focus on general advice and information regarding financial literacy for all OECD member countries and writings specific to New Zealand.

When I began to review these materials, a strong connection between the OECD's concern for improving financial literacy and their concerns about member countries' ageing populations and the financial burdens those ageing populations would bring to their governments was apparent. Indeed, many of the OECD writings on financial literacy were within documents discussing the problems of an ageing population or vice versa, with discussions about financial literacy either preceding or following discussions about the pros and cons of defined benefit and defined contribution retirement plans. This discovery led to a broadening of the OECD materials I had been collecting to include those discussing ageing populations and their retirement. Not as extensive as my collection of materials on financial literacy, my focus here was on getting a snapshot of how ageing populations were increasingly problematised and the impetus this offered to the drive for improvements in levels of financial literacy. Again, I traced the OECD materials back to the first I could find mentioning the problem of the ageing population. From there, I collected materials focussing on ageing populations and retirement published just prior to the global financial crisis (GFC) and after the GFC, as a preliminary review of the materials on financial literacy indicated a slight shift in the framing of the financially literate subject after the GFC, and I was interested in tracing any potentially related shifts in the framing of the problem of the ageing population.

From here, my focus shifted back to New Zealand. With the OECD documents showing a clear connection between the drive for financial literacy and concerns about ageing populations, it was important for me to broaden my research to include the interplay between discussions regarding retirement and financial literacy within New Zealand. The pertinence of the connection between the drive for financial literacy and the ageing population is embodied in the Commission for Financial Capability itself, a Crown entity tasked with promoting and providing financial education to New Zealanders and the office of the Retirement Commissioner. As OECD writings on the problem of the ageing population looked favourably on defined contribution plans, presenting improved financial literacy as a way of encouraging uptake in such plans, it seemed pertinent to also consider materials related to New Zealand's then relatively newly established defined contribution plan, KiwiSaver.

Where the writings from the Commission for Financial Capability were geared towards informing the public of the importance of financial literacy and consideration of their financial futures post retirement, KiwiSaver provided an opportunity to observe the framing of the financially literate subject at what was literally the business end of an apparent core aim of the Commission's drive for financial literacy: widespread enrolment in a defined contribution plan. By tracing the development of KiwiSaver and the entities involved in its management and support, I could have a clearer picture of how it fit into the financial literacy landscape within New Zealand

In August 2016, as I was writing up my findings from materials I had collected, a Twitter storm erupted in New Zealand over news reports regarding findings of KiwiSaver investments in munitions. Within the flurry of tweets were opinions from members of the New Zealand tweeting public noting not only their expectations of their KiwiSaver providers, but their expectations of themselves. The tweets included discussions regarding financial literacy and its efficacy in preventing ownership of funds with investments in munitions, discussions around levels of agency and accountability within the financial sector, and discussions about the role of government within both KiwiSaver and the financial sector. In all, the tweets offered a unique opportunity to add the voices of those being asked to be financially literate to my research. Once again, I returned to data collection.

As the tweets appeared to both respond to and shape the focus of print news reports on the munitions scandal, I decided it would be useful to include news reports online and in full from Stuff, The NZ Herald, and the Radio New Zealand news page in my data collection. These sites were chosen because they respectively represent New Zealand's leading news website, a leading news provider with a section dedicated to financial news, and the news page that broke the story. I focused my collection on those articles published in the first week following the initial report, including those referred to directly via Twitter. Again, I undertook a qualitative analysis of the articles, paying particular attention to how those entities and themes I had identified in my research to date were framed. With the tweets representing a distinct shift from the materials collected and analysed so far in the research, I decided to treat them as a case study and as such, the methodology for the collection of the tweets is outlined in more detail in the Twitter case study chapter.

Analysis

This section discusses the main strategies employed in the analysis of the chosen texts, outlining the role of both rhetorical and critical discourse analysis and the ways in which Foucault's theories regarding power/knowledge will help inform the study. It also provides preliminary definitions of key terms used in the research, highlighting relevant discussions that helped determine how those definitions were shaped. After distinct areas of data collection were identified and the data collected, I undertook an initial review of that data. These first-pass reviews involved thematic analysis. This analysis was undertaken without the use of analytic programmes or software as they would not be able to pick up the nuance in discussions I was interested in. From here key themes emerged, some of which were particular to the data set being analysed, while others traversed data sets. Once these themes were established, I returned to the original materials and identified key moments within the text, pertinent to these themes, where I undertook further, more detailed analysis.

As stated earlier, the critical conjunction of rhetorical analysis and critical discourse analysis informed by the work of Foucault is central to my work. I employ key strategies from foundational rhetorical analysis, looking closely at the style, form, and content of chosen texts, how they are informed by the rhetorical situation and what they reveal about it. I am also interested in looking beyond the persuasive operation of the text in its immediate rhetorical situation to consider the broader power relations being revealed. This leads to the shared terrain of contemporary rhetorical analysis and critical discourse analysis. I acknowledge the term 'discourse analysis' traverses many disciplines and means many things, with the commonality being the analysis of language use. Here, the analysis will be informed by the discourse-historical method of CDA (Wodak, 2011), which endorses a pragmatic approach to the analysis of discursive materials and events where "questions of theory formation and conceptualization are closely related to the specific problem being investigated" (p.63). Also significant within CDA's discourse-historical approach is its sanctioning of the integration of different approaches within its analysis in order to gain a more complete picture of the landscape in which these discursive events are embedded. Hence, this research includes a wide array of considerations, from using rhetorical analysis to examine a range of texts from key sources through to looking at the historical development of key government entities and programmes. As the discourse-historical approach seeks to understand the relationship between the various discursive situations and frameworks, it also looks to social theories to help provide contextual detail. Similarly, underpinning this research is the integrated consideration of neoliberal ideology and its bearing in the creation and propagation of financial literacy and KiwiSaver. My approach to the research generates detail through foundational rhetorical analysis, which is then considered in relation to knowledge production, transfer, function, and relationship to power. In adhering to a blend of rhetorical analysis and discourse-historical CDA, this study is necessarily text-centric in its nature; however, in considering elements in both approaches like rhetorical analysis' rhetorical circulation and CDA's interest in power, important contextual detail will also be analysed.

Taking this approach comes with potential problems. Rhetorical analysis is based on the premise that within the interaction between author and audience lies the possibility of persuasion. This implies that the author and audience carry agentive power – the power to act, persuade, or be persuaded by; however, Foucault's arguments regarding the ubiquity of power dictate that individuals, because they are constructed of practices that are informed by regimes of power/knowledge, are not autonomous agents. Although this view appears to negate the sense of agency offered in rhetorical analysis, as will be discussed in the literature review, Foucault's idea of power and discursive resistance (Caldwell, 2007) also seems to have room for moments of autonomy, which provides a way of reconciling the two. In relation to my work, I am interested in how specific institutions or writers have agentive power in shaping the evolution of financial literacy discourse and how the financially literate subject is imagined to have agency within this discourse.

I believe this area of friction is useful, as by not reconciling the two, but instead looking at the different ways they can describe the same moment, it offers the potential to see the financially literate subject functioning on multiple levels at the same time. On what I will term an operational level for now, the financially literate subject may be framed so that agentive power is central to much of the rhetoric. If the persuasive task is seen as being one of persuading the public of the need to improve financial literacy, the implication is that they can then choose whether they will take part in initiatives and become financially literate. On what I will loosely term a theoretical level, the financially literate subject is construed as subject *to* (rather than a subject of) financial literacy discourse, and the task is no longer to elicit action or choice, but to justify action or inaction that has already been decided or undertaken elsewhere, by or within the regimes of power/knowledge. In the latter, the notion of agency is nugatory as the purpose of the discourse is not to encourage individuals to choose to become financially literate or to improve their levels of financial literacy; there is no action or choice. The purpose of the latter is to open and solidify pathways necessary to maintain the primacy of the financial markets within society. These two states of being are not necessarily mutually exclusive. Areas of resistance within regimes of power/knowledge indicate room for both. Taking a cue from Dingo (2018), in her essay examining specific instances of the framing of girl empowerment, she notes the girls are both "contained and agentive" (p.236). Drawing on analytical strategies informed by both rhetorical and critical discourse analysis and linking findings to those from the case study of the KiwiSaver munitions uproar on Twitter enables me to draw out complexities within the framing of the financially literate subject that have the potential to go beyond what rhetorical analysis or critical discourse analysis on their own might uncover. While ultimately the findings do not reveal a way of resolving the problem of agency and discursive resistance Foucault was grappling with in his later thinking – a problem this research is not looking to resolve – they do reveal that the systems and sites that establish and maintain discourses surrounding financial literacy are just as complicated and intricate as the discourses themselves.

Identification of the rhetorical situation also requires some clarification. Here, I use Chaput's (2010) idea of rhetorical circulation, which both updates and complicates the rhetorical situation. Informed by Foucault's biopolitics lectures, Chaput (2010) notes that rhetoric "is not an isolated instance or even a series of instances but a circulation of exchanges" (p.8). This reimagining of the rhetorical situation arises in part in response to neoliberalism, which, rather than consisting of clearly defined spaces, Chaput (2010) argues, is full of fluid connections and spaces. Gries (2018), who co-edited a book discussing the utility and importance of circulation in rhetoric studies, argues circulation's ability to help in the understanding of fluid connections and spaces, and its role in accessing and constituting discursive communities make it transformational in developing knowledge within the discipline. By considering rhetorical circulation, rather than the more static idea of the rhetorical situation, we get a better idea of the complex relationships between multiple discursive moments, which will provide insights into what Chaput (2010) terms the "situatedness" (p.21) of the individual elements, or nodes, in my research. When considering the case study, which includes analysis of social media posts, I will be drawing on a distinct form of rhetorical circulation Royster and Kirsch (2018) call social circulation. Social circulation specifically considers utterances and interactions that take place in a social space, providing an interpretive lens that "bring[s] visibility to how social networks enable members to create and transmit knowledge, inventions, and innovations, as actors who take the authority to create accommodations for themselves and sometimes to change the world" (p.184). As Royster and Kirsch (2018) note, these socially circulated practices tend to have distinct habits of engagement that differ from those found in public, private, or institutional spaces, uncovering what they term "silhouetted networks of actors… who may have limited access to power and privilege" (p.184). While Royster and Kirsch specifically considered social circulation in relation to how women participate in the social domain, its application to the financially literate within the Twitter discourse allows a more nuanced examination of how ideas of financial literacy are transcoded – or not – within a social realm.

As analytical tools, rhetorical analysis and critical discourse analysis share many similarities. Jäger (2001), a researcher interested in critical discourse analysis and how language is used as an instrument for exclusion, urges consideration of the individual, describing the discursive network the individual finds themselves in in terms similar to Chaput's (2010) idea of rhetorical circulation. In addressing the role the subject plays within discourse, Jäger notes that "the acting individual is absolutely involved when we talk about the realisation of power relations (practice). It thinks, plans, constructs, interacts and fabricates" (2001, p.38). He adds that all this is done "in the frame of the rampant growth of the network of discursive relations and arguments, in the context of 'living discourses' insofar as it brings them to life, lives 'knitted into' them and contributes to their change" (p.38). Chaput's theory of rhetorical circulation enables moments of traditional rhetorical analysis – analysis of individual constructions and fabrications – to be connected to the discursive network described by Jäger. Jäger's idea of a "network of discursive relations" (2001, p.38) knitted together also fits the network metaphor outlined by Dingo (2008), who argues that there is a network model for "material, rhetorical, cultural, and economic linkages among nations" (p.493) and that this metaphor requires the consideration of relationships and groupings "that enable an understanding of rhetorical connectivities" (p.494). Thus, the network metaphor is useful to my work, not just via its utility to both rhetorical and critical discourse analysis, but also in its potential to help layer traditional rhetorical analysis with rhetorical circulation and broader discourse discussions. As Dingo states, "the network metaphor thus helps rhetoricians establish relationships between and among texts and occasions" (2008, p.494). Using the network metaphor I am able to explore how rhetorical appeals made on behalf of financial literacy reach their various, connected audiences and trace how “nodes of power” (Dingo, 2008, p.494) support and legitimise arguments.

Thesis Organisation

This thesis is split into two main parts. ‘Part I: Financial literacy in the context of neoliberal governmentality’ establishes the landscape in which the events of the case study outlined in part II take place. Part I begins with a review of the relevant literature focused on neoliberalism, governmentality, discourse, and financial literacy. It also contains an analysis of selected OECD documents discussing financial literacy and pension plans and a breakdown of New Zealand’s implementation of KiwiSaver.

Part II presents a case study focused on the 2016 Twitterstorm over the media exposé of KiwiSaver investment in munitions. Part II outlines the framing key segments of traditional news media made of the events, provides background to help understand the relevance of Twitter as a source of analysis, and analyses the tweets themselves. Where the focus of part I is firmly on more institutional texts – texts produced by those within either an academic, governmental, or multinational institute – the focus of part II shifts from these more formal texts to those created less formally, those that provide an insight into the reactions of individuals who are the focus of financial literacy initiatives. The case study offers an opportunity to observe the interplay between the financial marketplace and the individual at a distinct moment in time, enabling a greater understanding of how individuals see themselves within this financialised environment.

Part I: Financial literacy in the context of neoliberal governmentality

Chapter Two – Literature review – Neoliberal governmentality, discourse, and financial literacy – This chapter looks at relevant literature helping shape the broader theories linked to my research, focussing particularly on specific themes connected to financial literacy. It begins with a breakdown of ideas of risk and individualisation noted as symptomatic of the age of reflexive modernity we are said to be living in, then shifts to the key principles of neoliberalism, highlighting how closely neoliberalism and financialisation are intertwined. Following this is a breakdown of important moments in the literature surrounding governmentality, noting how discussions regarding governmentality are complex and relate to power relations as they are enacted in multiple sites within society. The work of Foucault informs a great deal of this section. As notions of responsibilisation and financialisation raised in the review of neoliberalism and governmentality play a large role in the research as a whole, this chapter also takes a closer look at the literature focused on these ideas specifically, highlighting their link to education and knowledge. The final stages of this chapter reviews literature focused on the more practical aspects of the research, noting important elements in discourse research and literacy studies before discussing significant moments in financial literacy research, highlighting areas of conflict that already exist within discussions regarding the framing of the financially literate subject.

Chapter Three – Managing free market risks: OECD policy on financial literacy – As an important source of policy advice for member countries, OECD texts on financial literacy provide an opportunity to review the foundations of how the financially literate individual is shaped in New Zealand. This chapter identifies and examines key texts produced by or on behalf of the OECD. In examining how these documents frame the financially literate individual, the financial marketplace, and the role of government, noteworthy themes are identified that work to position financial literacy as a form of consumer protection and market regulation, and the financially illiterate as a threat to sophisticated financial markets.

Chapter Four – A neoliberal articulation?: The introduction of KiwiSaver– This chapter draws out the connection between New Zealand's financial literacy drives and concern over its ageing population. Starting with an overview of New Zealand's pensions history, it traces the eventual implementation of KiwiSaver, highlighting how deeply connected KiwiSaver and financial literacy initiatives are within New Zealand. The chapter also discusses important events in the New Zealand financial market in the year prior to the global financial crisis, the years of the crisis and beyond, to provide relevant context to the landscape where the case study sits.

Part II: Case study: Public responses to / engagement with KiwiSaver munitions investment controversy

Chapter Five – Raising the alarm: Journalism on munitions investment – The first part of this case study breaks down key pieces of print media coverage in the KiwiSaver munitions investment uproar. The documents analysed highlight not just how the concerns of the public are represented and influenced by the media, but how certain types of framing of information helped news items achieve purchase. A core focus in this chapter is how the government and the individual are framed within the texts and how expectations of the financially literate individual are shown to align – or not – with the realities of KiwiSaver investment.

Chapter Six – Munitions investment Twitterstorm: Methods for analysing Twitter – This chapter provides an overview of relevant literature regarding research into Twitter and its utility as a data source. It includes discussions of Twitter as a genre and its impact on journalism, identifying potential issues with the perceived echo chamber effect and noting that while tweets cannot be an accurate representation of the population's various points of view, an analysis of discrete tweets remains useful as a gauge of individual, localised sentiments that reveal how some in the population view their responsibilities towards financial literacy and KiwiSaver.

Chapter Seven – Twitter debate: Discourse analysis and findings – This chapter contains a breakdown of the methodology used in the collection and analysis of tweets discussing KiwiSaver investment in munitions as well as an analysis of the tweets themselves. Ultimately the chapter emphasises the complexity of the relationship between the expectations surrounding financial literacy and the realities of the financial marketplace. The analysis shows that not all individuals accept the level of responsibilisation placed on them as KiwiSaver investors. With some push-back against the individualisation and responsibilisation of the population as manifest in KiwiSaver, some are seen to question or even demand more from the state and corporations via the tweets, seeking a more civic-focused, collective view of our responsibilities.

Chapter Eight – Conclusion – The concluding chapter draws on the key themes found in the research, highlighting the broader implications of the impetus of the current drive for financial literacy and what it means in connection to pension schemes like KiwiSaver. It also identifies research limitations and offers suggestions for future research.

Chapter 2: Literature Review: Neoliberal Governmentality, Discourse, Financial Literacy

This examination of the discursive construction of the financially literate person in New Zealand necessarily touches on a number of theories and is informed by a variety of research. As the expectations placed on the financially literate individual are determined by the broader social landscape in which that individual resides, this chapter begins with a review of literature that helps provide the detail of this landscape. It starts with a focus on reflexive modernity, highlighting themes of individualisation and risk, and appeals to responsibility that feature in work discussing the age of reflexive modernity we are said to be in.

A discussion of the individualised, responsibilised financially literate subject and the systems of power that help in that subject's creation also requires a review of literature surrounding neoliberalism. This section examines existing literature focused on neoliberal theories to arrive at a working definition of neoliberalism and an outline of its core set of principles. It highlights how different approaches to neoliberalism reinforce its complexity, breaking down discrepancies within discussions about the role of government and ultimately aligning with a Foucauldian view of the role of government intervention and society itself within neoliberalism. This section also highlights the role of morality and virtue in neoliberal theory, linking to the notions of ability and competency at the foundation of financial literacy initiatives.

The literature review then shifts to a more detailed view of three core concepts raised in the review of texts on neoliberalism – concepts that later textual analyses reveal as core themes: governmentality, responsibilisation, and financialisation. As might be expected, the writing of Foucault again looms large within this section, which starts by looking to arrive at a working definition of governmentality as well as a useful process for its analysis. Importantly, the section outlines the connection literature on governmentality makes between governmentality, power, the economy, and knowledge, noting how the economy is seen to serve as a tool through which power is enacted and knowledge is seen as part of the rationalizing process of governmentality. Notable for this research is the idea that contemporary governmentality operates within a network of numerous and varied sites, sites that are apparent in the analysis of the structures informing financial literacy and KiwiSaver within New Zealand. Ultimately, this section looks to outline key concepts that will help provide new insights into governmentality as informed by neoliberal theory and evidenced via the shaping of the financially literate subject and that subject's interactions with KiwiSaver.

The section focused on responsibilisation and financialisation explores in more detail neoliberal ideas of individual responsibility and makes connections to the growth of financialisation. Here, the writing of those who discuss responsibilisation as it relates to financial literacy is examined in more detail, noting discrepancies between expectations of the capabilities of those deemed financially literate and the reality of participation in the financial marketplace. Further questions are raised in the discussion regarding financialisation, which outlines literature that covers the connection between it and the growing interest in pension and savings reform, highlighting the need for a close examination of not only the stated goals of financial literacy and government justifications for financial literacy initiatives, but how they are tied to financialisation.

From here the literature review shifts to a focus on writings on discourse, narrowing to review literacy writings before discussing literature specifically focused on financial literacy. Again, as might be expected, much of the reviewed literature on discourse is greatly informed by the work of Foucault, solidifying his stance as a key theorist for this research. Here, the subtle shifts in various definitions of discourse are discussed before arriving at a working definition that acknowledges a connection between discourse and power. This section also highlights the tensions between the view of power as a dominating force and the more Foucauldian view of power as both productive and oppressive, something the discussion returns to in part II of this thesis.

The literacy studies section draws on key moments in research focused on traditional literacy. Here, potential areas of tension in the connection between definitions of literacy and the levels of proficiency associated with the notion of being literate are discussed and parallels to existing research on financial literacy are drawn. This section also draws attention to research into pervasive ideas of literacy as power and examines how they are complicated by findings that social and economic change promotes improvement in financial literacy, rather than the other way around. Fleshing out further connections between literacy and financial literacy, another parallel is explored in the tendency to ascribe special virtues to the literate person. However, where the literate person is perceived to gain culture with their literacy, the focus within financial literacy is more predominantly on the negative qualities of those perceived as lacking financial literacy. The view of the financially illiterate as a danger to themselves and society is important and is borne out in particular in this research's primary source documents that were generated post-global financial crisis. Of note, the reviewed literature highlights that improvements in an individual's levels of literacy are perceived to be correlated with economic as well as societal benefits, which some researchers see as a problem as it requires adhesion to a very narrow understanding of literacy itself, negating alternative literacy practices. Indeed, literacy literature provides a rich field of study and the review of these texts offers a range of understandings that could be applied to an analysis of financial literacy.

In the section looking solely at financial literacy literature, the focus is primarily on parameters and themes within existing financial literacy discussions. Echoing discussions in general literacy, problems associated with the various ways financial literacy is defined are raised, highlighting commonalities in the lack of clarity around the defined capabilities of the financially literate subject. While definitions of financial literacy tend to be vague in the literature that is interested in measuring financial literacy, the expectations placed on the financially literate subject were found to offer a more detailed financial literacy competency framework.

Though the literature reviewed here is broad, the nature of the research makes it necessarily so. The scaffold supporting the creation of the financially literate subject consists of several interlocking parts, each with their own associated theories. Certainly, the literature reviewed here is not exhaustive, but it is intended to highlight the definitions, theories, discussions, and places of friction that in turn help inform this research and the conclusions reached following the case study analysis.

Reflexive Modernity

Reflexive modernity centres on the idea that rather than moving from modernity to post-modernity, we moved from modernity to reflexive modernity, marked by an on-going examination of social practices, which, in turn, leads to ongoing reformation of those social practices. Giddens, one of the creators of the term 'reflexive modernity', does not offer a working definition of the term in his book co-authored by Sutton and entitled *Essential Concepts in Sociology*, but he does offer insight into how the phrase was coined: "Giddens and Beck argue that 'late' modernity is a 'de-traditionalised' social context in which individuals are cut adrift from the social structure and, hence, forced to be continuously reflexive in relation to their own lives and identities" (2014, p.37). In discussing the notion of detraditionalisation, Beck, Giddens, and Lash (1994) note that the term does not imply "a society without traditions" (p. vi), but rather a society where tradition is asked to defend itself. Giddens and Sutton discuss how detraditionalised societies are linked to risk, stating,

> there is no doubt that recent social changes have led to more uncertainties and less reliance on traditional and habitual ways of life. In this changed context, sensitivity to risk does seem to be increasing, along with the need for individuals to make their own decisions on a much wider range of issues with which they are now presented. (2014, p.60)

Here, individualisation, which is another important aspect of reflexive modernity, is raised. Beck (2009), in *World at Risk*, expands on the connection between risk and individualisation, stating the form of individualisation introduced with reflexive modernity "is the result of the failure of experts in the management of risks" (p.54). He notes that because institutions are unable to rationally define and control risks, they "cynically whitewash their own failure by appealing to 'responsibility'" (p.54), highlighting the irony that individuals need to trust the 'expert systems' of the institutions that divested responsibility due to their inability to be trusted to control the risks they are now asking the individual to be responsible for. For Beck, risk is constitutive in how we think about the world, and the idea that organisations themselves struggle to manage the risks that individuals are now being asked to shoulder resonates with certain aspects of my research. Reflexive modernity clearly encompasses much of the language of neoliberalism, so while the focus of my research will be on the latter, reflexive modernity remains an important overarching concept.

Galit Ailon (2011) provides an example of rhetorical analysis centred on the concept and practice of reflexivity in her study of *BusinessWeek* articles covering the rise and fall of Enron from 1997-2007. She identifies how theorists within the realms of political economy and institutional sociology have come to see the notion of reflexivity as “pivotal” when analysing capitalism’s “transformative sensitivity to its own crises and failures” (p.141). For these theorists, she posits, reflexivity is “a culturally unstructured or disembedded reflection upon problematised conventions and beliefs” (p.141). Through this lens, reflexivity takes on a cultureless objectivity and becomes almost a never-ending truth-finding mission, forever self-adjusting in search of better ways of being. It is pivotal because it is seen as the key tool helping capitalism to hone more appropriate responses to the crises and failures it faces. However, via her analysis of the rhetoric within selected *BusinessWeek* articles, Ailon argues that reflexivity, rather than being “culturally unstructured or disembedded” (p.141), has its own subjectivity that she terms a “cultural grammar” (p.141). This cultural grammar, she argues, “[parallel those practiced beliefs] pertaining to the management of money” (p.142). Where Giddens and Beck (1994) see reflexive modernity as a symptom of a de-traditionalised society, Ailon (2011) raises the possibility that reflexive modernity and the reflexivity at its core are indicative of the prominence of a different type of tradition: one governed by economic practice.

Ailon (2011) notes how popular media provides an “optimal site” (p.145) for the study of reflexivity as it is both a location of information production and a source of information dissemination. Focusing on one “site of reflection” (p.145), namely *Business Week*, and one subject – the scandal surrounding Enron – Ailon’s research traces moments of reflexivity. Citing political economists, institutional sociologists, and Beck, Giddens, and Lash, Ailon notes that alongside the view of reflexivity as “a process involving self-reflection upon problematised beliefs or knowledge limitations and attempts to revise them” (p.142), those she has cited also share a belief that “reflexivity is a discourse that is culturally and institutionally unstructured, representing a look from an abstract or disembedded ‘outside’ upon conventional ways of conceiving the provisions and practices of the capitalist world” (p.142). Ailon is concerned with the moments of reflexivity apparent in the articles, tracing the shifts in how they reflect on the unfolding growth and subsequent demise of Enron. She then categorises and analyses these moments to arrive at a commentary on the usefulness of theoretical accounts of reflexivity compared to empirical evidence and to call for further thought about the notion that reflexivity is cultureless. As the analysis unfolds, Ailon traces similarities between how *BusinessWeek* managed the beliefs it imbedded in its articles and capitalist money management, with capitalism itself the core asset being managed in the articles. She argues that the rationale-seeking process undertaken by *BusinessWeek* as it traced the rise and fall of Enron was centred on maintaining the legitimacy of the values held by neoliberalism, “exonerating the market by compressing blame into the realm of a supposedly deviant market actor and diffusing it outside the market” (p.159). Reflexivity, according to Ailon, has neoliberal theory hardwired into its grammatical code and reflexive discourse thus seeks to reflect on events in search of a truth, yet the lens through which self-reflexive actors view that truth is strongly influenced by a neoliberal form of capitalism. Reflexive thinking, Ailon ultimately argues, “*is* an economic practice” (p.161).

Although the moments of reflexivity seen in the institutional texts appear to support Ailon’s (2011) claims that reflexive thinking is an economic practice – particularly an economic practice that places neoliberal economic theory at the forefront – the analysis of the texts from both media and social media (namely Twitter) suggests a point of conflict with the reflective reframing of the financially literate subject. This conflict does not necessarily endorse the notion that reflexive thinking is only an economic practice within certain sites of reflection, but it certainly suggests that for some reflexivity is not solely a *neoliberal* economic practice.

Neoliberalism

While many authors have outlined the key principles of neoliberalism, this review will focus on those held in common in the literature reviewed. The aim of the review is to arrive at a working definition for neoliberalism along with a core set of principles that help explain the current impetus towards financial literacy and financial literacy initiatives. Starting with a focus primarily on definitions of neoliberalism provides an idea of its ideological shape. As Peck, Brenner and Theodore (2018) note, neoliberalism as politically and institutionally implemented is diverse and complex. They characterise “actually existing neoliberalism” as a shape-shifter that modifies with the host country/populace, embedding in a multitude of ways. In aggregate, these applications of neoliberalism attain “something resembling a normalized commonsense, or practical hegemony” (para. 2). They argue that defining neoliberalism is a difficult task because of its protean nature, stating that “[neoliberalism is] an historically specific, fungible, volatile, and unstable process of market-driven sociospatial restructuring…, rather than… a fully actualized policy regime, complete institutional apparatus, or stabilized regulatory framework” (para. 12). Hence, they also argue for the importance of “processual understandings of neoliberalization” (para. 3) where contextualized research stands alongside abstract theories of neoliberalization.

In the literature reviewed, as might be expected, the range of definitions of neoliberalism presented primarily reveals the various individual authors’ areas of interest. Some, like Gérard Duménil and Dominique Lévy (2005), for example, look at neoliberalism from a Marxist perspective and define neoliberalism as “the ideological expression of the reasserted power of finance” (p.17). With a focus very firmly on the relationship between production and class in neoliberalism, Duménil and Lévy ultimately claim that "neoliberalism is the expression of the new hegemony of finance" (p.40). Similarly, Palley (2007), in his discussion regarding financialisation, defines neoliberalism as "both a political and economic philosophy" (p.1) where both philosophies advocate a laissez-faire deregulated market, with political philosophy holding it as "the best way to promote individual freedom" (p.2) and economic philosophy holding it as "the best way to promote economic efficiency and economic well-being" (p.2). While Duménil and Lévy's (2005) Marxist approach has them discussing neoliberalism's power relationship based on means of production, Palley's view that "financialisation is a particular form of neoliberalism" (2007, p.1) points to his focus on the economic environment itself and, particularly, the standing of financial markets within that environment. Whether a political and economic philosophy or an expression of hegemony, the qualities ascribed to neoliberalism, as with most things, clearly depend on the lens through which it is being examined. Beyond the label of 'philosophy' or 'expression of hegemony', neither the definitions of Duménil and Lévy (2005), nor Palley (2007) provide a detailed picture of what neoliberalism is.

To arrive at a definition that captures more of neoliberalism's complexity, some of the writers who have done their own analysis of neoliberal definitions have proved helpful. To reach a useful working definition of neoliberalism, Thorsen and Lie (2006), who detail definitions of both liberalism and neoliberalism from a historical perspective, argue that a 'moderate,' precise definition is needed. After detailed analysis of definitions provided by significant writers writing about neoliberalism (Friedman, Blomgren, Hayek, Harvey, Nozick, Palley, and Mises), they offer this definition: "Neoliberalism is... a loosely demarcated set of political beliefs which most prominently and prototypically include the conviction that the only legitimate purpose of the state is to safeguard individual, especially commercial, liberty, as well as strong private property rights" (p.14). In creating this definition, they state their intention is to enable a more useful way of describing recent economic and political trends. Their point of difference from the definitions informing them is that theirs is "more to the point" (p.14). While the definition provided here is no more concise than that offered by Palley (2007), it certainly covers more ground. Perhaps as an acknowledgement that the definition does not encompass all that neoliberalism is, Thorsen and Lie (2006) then outline nuances common within neoliberalism that, presumably, could be added to the offered definition. These additions include an elaboration of what is meant by minimal state intervention (a smaller state that does not overstep its bounds), the implementation of free markets and free trade, the adoption of "market mechanisms" (p.14), the perceived link between moral virtue and access and competence within the market, and the importance of individual responsibility.

Another who has analysed the various definitions of neoliberalism and offers one of her own is Hardin (2014). Unlike Thorsen and Lie (2006), however, Hardin does not argue that a more precise definition is needed; rather, she argues that definitions to date do not encompass all that neoliberalism is today. To better outline the gap filled by her definition, Hardin breaks up criticisms of neoliberalism into three camps: Foucauldian, which she states views neoliberalism – specifically Foucault's 'American neoliberalism' – as "about the application of economic analysis to all phenomena" (p.207); Marxist, which "draws on Marxist political economy to frame neoliberalism as the dominant capitalist ideology of the present" (p.207); and epochalist, which "uses neoliberalism as one of a set of epochal concepts to describe recent economic developments in conceptual terms" (p.207). Hardin then situates definitions provided by different writers within these three groups, pointing out places within each that need clarification or development. For Hardin, the issues are not so much with the theoretical framework of each group, but the specific detail within each definition. Finally, Hardin argues for a new approach, stating "I want to define neoliberalism as a form of governmentality that operates in two, co-constitutive but analytically distinguishable modes" (p.213), the first mode being "focused on the production and dissemination of ideas" (p.213), and the second being "one of articulation" (p.213). In her explanation of what this means, Hardin discusses a "self-consciously intentional intellectual project" (p.213) where cultural appropriation, "the circulation of power" (p.214), and "the power of the knowledge apparatus" (p.214) are at play, placing herself within her Foucauldian group. Most usefully for the case study that is central to this thesis, Hardin argues that "[t]he free, well-functioning society is one composed of corporations, whether of one or many individuals, and operating according to corporate logic" (p.215). This new way of deconstructing society, which she terms "corporism" (p.215), could be tested via application to the analysed documents associated with New Zealand's shift to the KiwiSaver defined contribution plan. While other accounts of neoliberalism (see Harvey below) provide a useful and more detailed picture, Hardin's definition highlights neoliberalism as a form of governmentality, which shares common ground with the approach I intend to take in my research.

David Harvey (2005) in his book *A Brief History of Neoliberalism* further elaborates on coporism as inclusive of individual entrepreneurialism. Within this concept, the individual, as an entrepreneur, is treated like a business. Indeed, of the literature reviewed to date, Harvey presents the most encompassing definition of neoliberalism, followed by a detailed elaboration of what the definition looks like in practice. He states:

> Neoliberalism is in the first instance a theory of political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterised by strong private property rights, free markets, and free trade. The role of the state is to create and preserve an institutional framework appropriate to such practices. The state has to guarantee, for example, the quality and integrity of money. It must also set up those military, defence, police, and legal structures and functions required to secure private property rights and to guarantee, by force if need be, the proper functioning of markets. Furthermore, if markets do not exist (in areas such as land, water, education, health care, social security, or environmental pollution) then they must be

> created, by state action if necessary. But beyond these tasks the state should not venture. State interventions in markets (once created) must be kept to a bare minimum because, according to the theory, the state cannot possibly possess enough information to second-guess market signals (prices) and because powerful interest groups will inevitably distort and bias state interventions (particularly in democracies) for their own benefit. (2005, p.2)

In Harvey's definition, which I take as the first sentence of the quote above, all the main elements of the previous definitions are present. Although Harvey's focus on class power positions his view of neoliberalism as Marxist (as noted by Hardin [2014]), the label itself does not diminish the functionality of his definition. Given that it encompasses nicely the main elements of the definitions reviewed to date and overcomes Palley's (2007) issues with laissez-faire, which I will detail later, it will be a good starting point for my discussions regarding neoliberalism.

In *The Birth of Biopolitics*, Foucault (2008) provides the fullest picture of his theories on neoliberalism. As always, Foucault begins by tracing the historical development of the term; however, unlike the historical overview provided by Hardin (2014) and Thorsen and Lie (2006), Foucault's focus takes in more than the development of particular theories and those driving them. Here, the exercise of political power is discussed in relation to the art of government. Indeed, Foucault identifies a concern with what he calls "governmental style" (2008, p.133) in the founding neoliberal texts, all of which have in common "the theme that government is active, vigilant, and intervening in a liberal regime" (p.133). Foucault notes that one of the key shifts in principles from liberalism to neoliberalism is the distancing of the market economy from laissez-faire. The political principle of laissez-faire, according to Foucault, is strongly identified with liberalism as early liberal theories saw laissez-faire as necessary due to the need for free exchange between two partners and later liberal theories saw it as necessary because of competition. For Foucault, "[n]eo-liberalism should not therefore be identified with laissez-faire" (p.132). This draws into question Palley's (2007) definition of neoliberalism, which places a laissez-faire deregulated market economy at the centre of neoliberal philosophy.

With no stipulation of the presence of any form of vigilant government intervening within the economy, there appears to be very little separating Palley's (2007) definition of neoliberalism from the picture Foucault (2008) paints of liberal, rather than neoliberal philosophy. However, supporting the notion that neoliberalism is marked by minimal government presence within the market economy, Thorsen and Lie (2006) add weight to the validity of Palley's definition by noting that the different definitions provided for neoliberalism from a political theory perspective all have in common "advocating a radical 'roll-back of the state' and a creation of a society principally governed by market mechanisms" (p.14). They go on to outline the common principles within neoliberalism, two of which are reduction in strength and size of the state, and no state intervention beyond that deemed legitimate. Yet while it seems Foucault (2008) is at odds with the narrative of neoliberalism put forth by Palley (2007) and the others, his idea of a vigilant government does not focus on the market economy. For Foucault, government intervention is a given; where the liberal concern was whether government should intervene, Foucault sees the neoliberal concern as being how government should intervene (and perhaps where). For Foucault, the location of the intervention is on society itself:

> Government must not form a counterpoint or a screen, as it were, between society and economic processes. It has to intervene on society as such, in its fabric and depth. Basically, it has to intervene on society so that competitive mechanisms can play a regulatory role at every moment and every point in society and by intervening in this way its objective will become possible, that is to say, a general regulation of society by the market… it is not an economic government, it is a government of society…. What the neo-liberals want to construct is a policy of society. (2008, p. 145-146)

Indeed, he notes "as the neo-liberals have always said, neo-liberal governmental intervention is no less dense, frequent, active, and continuous than in any other system" (p.145). The idea that the neoliberal agenda is to construct a policy of society appears to resonate with the construction and government-initiated rhetoric surrounding financial literacy and financial literacy initiatives; hence, Foucault's modification of the notion of minimal government intervention is important to my research.

An area where Foucault's ideas echo those of others is in the position of the individual. In discussing the common ground in neoliberal theory, Thorsen and Lie (2006) state

> [i]ndividuals are also seen as being solely responsible for the consequences of the choices and decisions they freely make: instances of inequality and glaring social injustice are morally acceptable, at least to the degree in which they could be seen as the result of freely made decisions. (p.15)

For Foucault (2008), although the outcome is the same, the focus is slightly different. Where Thorsen and Lie (2006) focus on the responsibilities of the individual, Foucault places the focus on society:

> society as a whole will not be asked to guarantee individuals against risks . . . Society, or rather the economy, will merely be asked to see to it that every individual has sufficient income to be able, either directly and as an individual, or through the collective means of mutual benefit organisations, to insure himself against existing risks, or the risks of life, the inevitability of old age and death, on the basis of his own private reserves. (2008, p.144)

If, as noted earlier, the neoliberal agenda is to construct a policy of society, then it follows that governments will be facilitating changes that require and encourage individuals to ensure their incomes in old age. This is already being seen in KiwiSaver. Foucault's society focus provides a connection to government that the individual focus does not offer, making it a useful tool in my research.

In addition to the reduction in the strength and size of the state and no state involvement beyond that deemed legitimate, Thorsen and Lie (2006) add advocation of free markets and free trade, international trade regulation only to safeguard commercial liberty, and nationally-realised property rights as additional common principles within the neoliberal theories and definitions they examined. While these final areas are not of primary concern to my research, Thorsen and Lie, in reference to Friedman, further note that "neoliberalism could also include a perspective on moral virtue: the good and virtuous person is one who is able to access the relevant markets and function as a competent actor in these markets" (p.15). Although this seems to speak to the idea of accepting individual responsibility again, the claims go far beyond that. Here moral virtue is based on more than the choices a person makes; it is based on ability and competency. Palley (2007) similarly discusses access to markets and decisions affecting productivity, but rather than labelling those without access morally unvirtuous and judging their competency within the markets, he highlights how the system itself is flawed, noting "the actual outcome will depend on the initial distribution of resources, and if the initial distribution of resources is unfair the final outcome will be unfair" (p.2). Importantly, he adds "the final outcome cannot be improved upon without making someone worse off" (p.2). For Palley, ideas of morality and virtue appear irrelevant as resource distribution and, by implication, access are determined prior to entry into the markets. This notion is important to consider in my research as concerns about ability and competency are at the foundation of financial literacy initiatives. Combining Thorsen and Lie's (2006) assertions with Palley's, (2007) the assumption, if applied to discussions about financial literacy, appears to be that any improvements in financial literacy then become irrelevant, because there will always be a segment of society for whom participation in the markets results in failure not due to ability or competence, but due to pre-existing resource distribution, making moral virtue predetermined and assigned to those with resources.

In their discussion of neoliberalism, Duménil and Lévy (2005) provide detail that suggests how initial resource distribution might play a part in outcomes. They state that the content of neoliberalism is a "systematic attack against social protection, freedom of action for finance (in particular concerning the international mobility of capital), [and] corporate governance motivating management toward the remuneration of shareholders" (p.25). While the language here appears a little strong and initiatives such as KiwiSaver cannot be described simply as an attack against social protection, its existence certainly signals a shift towards the removal of government-provided social protection while also supporting and even advocating the placement of resources in the financial market with a strong focus on equities. Foucault (2008) seems to sum up this shift when he states that individualisation "does not involve providing individuals with a social cover for risks, but according everyone a sort of economic space within which they can take on and confront risks" (p.144). Indeed, financial literacy initiatives and initiatives such as KiwiSaver are consonant with this economic space Foucault discusses.

In her book *Undoing the demos: Neoliberalism's stealth revolution* (2015), Wendy Brown dissects neoliberalism as "an order of normative reason" (p.30), drawing on Foucault's prescient and, as she notes, in some ways limited outline of how it operates. Driving her analysis is a desire to interrogate the undermining of democracy in the times of neoliberalism. Brown indicts neoliberalism as a market-focused ideology which "assaults the principles, practices, cultures, subjects and institutions of democracy understood as rule by the people" (p.9). Stating it is globally ubiquitous, yet fluid in its application and instances, Brown argues that neoliberalism works to convert "the distinctly *political* character, meaning, and operation of democracy's constituent elements into *economic* ones" (p.17). To illustrate her point, Brown draws on President Obama's second inauguration speech, noting that Obama repackaged welfare improvements as a pathway to greater economic growth – as if it were the improvement of the economy, rather than citizen's welfare, that legitimated the political choices he was foregrounding. Brown elucidates this notion of neoliberalism as a governing rationality, stating, "in political life… neoliberalization transposes democratic political principles of justice into an economic idiom, transforms the state itself into a manager of the nation on the model of a firm, and hollows out much of the substance of democratic citizenship" (p.35). One of the ramifications of this transposition of political life by neoliberal rationality, as raised by Brown, is the erosion of both citizenship and the prioritizing of the common good, arrived at via the shift in view from governing individuals to managing economic human agents who are primarily concerned with maximising their individual utility and profits (homo oeconomicus). Treating the state as a firm and its people as entrepreneurs within it, Brown argues, also works to shift equality, freedom and sovereignty from being political concerns to being economic ones. However, as Brown notes, this shift does not just deem homo politicus obsolete; it also negates humanism, stripping the meaning from human life, replacing it with economic imperatives, reshaping the core of our humanity into the guise of "financialized human capital" (p. 33).

Here, Brown acknowledges her alignment with Foucault's discussions of neoliberalism, highlighting his understanding of it "as a distinctive form of reason that, when it becomes ascendant, will remake governing and government" (p.50) and as a novel way of "conceiving and relating state, society, economy, and subject and also inaugurat[ing] a new 'economization' of heretofore noneconomic spheres and endeavours" (p.50). Yet, alongside visionary praise for Foucault in his early statements of neoliberalism presenting a new governmental rationality, Brown, keeping to her focus on political rationality and democracy, also notes a limitation of his work. In her view, Foucault positions governance as coming from the state and working on the population as a body of people who accept or resist governance, with no consideration of a political body or democratic unit of people working towards a united cause. Brown notes that in Foucault's view of neoliberal governance "there are few social forces from below and no shared powers of rule or shared struggles for freedom" (p.73).

In her later book, *In the ruins of neoliberalism: The rise of antidemocratic politics in the West* (2019), Brown discusses the role of neoliberalism in unintentionally creating social and political forces with shared struggles for freedom, borne from feelings of disenfranchisement caused by neoliberalism's erosion of democracy and its privileging and politicizing of the financial and economic. Where in *Undoing the demos* (2015), Brown acknowledges that there was much Foucault could not have predicted in neoliberalism's journey, in her later work, those with no shared powers or struggles play a much more significant role than perhaps Brown herself envisaged, highlighting the prescience of her earlier focus on neoliberalism as political ideology. I will return to the question of political collectivity when discussing the central Twitter case study regarding Kiwisaver investments in munitions.

Evident in the Twitter case study is the existence of a united cause – for some, at least. While it is not within the capabilities of the data collected in the Twitter case study to postulate a united cause borne from feelings of disenfranchisement caused by an erosion of democracy, the Tweets, in their shared discussions and outrage (albeit not unified across the board, but still evident), support Brown's argument regarding potential for democratic resistance. The state may have replaced political rationality with neoliberal rationality, and technologies of governmentality may be focused on the individual and, more specifically, the individual as an entrepreneur of the self, but not all those individuals are focused on their individual profits at the expense of the broader social good.

To better understand the impact of neoliberalism within New Zealand, the writing of Jane Kelsey, a professor of law who specialises in "the critique of law and policy under neoliberalism" (2015, p.7) is particularly useful. In her book *The FIRE Economy*, which is aimed at a more general audience than the other writings discussed in the literature review so far, Kelsey takes a close look at the connection between New Zealand's finance, insurance and real estate (FIRE) sectors and neoliberalism, tracing pertinent moments in the development of these sectors and in New Zealand's journey to becoming "one of the most neoliberal countries in the OECD" (p.122). Where the researchers covered in the literature review to this point have taken theoretical approaches to neoliberalism, Kelsey's discussion is firmly grounded in the New Zealand experience. The story of neoliberalism within New Zealand that Kelsey unfolds highlights the paradox of neoliberalism being threatened and made fragile by its negative exposure in the global financial crisis, while also having strength by being deeply and deliberately embedded within New Zealand's political and economic systems. Showing an interest in both the Marxist and Foucauldian approaches to neoliberalism, Kelsey explores neoliberalism in New Zealand "first, as a political project to realign state power; second, as a legitimising ideology; and third, as a regulatory regime that initiated, consolidated and now safeguards the financialised economy" (p.122). Relevant to my research, Kelsey discusses amongst other points the international trend towards redesigned pension funds and deregulation of the finance sector justified by ideas of sophistication and complexity.

Kelsey's 'on the ground' view of neoliberalism within New Zealand highlights the close ties between financialisation and neoliberalism, noting the global ubiquity of financialisation while arguing that neoliberalism takes slightly different forms from country to country, with each country adapting the neoliberal template to their own specific conditions. In a shift away from the Foucauldian view of neoliberalism, for Kelsey, neoliberalism is something that is imposed *on* the government, rather than something that is imposed *by* the government. She notes, "regulatory mechanisms and institutions that organise the economy have special significance … each of them disciplines a government to comply with an aspect of neoliberal orthodoxy that is crucial to financialisation" (pp. 125-126). In this view the government is shackled by existing systems. In New Zealand, Kelsey argues, these systems were put in place in the 1980s, deliberately engineered to ensure as much as possible that they would withstand future changes in government. While this view of neoliberalism seems to align more with Duménil and Lévy's Marxist perspective on neoliberalism, which sees finance in the position of power, it also has room for a more Foucauldian take as these systems designed to withstand "political slippage" (Horn & Shepsle, 1989, as cited in Kelsey, 2015, p.121) were put in place by the government of the time, a government that looked to secure the primacy of a financialised economy. Here, it is the reforms of the Fourth Labour government that reach through the decades and assert power over both current government and New Zealand society alike. There are still mechanisms of control at play, but they are the enduring remnants of a past government. Kelsey argues that under this system "ordinary citizens are now, more than ever, periodic participants in a spectator democracy" (p.129); however, under this view of neoliberalism within New Zealand, it appears this comment would apply to government, too.

Governmentality

In reviewing literature on governmentality, Foucault (1998) once again looms large. As the founding father of the term, he is understandably heavily relied on; however, as will be discussed, some of this may be due to the nature of his work in this area making it open to a variety of theoretical applications. This review will focus on definitions of governmentality, ways of analysing it, and the various areas of concern within it that may be pertinent to my research.

A common factor in the range of definitions of governmentality found in the literature reviewed is complexity. While it seems logical to start with the definition provided by Foucault (1998), the definition comes at the end of significant 'scene-setting' and is hard to follow out of context, so I will start elsewhere. In “Governing the Present,” Bratich, Packer, and McCarthy elaborate on the oft-quoted “conduct of conduct” definition by stating

> In simplest terms, governmentality refers to the arts and rationalities of governing, where the conduct of conduct is the key activity. It is an attempt to reformulate the governor-governed relationship, one that does not make the relation dependent upon administrative machines, juridical institutions, or other apparatuses that usually get grouped under the rubric of the State. Rather, as this collection demonstrates, the conduct of conduct takes place at innumerable sites, through an array of techniques and programs that are usually defined as cultural. (2003, p.4)

Interestingly, Lemke (2007) in his article “Foucault, Politics, and Failure: A Critical Review of Studies of Governmentality” also discusses the “conduct of conduct”, but for him it denotes the function of government, rather than governmentality. He states, “In a very broad sense, government refers to the “conduct of conduct,” and designates rationalities and technologies that seek to guide human beings” (p.37). Like Lemke, Dean and Rose also place the notion of “conduct of conduct” within the realms of government, rather than governmentality: “Government is any more or less the calculated and rational activity, undertaken by a multiplicity of authorities and agencies, employing a variety of techniques and forms of knowledge, that seeks to shape conduct” (Dean, as cited in Bennett, 2012, p.47); “Government, here, refers to all endeavours to shape, guide, direct the conduct of others” (Rose, 1999, p.3).

However, while in the works reviewed neither Dean nor Rose went on to provide clear definitions of governmentality, Lemke’s (2007) interpretation of governmentality, which echoes the structure of Foucault’s “Governmentality,” considers the historical development of the modern state:

> ‘governmentality’ denotes power relations in general, and Foucault employs the term in order to gain an ‘analytical grid for these relations of power.’ In a more specific sense, governmentality refers to a quite distinct form of power. It stands for a historical process closely connected to the emergence of the modern state, the political figure of ‘population,’ and the constitution of the economy as a specific domain of reality. This process is characterised by the ‘pre-eminence over all other types of power – sovereignty, discipline, and so on – of the type of power that we can call ‘government.’ (p.38)

As if to defend this particular view of government and its separation from governmentality, Lemke notes that in Foucault’s work “government is mostly understood as the guidance of human conduct” (2007, p.48). Indeed, Foucault’s definition of governmentality does show a focus on power. In the article titled “Governmentality,” Foucault (1998b) separates the term into three distinct notions:

1. The ensemble formed by the institutions, procedures, analyses, and reflections, the calculations and tactics that allow the exercise of this very specific albeit complex form of power, which has as its target population, as its principal form of knowledge political economy, and as its essential technical means apparatuses of security.
2. The tendency that, over a long period and throughout the West, has steadily led toward the pre-eminence over all other forms (sovereignty, discipline, and so on) of this type of power – which may be termed "government" – resulting, on the one hand, in the formation of a whole series of specific governmental apparatuses, and, on the other, in the development of a whole complex of knowledges [savoirs].
3. The process or, rather, the result of the process through which the state of justice of the Middle Ages transformed into the administrative state during the fifteenth and sixteenth centuries and gradually becomes "governmentalised." (pp.219-220)

Here the individual or community being governed all but disappears and the focus is on how power is formed and exercised. For the purposes of my research, it will be useful to blend the notions of governmentality and government as presented here, seeing governmentality as the art of government that is enacted in multiple sites, allowing the implementation of certain forms of power.

Although power is missing from many of the definitions of governmentality in the literature reviewed above, much of the writing acknowledges that it has an important role to play. Along with outlining the role of power in his definition of governmentality, Foucault provided a broader perspective, stating "the art of government is just the art of exercising power in the form, and according to the model, of the economy" (1998b, p.207). Rose takes this further by stating that through the state's connection to the economy and its endeavours to manage the population, it has become 'governmentalised' and "this governmentalisation has allowed the state to survive within contemporary power relations" (p.18). For both, the important element is the economy; it serves as a tool through which power is accessed, imparted, or exercised.

Of the literature reviewed, however, other than Foucault, Lemke (2007) has the most to say about power and its relationship to governmentality. In "An Indigestible Meal? Foucault, Governmentality and State Theory," Lemke begins by stating, "the concept of governmentality demonstrates Foucault's working hypothesis concerning the reciprocal constitution of power techniques and forms of knowledge and regimes of representation and modes of intervention" (p.2). Here, he is clearly going further than linking power to the 'conduct of conduct'; he is linking the power relationship within governmentality to knowledge, representation, and intervention, where knowledge, representation, and intervention are seen to be part of the rationalizing process. For Lemke, by categorising and providing arguments or justifications, government prepares a space through which it can act, or exercise power. Citing Foucault, Lemke points out how state institutions (a category the Commission for Financial Literacy and Retirement Income falls into) are an example of a rationalised form of government. However, he notes that theories in the "analytics of government" (p.13) hold that power, like that exercised within state institutions, "is not conceived as a stable and fixed entity that could be 'stored' at particular institutional sites but signifies the result of a mobile and flexible interactional and associational network" (p.13), which echoes the neoliberal network structure outlined by Chaput (2010), detailed further in this chapter.

Kiersey (2011), a professor of political science who has written much that draws on the work of Foucault, like Lemke, also focuses on governmentality's link between power and the conduct of conduct. In his article "Everyday Neoliberalism and the subjectivity crisis: Post-political control in an era of financial turmoil" (2011) Kiersey uses Foucault and his ideas on neoliberal crisis subjectivity to examine the global financial crisis. Like Lemke (2007), Kiersey underlines the relationship between power and conduct within his definition of governmentality. Where Lemke draws out connections between governmentality and knowledge, representation and intervention, Kiersey similarly highlights the large amount of ground covered by the term 'governmentality' by noting that it entails the connection between power and the conduct of conduct "both in terms of the body of knowledge that provides the criteria of the ideal subject, and in terms of the precise ways in which the actual subject is led to practice itself in satisfying these criteria" (p.31). With its focus on discourse, power and knowledge, Kiersey argues the importance of a Foucauldian analysis to the topic of his article – the global financial crisis – noting that this type of analysis should "explain the role of conventions and norms of social practice in shaping the horizon within which actors pursued strategies to secure their own wellbeing" (p.29). Kiersey's article on the GFC provides a useful example of how notions of governmentality, discourse, power and knowledge are closely tied together. Although Kiersey discusses the impact of different elements within the financial sector, perhaps indicating a view of them as the type of institutional site Lemke argues is part of "a mobile and flexible interactional and associational network" (2007, p.13), Kiersey's main focus is on how these entities, or technologies of power, normalised uncertainties and volatilities, repackaging them as risks. In relation to my research, an area of interest is how each of the case study areas interact and are connected and the power techniques that may be present; however, it should be noted that it is not clear how it is possible to gauge whether power is stored within an institutional site.

Beyond the possibilities of storing power, from Lemke's (2007) writing, two questions are raised: how is governmentality structured, and how can it be analysed? Regarding the first of these questions, the writings of Hay (2003) are the most detailed. Starting with a focus on the development of the role of government, Hay notes that in the nineteenth century techniques for "governing at a distance" (p.165) began to be established and these techniques relied on "a pluralisation of forms of governing and of technical, organisational, and administrative knowledges" (pp.165-166). Here, the influence of a theoretical desire to separate the public into groups or individuals can be seen, as multiple sites of influence require a pluralisation of forms. Indeed, when discussing this period, Foucault refers to that which is governed as “a sort of complex composed of men and things” (Rabinow, 1994, p.208). Rose (1999) discusses the structure required of a State that extends itself far into the lives of those it governs, stating that it must be done

> by a complex set of strategies, utilizing and encouraging the new positive knowledges of economy, sociality and the moral order, and harnessing already existing micro-fields of power in order to link their governmental objectives with activities and events far distant in space and time. (1999, p. 18)

However, Rose also notes that these links are more fragile than is often suggested. While he does not elaborate in great detail on how this fragility is manifest, Hay (2003) provides insights in his statement that this type of governing at a distance requires “an implicit contract or arrangement – procedures, techniques, and rules of conduct across different spheres of life” (2003, p.166). As Hay states, this involves “an ongoing process of governing oneself, properly applying oneself, and acting responsibly across every sphere of life” (2003, p.166). The link is fragile as now, rather than governing via domination and coercion, it is done via dispersion (of resources and power); it is paradoxically governing through what Hay terms “practices of freedom” (2003, p.166). Harking back to Foucault’s discussion regarding neoliberalism’s form of societal control discussed in the previous section, Hay notes that to adhere to the theory of minimal forms of state control, this form of state control requires “programs that shape, guide, channel – and upon *responsible*, self-disciplining social subjects” (2003, p.166). Bratich, Packer, and McCarthy elaborate on this by explaining, “It is not so much that the state’s reach is all-consuming; instead, the techniques of governmentality emanate from numerous sources and without them the state would not be what it is” (2003, p.5). They add: “Governmentality is an analytic perspective that defines the state’s role as one of coordination, one that gathers together disparate technologies of governing inhabiting many sites” (p.5). What these writings appear to have in agreement is the assertion that contemporary governmentality operates within a network of numerous and varied sites. It would seem that, to address the dilution of control the increase in localities brings, techniques are needed to ensure a certain level of self-governing (that presumably adheres to the over-arching governing agenda). This idea of governing via multiple sites can be seen in the institutional documents that provide context to the Twitter case study in this thesis. The rhetoric surrounding both KiwiSaver and financial literacy involves notions of responsibility, and freedom – at least in the financial sense, so from this perspective, they resemble the types of shaping programmes discussed here; however, as will be discussed later, the application of normed practices to analyse governmentality is considered problematic by some.

Before moving to the problems of analysis, however, I would like to quickly look at Hay's writing on governmentality and what he terms the "new architecture of community" (2003, p.165). Here, Hay discusses how governmentality has informed discussions about neoliberalism. He observes that for those interested in "liberalism as a political and governmental rationality" (p.166), like Rose, neoliberalism does not include a new philosophy for governing, but, rather "a new rationality for a social arrangement that relies upon new kinds of citizen-subjects and new techniques for governing them" (p.166). At this point the connection between the type of governmentality noted earlier and neoliberal theory is made clearer. Hay notes that the neoliberal form of governing, as discussed by others, encourages "ever greater reliance upon self – self-expertise and self-governing as necessary components of a political rationality affecting all aspects of life" (p.166). This aligns with writings reviewed in the neoliberal segment of the literature review, which noted a neoliberal shift towards the provision of individual economic spaces in which the self manages its own risks. Returning to Lemke's paradoxical notion of governing by freedom of choice, or "controlled autonomy" (p.37), he notes that within neoliberal governmentality, there is an "intimate relationship between the universal call for 'self-determination' and quite specific societal expectations and institutional constraints" (p.37), an idea reiterated by Hay who, in discussing neoliberal forms of governing, notes that "it also understands the technological (i.e. the 'new' apparati of rule) as mediating a kind of State control that values self-sufficiency and a kind of personal freedom that requires self-responsibility and self-discipline" (p.167). In Kiersey's (2011) article on neoliberalism and the global financial crisis, these neoliberal forms of governing through the likes of "discourse of good citizenship, delineated in terms of economic responsibility, and moral courage" (p.24) indicate what he sees as an important element of neoliberal capitalism: the "cynical deployment of the power of subjectivity" (2011, p.41). Kiersey highlights how perceived problems are assessed and managed via technologies of power. These include technologies of the self, which work to support the individualisation of society, propelling the individual to voluntarily self-govern to meet pre-established ideals. In the act of meeting ideals, the individual then makes themselves subject to evaluation based on those ideals. Within a discourse of good citizenship based on financial self-sufficiency, this becomes more than an evaluation of individual economic responsibility, but also an evaluation of an individual's morality as informed by neoliberal economic theory. From this, it is clear is that neoliberalism and the form of governmentality discussed earlier are closely linked. For the purposes of my research, I am interested in the ways in which the areas associated with my case study reflect this neoliberal form of governmentality: how they frame, manage and evaluate the perceived problems, including what is deemed to be the 'truth' and what is moral, and whether they provide any new insights into the art of governmentality in the neoliberal age.

A final point to note prior to looking at the analysis of governmentality: while the focus on the self is noted as being important for neoliberal governmentality, not all literature reviewed held it as a primary concern. Interestingly, for Oksala (2013), the economy and, more specifically, wealth is seen to be the focus of neoliberal governmentality. For her, neoliberal governmentality "reduces politics to a single question: according to the best available economic analysis, what kind of political arrangement would ensure that the population is as wealthy as possible?" (p.71). In her outline of the history of governmentality, Oksala notes that via the development of political economy in 18th-century claims regarding the scientific truth about economics and good governance were made possible. This is highlighted as an important moment as it signifies for her the conceptual origin of neoliberal governmentality where the 'truth' revealed within the economic sphere "places strict limits on the realm of politics, such that economic knowledge must fundamentally guide and condition political power" (p.60). Indeed, the idea that the economy is fundamental not just to neoliberal governmentality, but governmentality in general is addressed by Foucault, who states, "the introduction of economy to political practice [is the] essential issue in the establishment of the art of government" (1998b, p.207). Given the focus of my research, the link between governmentality and economy is particularly important to note.

Although all the ideas discussed to this point are important to my study, the literature that discusses the analysis of governmentality is perhaps the most important literature to review, in light of the practicalities of my research. The most prolific writer in this area is Lemke, who, in his chapter titled "Foucault, Politics, and Failure: A Critical Review of Studies of Governmentality" rails against those who ""canonise" or "generalise" this style of thought" (2013, p.52) by stating, "[t]he productivity of governmentality studies and its critical potential rests on whether or not it is possible to integrate innovative concepts and ideas and concomitantly to open up new research methods and lines of questioning" (p.52). Specifically, Lemke notes that within governmentality studies there has been a tendency to observe a common set of strategies or technologies within whatever area the research is on and because of the over-use of these strategies or technologies, no original insights are reached. The common strategies or technologies Lemke raises are "indirect forms of government like empowerment or activation instead of direct intervention; a focus on responsibilisation and risk management; development of entrepreneurial modes of action and organisation, and so on" (p.51). Lemke calls their use "theoretical trivialisation" that is "paralleled by a systematic overvaluation of the concept" (p.51). Lemke's caveat is worth bearing in mind, given that I intend to observe the occurrence of these specific strategies within my case study and intend to go beyond simply tracing indirect forms of governmentality.

However, while Lemke (2013) rails against certain types of governmentality analysis, Bennett (2003) and Rose (1999) provide an outline of approaches to the topic that have the potential to deliver useful insights. Bennett, discussing work done by Dean, raises suggestions for ways of analysing governmentality, focussing on "mechanisms of government, with its routines and operations" (2003, p.47), noting the four areas that the analysis should pay attention to:

> 1. Characteristic forms of visibility, ways of seeing and perceiving
>
> 2. Distinctive ways of thinking and questioning, relying on definite vocabularies and procedures for the production of truth (e.g., those derived from the social, human and behavioural sciences)
>
> 3. Specific ways of acting, intervening and directing, made up of particular types of practical rationality ("expertise" and "know-how")
>
> 4. Characteristic ways of forming subjects, selves, persons, actors or agents. (Dean, as cited in Bennett, 2003, p.47)

Rose (1999) also addresses the analysis of governmentality, noting that the purpose is "diagnostic, rather than descriptive" (p.19). For him, studies of governmentality are studies of multiple things:

> Of the emergence of particular 'regimes of truth' concerning the conduct of conduct, ways of speaking truth, persons authorised to speak truths, ways of enacting truths and the costs of so doing. Of the invention and assemblage of particular apparatuses and devices for exercising power and intervening upon particular problems. They are concerned, that is to say, with the conditions of possibility and intelligibility for certain ways of seeking to act upon the conduct of others, or oneself, to achieve certain ends. (p.19)

Rather than stating that governmentality is a certain set of strategies, something criticised by Lemke (2013), Rose and Bennett are highlighting angles of analysis that seek to understand, rather than categorise. This addresses the fluidity Foucault seems to point to in his discussions about governmentality. Categorising requires adherence to an existing framework, which does not fit the idea of governmentality as something not fixed. To advance the study of governmentality, according to Lemke, we need to look beyond the framework. For Rose, this means "to start by asking what authorities of various sorts wanted to happen, in relation to problems defined how, in pursuit of what objectives, through what strategies and technologies" (1999, p.20), which provides a good guide for my studies.

In their article "Governmentality", Rose, O'Malley and Valverde (2006) outline Foucault's discussions about governmentality, tracing its origins, analysing what it has enabled, and touching on the different types of governmentality analyses undertaken across a range of disciplines. Just as they argue that discussions of governmentality informed by Foucault do not consider a single entity but rather recognize that "a whole variety of authorities govern in different sites, in relation to different objectives" (p.85), their article also argues the worth of the varied tools developed in these studies of governmentality undertaken across a wide range of disciplines. They highlight the value of a flexible approach that is "compatible with many other methods" (p.101). However, like Collier (2009), they caution that an improper consideration of governmentality can lend itself to overly broad categorisations, where, for example, a site of analysis shows instances of neoliberal logics and thus is categorized as neoliberal in its entirety. While they note that these ways of understanding governmentality where the presence of one element dictates the understanding of the whole have led to some viewing governmentality as rigid to the point where change can only be brought about by an external force, Rose, O'Malley and Valverde (2006) argue that governmentality is far from rigid. Rather, they state, "in our view… the assembled nature of government always suggests that rationalization – the process of rendering the various elements internally consistent – is never a finished process" (p.98). They add that the rationalities themselves are also constantly changing, and hence they contend that consideration of social rationalities of government helps frame and understand governmentality as an approach to the understanding of governing the conduct of "a society of interdependent citizens and interlinked social and economic processes that are amenable to knowledge and planning" (p.98).

Where Rose, O'Malley and Valverde (2006) acknowledge potential issues of broad categorisation within governmentality studies and present a way of approaching governmentality that considers rationalities as a way of avoiding falling into these ideas of rigid categorisation, Collier (2009) argues that the concept of governmentality itself "is not a helpful tool for analyzing a topological field comprised of heterogeneous techniques, procedures and institutional arrangements that *cannot* be made intelligible through reference to common conditions of possibility" (p.98). Although Collier recognizes that those studying governmentality largely do not treat it as rigid, he maintains that as governmentality lends itself to this synechdocal neoliberal categorisation, it remains an overly problematic tool that even the consideration of social rationalities cannot solve. For Collier, the ever-shifting, flexible nature of Rose, O'Malley and Valverde's proposed consideration of social rationalities introduces too many potential variables, losing its utility as a tool to understand power and governance. Focusing on common assertions of neoliberalism's shape-shifting abilities, and perhaps overlooking scholarship connecting the likes of financialization, individualization, and corporate welfare to neoliberal ideology, Collier asks what can thus be decisively labelled 'neoliberal' in the structure and activity of governance. In the final paragraphs of his article, Collier asserts that some considerations of governmentality can run the risk of ascribing it with neoliberal ideology and, in taking a blinkered, rigid view, overlook techniques of governmentality seen in the application of neoliberal ideology that are also present in other regimes and doctrines. Connected to this, Collier argues, neoliberalism's fluidity in approach is such that elements of it can appeal to those on both ends of the political spectrum, producing varied effects upon application, some of which may not necessarily be consistent with neoliberal doctrine. Hence, application of a 'neoliberal' label may neglect or subjugate nuance and hinder a more complete understanding of governmentality techniques. He asserts that a topological analysis – considering "redeployment, recombination, problematization, [and] pattern of correlation, among others" (p.99) – is a more promising line of enquiry than approaches that consider governmentality, but then he ends by acceding that governmentality "is most valuable in understanding the conditions of possibility of certain ways of understanding and acting; for drawing insightful distinctions among diagrams of power; for understanding what is general to diverse governmental forms in disparate sites" (p.99). Ultimately, of the two approaches, "neither [should be] afforded primacy" (p.99).

Within my study, I apply aspects of both approaches discussed by Collier (2009). While I certainly lean into neoliberal categorisations, these are specific, rather than broad, keeping the focus tightly on defined characteristics of neoliberal governmentality as operationalized in the New Zealand context. Here, notions of neoliberalism are raised, commonalities across nodes of power are identified and language is interrogated to better understand the connection between neoliberal ideology, the drive for financial literacy in New Zealand and the urgency surrounding its narrative. Considerations of governmentality are important in this research for what they reveal about the ways in which elements of neoliberal ideology are enacted, the ways neoliberal ideals are further embedded within New Zealand society and their connection to power and control. These factors are examined in further detail in chapter four of this thesis.

Responsibilisation/ Financialisation

Neoliberalism does not just loom large in the rhetoric surrounding financial literacy, as has already been outlined; its influence is apparent in the mere existence of current financial literacy initiatives. As Harvey (2005) notes, when Margaret Thatcher famously denied the presence of society, she was heralding the already growing drive towards individualism and personal responsibility. However, the notion of responsibilisation, which is often closely tied to neoliberalism, is not peculiar to neoliberalism. Sociologist and anthropologist Ronan Shamir argues that the practice of responsibilisation is the "prime underlying social disposition" (2008, p.4) of governance, noting, "It is an 'enabling praxis' and a technique of government that set into action a reflexive subjectivity deemed suitable to partake in the deployment of horizontal authority and one which willingly bears the consequences of its actions" (p.4). Shamir points out that spontaneous reflexive subjectivity and morality separates responsibility from simple rule-following. He posits that responsibility as framed by neoliberal theory recasts the notion of moral agency, aligning it with the cost/benefit focussed habits of "economic-rational actors" (p.7). Harvey's point that neoliberalist advocates see the role of the state as primarily to maintain a framework that enables “individual entrepreneurial freedoms” with “strong private property rights, free markets, and free trade” (2005, p.2) indicates that this recalibrated idea of responsibilisation is an important vehicle that enables the state to withdraw from certain areas of social provision. A responsible, financially literate consumer will not need the state to provide for her post-retirement, nor will she need the state to regulate the financial sector as she will have taken enough responsibility for her financial education that she will be able to identify risks and take advantage of opportunities with minimal negative impact on herself or society in general. However, should this financially literate, responsible consumer fail, as Shamir (2008) has pointed out, responsibilisation also means she must bear the consequences of her actions. Looking at responsibilisation as it relates to financial literacy, Willis states: “When consumers find themselves in dismal financial straits, the regulation-through-education model blames them for their plight, shaming them and deflecting calls for effective market regulation” (2008, p.198).

However, to responsibilise the consumer and facilitate a withdrawal from its own responsibility, there are a few steps the state must take first. Bay, Catasús, and Johed (2012), in their article that looks at the role of accounting in the framing of financial responsibility, discuss how “the first goal of the financial education programme is to increase people’s awareness of their own need for financial education” (p.601). In other words, people do not know that what they do not know is not good for them. They add that to get people to a place where they can be educated, they must be informed of the following: “a) they are financially illiterate, b) illiteracy is bad, and c) their illiteracy needs to be remedied” (p.601). Here Bay Catasús, and Johed draw on the writing of Alan Finlayson (2009), a political and social theorist, who notes that the marketing of initiatives such as financial education programmes is as significant as the programmes themselves, as they “act on individuals’ orientations towards and understanding of finance” (p.411). Via marketing, financial literacy is promoted at the same time as attitudes and values associated with it. In New Zealand, the establishment and advertising of the ‘Sorted’ website might be seen as a primer for subsequent financial literacy educational drives and certainly, the marketing of financial literacy initiatives should be considered in conjunction with the initiatives themselves.

One of the many areas of concern that Willis (2008) highlights in the current drive towards the responsibilisation of the individual via financial literacy education is the effectiveness of the educational programmes themselves. After detailing empirical studies to date, Willis claims, “this state of the research does suggest that ideology rather than evidence is driving the support for financial regulation through education” (p.211). Linking back to Harvey’s (2005) point about ever changing financial products, Willis adds that for financial literacy education to be truly effective it must keep up with these innovations in a “largely unregulated financial-services marketplace” (p.211). Indicating that the current drive for financial education belies the complexity of the issue, she further adds:

> There are at least four intractable barriers here: the informational asymmetry between sellers and consumers created by the complexity of financial products and the speed with which they change; the very low level of computational abilities possessed by most consumers; widespread decision making biases that impair consumer financial behaviour; and the disparity in resources with which industry versus educators can reach consumers. (p.211)

If education is not capable of adequately preparing consumers for participation in financial markets where they are expected to shoulder the consequences, responsibilisation in this instance resembles lambs en route to the freezing works. What it highlights is a need to closely examine and compare the stated goals of financial literacy initiatives and the state (and provider) justifications for them.

Gerald Epstein (2005) indicates that some see the unceasing creation of complex financial products as part of the rise of financialisation. In his introduction to *Financialisation and the World Economy*, he states "financialisation means the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies" (p.3). In fact, Epstein points out that some place financialisation in a more exalted position, viewing it as the driving force behind neoliberalism and globalisation. Thomas Palley (2013), recently a senior economic policy advisor in the U.S., shows some affinity with this point of view, noting that financialisation could alternatively be called financial neoliberalism. His book, *Financialisation: The Economics of Finance Capital Domination*, outlines the principles behind financialisation and makes the claim that the key effects of financialisation are to "(1) elevate the significance of the financial sector relative to the real sector, (2) transfer income from the real sector to the financial sector, and (3) increase income inequality and contribute to wage stagnation" (p.9). Key to my research, Palley states that financialisation advances the move towards "small government," identified by "privatisation, tax cuts that shrink the public revenue base, and deregulation" (p.36). He notes that the small government agenda includes pension and saving reforms with "a movement away from providing retirement income through group-based defined benefit pension plans to individual defined contribution arrangements" (p.3). More importantly, Palley (2007) identifies three avenues through which this movement advances the interests of the financial sector:

> First, they generate large fee income through charges for custodial services and brokerage commissions. Second, they increase individual investor demand for equities, which boosts equity prices. Third, they create an investor identity among households that generates favourable political support for policies favoured by large financial interests. (p.36)

Keeping this in mind, we might ask why financial literacy measures include questions about diversifying stocks and look more closely at the connection between financial literacy imperatives and the emergence of KiwiSaver. With financial literacy measures encouraging investment and the implementation of KiwiSaver, which as an opt-out, rather than opt-in retirement investment scheme impels many New Zealanders into investing when they otherwise might not, it seems important to examine how each of these elements is framed and where they stand in relation to the dominant philosophies of our time.

Discourse

The previous section of this literature review traced theories linked to neoliberalism that will be useful in my research. Another important element of my work is financial literacy itself. Before getting there, however, I would like to start from the broadest perspective: discourse. An analysis of the literature providing definitions of discourse elicits definitions that seem relatively straightforward; however, when reviewing the literature on ways of analysing discourse, things become much more complex. In this initial literature review my focus is on arriving at a working definition of discourse and a general overview of the key concerns when analysing discourse.

As with a number of the previous sections, much of the reviewed literature on discourse appears to be informed by the work of Foucault, so I will start with definitions gleaned from his writings. In "On the Archaeology of the Sciences," Foucault (1998f) notes that discourse as a field is very large, but definable. He states "it is constituted by the set of all effective statements (whether spoken or written) in their dispersion as events and in the immediacy that is proper to each" (p.306). What he means by "immediacy that is proper to each" (p.306) is elaborated on in the definition of discourse he provides in "My Body, This Paper, This Fire," an article that appears later in the same collection of works. Here, he states:

> Any discourse, whatever it be, is constituted by a set of utterances which are produced each in its place and time, as so many discursive events. If it is a question of a pure demonstration, these utterances can be read as a series of events linked one to another according to a certain number of formal rules; as for the subject of the discourse, he is not implicated in the demonstration – he remains, in relation to it, fixed, invariable and as if neutralised. (1998e, p.405)

This definition expands on the notion of discourse as collections of 'utterances', governed by certain rules, within a time and space of their own. Here, the question of the function of the subject is raised, which I will discuss in more depth later. Gordon (1998), who provided the introduction to *Essential Works of Foucault: Volume 3*, sums up what he sees as Foucault's definition of discourse, stating it is "identifiable collections of utterances governed by rules of construction and evaluation which determine within some thematic area what may be said, by whom, in what context, and with what effect" (p.xvi). In each of these definitions, discourse is a collection of utterances/statements that constitute some form of 'event'.

When looking at the definitions provided by other theorists, a wider range of concerns become apparent. For Wodak (2001), the focus of the definition appears close to that of Foucault's; however, language use (for example, the replacement of the term 'utterances' with 'linguistic acts') indicates an interest in the detailed mechanics of discourse:

> 'Discourse' can thus be understood as a complex bundle of simultaneous and sequential interrelated linguistic acts, which manifest themselves within and across the social fields of action as thematically interrelated semiotic, oral or written tokens, very often as 'texts', that belong to specific semiotic types, that is genres (p.66).

For Jäger (2001), signalling Foucault's ultimate focus in his discussions of discourse, the emphasis shifts from the collection and dispersion of utterances to the flow of knowledge and the exercise of power. Quoting his earlier works, he defines discourse as "'the flow of knowledge – and/or all societal knowledge stored – throughout all time' (Jäger, 1993 and 1999), which determines individual and collective doing and/or formative action that shapes society, thus exercising power" (p.34). Jäger highlights this focus on power has been noted by others, as he shows when he quotes Link, who states discourse is "an institutionally consolidated concept of speech inasmuch as it determines and consolidates action and thus already exercises power" (Link, as cited in Jäger, p.34). The areas of relevance to my research and commonalities in the literature reviewed outline a possible working definition of discourse as statements – grouped within collections or categories – that are both drawn from and feed into accepted bodies of knowledge. The relationship between knowledge and power lies in the discourse's ability to "represent the order of things" (Foucault, 1998h, p.264).

Much of the literature reviewed highlights a close connection between discourse, knowledge, and power. Jäger (2001) simply and succinctly sums up the connection in his statement that "as 'agents' of 'knowledge (valid at a certain place at a certain time)' discourses exercise power" (p.37). Indeed, in Jäger's work "Discourse and Knowledge" he pays close attention to the interaction of power and knowledge within discourse. For Jäger, discourse does not merely reflect social practice; it works as a way of implementing power by "transport[ing] knowledge on which the collective and individual consciousness feeds" (p.38). Connecting to the idea of drawing from and feeding into a body of knowledge, Jorgensen and Phillips (2002) highlight how discourses are linked to power in that they "contribute centrally to producing the subjects we are, and the objects we can know something about (including ourselves as subjects)" (p.14). Discussing their view of Foucault's work, they state "[w]ith respect to *knowledge*, Foucault's coupling of power and knowledge has the consequence that power is closely connected to discourse" (p.14). The power/knowledge/discourse relationship Foucault outlined in the transcript of his "Truth and Power" interview shows his vision of this relationship is one where power is the genesis of knowledge and discourse. He states, "What makes power hold good, what makes it accepted, is simply the fact that it doesn't only weigh on us as a force that says no; it also traverses and produces things, it induces pleasure, forms knowledge, produces discourse" (1998i, p.120). For Jorgensen and Phillips (2002), the notion that "power constitutes discourse, knowledge, bodies and subjectivities" (p.13) is what makes power productive, rather than "exclusively oppressive" (p.13). Interestingly, van Dijk (2003), in "The Discourse-Knowledge Interface", which focuses on critical discourse analysis (CDA), notes that "[o]ne of the general aims of CDA is to study the discursive reproduction of dominance (power abuse) and its consequences on social inequality" (p.87), which seems to indicate that while Foucault's ideas about power may have influenced the focus of CDA, it is the notion of power as an oppressive, rather than productive force that appears to be deemed more important for research purposes.

Adding more nuance to the interaction between power and knowledge, Faubion (1998), in his introduction to the *Essential Works of Foucault* (Volume 2), outlines Foucault's discussion regarding the difference between statements generated within a discourse and statements that constitute a discourse. The idea is those that constitute a discourse are rarer and, therefore, are costlier as they require more capital in their production. Here Faubion works in notions of truth, stating that the perceived cost "evinces their "value," but a value that cannot be defined "by their truth." The value of statements resides, rather, in their presumptive truth, their presumptive authority, and so in their actual instrumental potential" (p.xxxiii). Foucault elaborated on the link between truth and discourse in interviews transcribed in Rabinow's *Essential Works of Foucault* (volume 3). Taking his cue from Nietzsche, Foucault states:

> a rationality – that of a science, a practice, a discourse – is not measured by the truth that science, that discourse, that practice may produce. Truth itself forms part of the history of discourse and is like an effect internal to a discourse or a practice. (1998c, p.253)

In his discussions regarding truth, Foucault almost seems to view it like a commodity, rather than an indicator of veracity. In his discussion regarding truth and power, he states:

> In societies like ours, the "political economy" of truth is characterised by five important traits. "Truth" is centred on the form of scientific discourse and the institutions that produce it; it is subject to constant economic and political incitement (the demand for truth, as much for economic production as for political power); it is the object, under diverse forms, of immense diffusion and consumption (circulating through apparatuses of education and information whose extent is relatively broad in the social body notwithstanding certain strict limitations); it is produced and transmitted under the control, dominant if not exclusive, of a few great political and economic apparatuses (university, army, writing, media); finally, it is the issue of a whole political debate and social confrontation ("ideological" struggles). (1998i, p.131)

For Graham (2011), this perception of truth requires those undertaking a discourse analysis from a Foucauldian perspective to recognise that “truth is contingent upon the subjectivity of the reader and the fickleness of the language” (p.666). She notes a tendency from a desire to avoid “speak[ing] for the subject of analysis” (p.666) to “recognise the futility of trying to mine a policy document for the writer’s intention” (p.666). However, this does not challenge my project design as Graham goes on to note that the aim of this type of research should not be to “establish a final ‘truth’ but to question the intelligibility of truth/s we have come to take for granted” (p.666). She states:

> Discourse analysis consistent with a Foucauldian notion of discourse does not seek to reveal the true meaning by what is said or not said (Foucault, 1972). Instead, when ‘doing’ discourse analysis within a Foucauldian framework, one looks to statements not so much for what they say but what they *do*; that is, one question’s [sic] what the constitutive or political effects of saying this instead of that might be? (p.667).

Jorgensen and Phillips (2002) support this focus in discourse analysis, stating:

> Because truth is unattainable, it is fruitless to ask whether something is true or false. Instead, the focus should be on *how* effects of truth are created in discourse. What is to be analysed are the discursive processes through which discourses are constructed in ways that give the impression that they represent true or false pictures of reality. (p.14)

These ideas regarding truth and analytical priorities in the literature reviewed to date are important to my research as they provide very clear guidelines regarding methodology.

At this point, I need to make a slightly tangential step in the literature review and discuss literature surrounding the potential theoretical complications I face in professing to take a methodological approach informed by Foucault, rhetorical analysis and critical discourse analysis (CDA). Van Dijk’s assertion that “one of the general aims of CDA is to study the discursive reproduction of dominance (power abuse) and its consequences on social inequality” (1993, p.87) indicates the core focus of CDA noted earlier: power. In their article “Critical discourse analysis and rhetoric and composition”, authors Huckin, Andrus and Clary-Lemon (2012) argue the benefits of critical discourse analysis, further highlighting this focus, stating “[CDA] is an interdisciplinary approach to textual study that aims to explicate abuses of power promoted by those texts” (p.107). Indeed, they solidify the importance of the oppressive nature of power in CDA by quoting Ruth Wodak, “one of the field’s founders and foremost practitioners” (p.107), who said, “CDA [is] fundamentally interested in analysing opaque as well as transparent structural relationships of dominance, discrimination, power and control when these are manifest in language” (Wodak, p. 53, as cited in Huckin, Andrus & Clary-Lemon, 2012, pp.107-108). With Foucault noted as one of the key theorists who has influenced and continues to influence the CDA approach (Huckin, Andrus, & Clary-Lemon, 2012), the connection between discourse and power within CDA is unsurprising. However, with CDA's strong focus on power and interest in "the discursive management of the public mind" (van Dijk, 1993, p.280), the same question of agency raised within discussions regarding Foucault's ideas about power must be tackled in CDA.

As noted earlier, a common reading of Foucault's ideas regarding power positions it as something elusive, so deeply embedded in the everyday via networked nodes and the likes of socialised norms that the individual is merely an effect of power (Allen, 2002). Despite Foucault's declaration that "it is not power, but the subject, which is the general theme of my research" (as cited in Dreyfus & Rabinow, 1983, p.209), this idea that the individual is formed by these intricate systems of power/knowledge shifts the individual from subject to object, removing the possibility of true performative power under the implication that the individual has no real choice or ability to act because what they know and understand and the system within which they operate are all controlled, or at least deeply informed by these well-established mechanisms of power. Raymond Caldwell (2007), an academic with particular interest in agency, discusses Foucault's depictions of power/knowledge and the relationship of agency to power, noting that within Foucault's framework the subject is "a site of power within discourse, always subsumed or determined by power and apparently unable to step outside itself to unmask or deface this power" (p.775). Following these readings of Foucault, it is because of this manifold dispersion or network of power that we are led to discipline ourselves, accepting and adhering to norms without any overt coercion from others. Within this system of power, individual autonomy or agency is merely an illusion.

Mixing this reading of Foucault with both critical discourse analysis and rhetorical analysis, therefore, appears to present problems. If these interpretations of Foucault's ideas of power and agency are applied to a critical discourse analysis, the notion of agency immediately provides a point of tension with rhetorical analysis, given that a central tenet to rhetorical analysis is the notion that "people are able to persuade others to believe things through communication" (Zachry, 2009, p.71). Further emphasising the potentially transformational role of agency within rhetoric, researcher in rhetoric and discourse Elisabeth Hoff-Clausen states of rhetorical agency that "the term relates to the power of speech to intervene in a course of events" (2018, p.287). She adds:

> Rhetorical agency is realised only when an audience attends to someone speaking, thus opening a possibility of influence, and when the words of the speaker in return attribute agency to members of the audience – that is, identify and engage them as mediators of change. … It is through this process of a speaker and an audience mutually attributing each other a possibility to act that words may (trans)form the social and material reality. (p.288)

Within rhetorical analysis, the persuasive act in itself implies agentive power, both in the hands of the author via their ability to use language to persuade and in the hands of the audience via their choice to be persuaded (or not) by this language. Discourse framed in this way certainly holds the possibilities of upholding existing power structures, but it is not something that merely exists for the purpose of asserting, maintaining, or legitimising those power structures. Rather, discourse via the lens of rhetorical analysis is communication intended for and received by an audience – an audience that holds the possibility of being persuaded, an audience that, therefore, holds power via the potential shifts they may bring about by actions emanating from the persuasive act. Highlighting the importance of the role of the audience within rhetorical analysis, Mark Zachry (2009), a researcher in technical communication with special interest in rhetorical analysis, points out that rhetorical analysis involves more than interpreting discursive meaning; it is about "interpreting the meaning of these textual components – both in isolation and in combination – for the person (or people) experiencing the text" (p.69). Audience is important. The world of the rhetorical analysis encourages consideration of the role of the intended audience in the shaping of language used; it requires the analyst to interpret discrete sections or moments of language use, considering a variety of components, from context to the subject being discussed to ascertain the persuasive nature of that language, including the effect the language use may have on the audience's perception of the subject.

Consideration of language via a rhetorical analysis certainly allows for commentary on mechanisms of power that may have an impact on the constituent parts of a text, but studies of power are at the heart of CDA. As such, CDA's focus on "structural relationships of dominance, discrimination, power and control when these are manifest in language" (Wodak, p. 53, as cited in Huckin, Andrus & Clary-Lemon, 2012, pp.107-108) places the recipients of that language in a potentially overlooked corner. By automatically positioning the audience as subjugated to the discourse, while also not giving them a prime position within the framework of the analysis itself, CDA doubly subjugates the audience. This is not to say that CDA is unconcerned with audience or that audience could not be part of the analytical framework of a critical discourse analysis, as analyses abound that include discussions of the audience's agency in specific discourses; however, within CDA audience consideration is often an optional by-product of a larger focus on issues of power.

Despite these potential tensions within the elements of my intended analytical approach, Foucault's discussions regarding power in his later work offer a way of reconciling the parts, as does the very fluid nature of the CDA field. Sara Mills (2003), a linguist who has written on both discourse and Foucault, discusses Foucault's view of the complexity in power relationships, highlighting how Foucault was less interested in the oppressive nature of power and more interested in the ways power is resisted, the way individuals are active subjects in the affirmation or resistance to power. Rather than being merely constraining, Mills argues that Foucault saw power as productive, acting as a catalyst of sorts for new forms of behaviour. For Caldwell (2007), it is in this notion of resistance that the opportunity for agency appears; however, all is not smoothly resolved as Caldwell notes that Foucault's equating of resistance to power to "the irreducible opposite to power" (p.776) limits the scope of that agency. Positioned in diametric opposition to power, Caldwell argues resistance then is simply reactive and therefore still situated within the existing power/knowledge network, rather than having its own intentionality. In other words, resistance under this framing lacks a reason for being beyond simply being the opposite of power and, as Caldwell states, it is "ultimately a volitional act of refusal; it allows those who [are] 'subjects' of power to act otherwise and reject their confinement and self-subjugation within pre-determined discourses of power/knowledge" (p.777). Although the form of agency described here appears perilously close to the illusory form of agency described by Caldwell earlier, Mills argues that Foucault himself provides a blueprint for effectively creating ways of resisting systems of power. Mills suggests the very diametric opposition described by Caldwell that appears to confine agency and resistance indicates a necessary focus on individual sites of power that contain the possibility for creating new systems of power via a collection of multiple, diversified sites of resistance. Undoubtedly having diverse resistance strategies with potentially varied agendas makes resistance difficult to coordinate, but, as Caldwell notes, "acts of self-reflexivity, resistance and change are themselves discursively constituted and therefore potentially infinite" (2007, p.186). Foucault himself stated, "discourses that make us into subjects also allow the creation of a space for discursive resistance and change" (Foucault as cited in Caldwell, 2007, p.186). With the potential for a more transformative form of agency than that previously imagined, a space is thus provided within which both Foucauldian theories of power/knowledge and ideas of rhetorical agency can co-exist.

Caldwell and Mills' arguments regarding Foucault's discussions about resistance open up a pathway for combining the previously agency-limiting Foucauldian analyses of power/knowledge with rhetoric's more expansive view of agency within discourse; however, it is perhaps the fluid nature of critical discourse analysis (CDA) itself that more readily enables a research approach that combines Foucauldian theories with rhetorical and critical discourse analyses. In "Critical discourse analysis and its critics", author Ruth Breeze not only points out that "many scholars, particularly those working within [the CDA] paradigm, feel that it is incorrect to refer to CDA as a unitary, homogenous entity" (2011, p.494); she also details a variety of the ways CDA approaches differ and the various schools of thought within CDA. Indeed, it is this very flexibility within CDA that Huckin, Andrus and Clary-Lemon (2012) argue makes it a "powerful new methodology for rhetoric and composition, leading to unusually rich and versatile research" (p.110). To this end, the core method of critical discourse analysis (CDA) that is informing the methodology of this research is CDA's discourse-historical approach outlined by Wodak (2001). To understand the framing of the financially literate subject, not only are the elements of the rhetorical situation useful to examine, so too is the origin of the framing of that subject, its shifts, its context, and the ideas that influence the way it is framed. In her discussion of the discourse-historical approach, Wodak (2001) notes that its genesis as a method was a study seeking to trace the composition of a particular anti-Semitic image that took hold in public discourse surrounding an Austrian presidential campaign in the 1980s. The method involved analysis of newspaper and other media reports, reporting from other countries, and institutional discussions as well as historical detail. A longer study that followed this looking at the commemoration within Austria of the 50th anniversary of Hitler's occupation included an examination of a report and media discussions about that report, and an examination of official political commemorations and public discussions preceding the commemorations. Wodak (2001) argues that the method followed in these studies interested in national identities enabled the researchers an in-road in explaining how the "discourses of sameness and difference" (p.71) were being applied. Through this approach, in the breadth of their analysis, the researchers were able to trace how focal points within discourses arose, how they transformed, and how they were modified through the various nodes of power they traversed (though Wodak uses the term "fields of action" [p.71], rather than nodes of power). Using one of her research topics as an example, Wodak unpacks the steps followed within the discourse-historical approach taken. The first step she notes was understanding of key historical moments in the rise of the discourse. This also included consideration of theories that helped drive some of the events discussed. The second was what Wodak termed "the application of the discourse model" (p.72), which included separating the discourse across the genres being analysed into sub-topics. Through this step they were able to identify and examine intertextuality and overlaps across nodes of power and genres. The following step was an overview of the genre being analysed. In the example given by Wodak (2001), this process manifests as a description of the genesis and intricacies of a specific petition. The final step was an analysis of the research data. At the end of the chapter, Wodak makes a point of noting that the procedures within the analysis (sampling information, formulating questions, categorising, interpreting, contextualising) are applied recursively throughout.

As this research into the framing of the financially literate subject is interested in both the audience of that framing and the power relations intrinsic to that framing, I have found it useful to take a blended approach to my research methodology, combining rhetorical analysis with discourse-historical CDA. In detailing the interdisciplinary utility of both CDA and rhetorical analysis, Huckin et al. discuss important ways they see a combination of the approaches adding to analyses of discourse, stating that the combined approach "enables writing researchers to move beyond traditional analytic modes of interpretation and criticism into examining the impact that contexts, power dynamics and social interaction have on written texts and processes" (pp.110-111). They note that including CDA's focus on power within a rhetorical analysis, "better achiev[es] the goals of a critical pedagogy" (p.111), adding that it enables "the parallel analysis of multiple, multimodal, and historical texts… and provides a lens with which the researcher can coordinate the analysis of larger (macro) political/rhetorical purposes with the (micro) details of language" (p.111). Huckin et al. also detail how the combined approach has proved particularly useful for researchers of discourse within news media, which plays a role in my case study. Specifically, they note the value of layering CDA's notions regarding framing with rhetoric's form of close-reading, inclusive of rhetorical choices informed by the material (like the design of a social-media application). This approach, they argue, enables researchers to not only critique news media's depiction of events via consideration of both language details and context but to also consider its bearing on the audiences of those discourses. Although Huckin et al. discuss the utility of a combined approach in terms of CDA as a useful tool that is integrated into rhetorical analysis – placing rhetorical analysis in a dominant position – their arguments could equally be used to support the integration of the rhetorical analysis approach into CDA. Regardless, they offer a strong justification for a combination of the approaches.

Literacy Studies

The term 'literacy' has been applied to many fields over the years. If we say someone is literate, we tend to mean they are able to read and write; however, when the word 'literate' (or, more often 'illiterate') is placed alongside a term it is generally taken to mean they have some form of competency (or lack of competency) in that area. Here, to avoid confusion, I will use the term general literacy to indicate its more common use (i.e. ability to read and write). Indeed, general literacy studies offers further insights regarding what can be expected of financial literacy and what its limits may be. This field of study provides a more complex perspective on the role neoliberalism, reflexive modernity, responsibilisation, and financialisation play in the framing of both financial literacy and the financially literate agent.

Similarities between how general literacy and financial literacy are perceived can be seen in a variety of ways. Many of the issues regarding defining, measuring, and creating educational programmes for financial literacy have parallels in general literacy. Sylvia Scribner, a psychologist interested in education and literacy, discusses the issue of definition in her 1984 article "Literacy in Three Metaphors", arguing that rather than concentrate too much effort on arriving at an essential definition of literacy, we should understand the range of meaning associated with literacy through three metaphors she proposes: literacy as adaptation, literacy as power, and literacy as a state of grace. To elaborate on the idea of literacy as adaptation, Scribner raises notions of functional literacy, which "is conceived broadly as the level of proficiency necessary for effective performance in a range of settings and customary activities" (p.9). She points out that defining what is necessary is problematic as it depends on individual perceptions and, added to that, gauging what is both effective and necessary has added complexity in diverse populations. Noting subsequent issues with trying to solve these problems by either shaping literacy activities to a generalised population or narrowing what is defined as functional, Scribner also raises the point that truly applying different criteria for each different community brings with it problems of inequality. Scribner further complicates the notion of functional literacy by noting that to be truly functional, the literacy must meet the future needs of the individual, which, individual needs in a diverse community aside, is an uncertain area that experts already disagree on (some arguing that future literacy needs will be higher, others arguing they will be lower). She sums up her literacy-as-adaptation metaphor by discussing the importance of viewing functionality from the individual's point of view, raising the need to consider the self-perceptions of those who might be deemed functionally illiterate by a given standard. Scribner pertinently notes that "appeals to individuals to enhance their functional skills might founder on the different subjective utilities communities and groups attach to reading and writing activities" (p.11).

With financial literacy, the individual's functional needs appear to have already been decided, due, it would seem, to the unwritten notion that the financial world the individual is expected to take part in is the same for everyone. In many of the readings on financial literacy, functional needs are certainly discussed; however, as in both Lusardi and Michell (2011), and Atkinson and Messy's articles (2012, 2013), the discussion regarding what those needs are is relatively brief, as if the criteria of understanding the three concepts of interest compounding, inflation, and risk diversification (recently dubbed "the Big Three" [Agnew, Bateman, & Throp, 2013, p.1]) had universal agreement. Certainly, in the range of reviewed literature written by those who appear most respected in the field, there is little to no discussion regarding how financial functionality is considered in diverse populations, or how the views and desires of those deemed financially illiterate might complicate the shaping of a financial literacy programme. On functional literacy skills, Scribner states "even tender probing reveals the many questions of fact, value and purpose that complicate its application to educational curricula" (1984, p.11). Scribner's appeal to separate literacy into the three metaphors and examine them in turn, for questions regarding the functionality of financial literacy at least, is useful to better understand the ideological framework on which it is built.

Scribner's second metaphor, literacy as power, is also useful to consider when examining financial literacy. She states, "the literacy-as-power metaphor emphasises a relationship between literacy and group or community advancement" (1984, p.11), which certainly fits pervasive rhetoric surrounding financial literacy. Detailing the growth in the perception that literacy is "a means for poor and politically powerless groups to claim their place in the world… a resource for fundamental social transformation" (pp.11-12), Scribner highlights how this point of view is also troubled, with studies conducted on developmental, social, and material changes after implementing a UNESCO world literacy programme indicating that rather than literacy promoting economic and social change, the reality may be the opposite: economic and social change promote literacy. Certainly in financial literacy, researchers have noted a tendency towards higher financial literacy skills in those from upper socio-economic levels and queried the relationship between the two. Given the stated aim of financial literacy, which, in the New Zealand case (according to the National Strategy for Financial Literacy) is to use financial education to "achieve our goal of a financially literate population" (2010, p.2), it may be that funds put towards financial literacy education programmes would be better placed in programmes that directly improve the socio-economic status of those considered financially illiterate.

It is not within the boundaries of my present research to ascertain whether improved financial literacy leads to improved financial conditions, or the other way around, but this is certainly an area that needs further analysis. Yet, given the push towards establishing educational programmes to promote financial literacy in New Zealand at least, it is clear that the prevailing school of thought identifies improved financial literacy as the precursor to improved personal financial wellbeing. Due to the many questions it raises, Scribner's literacy-as-power metaphor proves useful when considering the assumed consequences of attaining financial literacy.

The third metaphor developed by Scribner, literacy as a state of grace, examines "the tendency in many societies to endow the literate person with special virtues" (1984, p.13). Here she describes tendencies to view the written word as something deserving "great power and respect" (p.13) and those who are literate as more 'cultured', with literacy accorded with the mental ability of those who have mastered it. Scribner acknowledges the growing body of knowledge questioning the earlier idea that lack of literacy inhibits intellectual growth, and she discusses the need to gauge how widespread the exalted view of knowledge gained from literacy is. In light of this, she asks where oral traditions fit in and whether the beliefs hold across social, ethnic, and religious groups. Some of these questions are very specific to general literacy; however, the idea of literacy as a state of grace does encourage a closer analysis of the position financial literacy holds in society.

As already evident in the writings of financial literacy researchers like Lusardi and Mitchell (2011), a healthy financial system is seen as important for society at large and, in turn, the ability to make sound financial decisions is itself given an exalted position. What appears to be highlighted more is, taking a cue from Scribner (1984), what might be termed the state of want. Scribner notes that in many societies, those who have attained a certain level of literacy skills are often endowed with special virtues. With financial literacy, the special virtues are associated with the flip side; those who are deemed financially illiterate appear to be endowed with special negative qualities. They are not just financially dangerous to themselves; they are dangerous to society as a whole. Excerpts from Lusardi and Mitchell's (2011b) "The Outlook for Financial Literacy" provides examples of this point of view, which can easily be seen in many of the current articles discussing the importance of financial literacy: "While the crisis has many causes, it is undeniable that financial illiteracy is one of the root causes" (PACFL, as cited in Lusardi & Mitchell, p.2); "Financial illiteracy can be costly not only to individuals but also to society" (p.6); "financial illiteracy undermines not only individual retirement security but, indeed, the stability of the global financial system more generally" (p.10). This is just a surface scratch, but it clearly shows that Scribner's separation of literacy into three metaphors provides a very useful starting point for an examination of financial literacy.

Discussing the notion that those without the right general literacy skills are putting the wellbeing of the rest of society in jeopardy, Deborah Brandt, a leading theorist and researcher in literacy studies, states that the ability to write “is now, according to the government, a duty to productivity, and one with increasingly sharp consequences for those not in compliance” (1999, p.374). Again, echoes of this idea that those without literacy skills are detrimental to society can be heard in the discourse surrounding financial literacy today. In their 2011 article on financial literacy in New Zealand, Retirement Commissioner Diana Crossan, David Feslier, and Roger Hurnard opened with the statement:

> Financial literacy is a fundamental component of a well-functioning civil society. In New Zealand, there has been a growing awareness of its importance and value in an environment of (currently) light handed financial regulation, financial product diversity, and economic recession. (2011, p.619)

Here, too, there is a stated impact on society linked to lack of literacy and non-compliance is seen to have significant consequences. Brandt notes that general literacy “is pursued for the opportunities and protections that it potentially grants its seekers” (2002, p.374). Again, the ideas here are similar to those in articles discussing the benefits of improved financial literacy and, as will be discussed, they are echoed in the OECD writings researched (see later discussion). In article after article (Bay, Catasús, and Johed [2012]; Braunstein and Welch [2002]; Carlin and Robinson [2012]; Collins [2013]; and the Commission for Financial Literacy and Retirement Income [2012], to name just a few from the top of an alphabetised list), improved financial literacy is depicted as providing opportunity and protection, not just to the individual, but to society in general.

This pervasive view fits in with what literacy studies terms the ‘autonomous model’. In her article discussing what general literacy is and does, Lesley Bartlett, a researcher in literacy and the anthropology of education, notes that the autonomous model of literacy assumes a “homology between individual and the society” and “predict[s] that literacy at the individual level will result in economic, social and political development at the national level” (2008, p.738). Bartlett goes on to quote anthropologist Brian Street, who named the autonomous model of literacy, stating how the autonomous model “isolates literacy as an independent variable and then claims to be able to study its consequences” (cited in Bartlett, 2008, p.738). Kristen Perry (2012), researcher in socio-cultural literacy, notes that most literacy education follows the autonomous model of conceptualizing literacy, stating: “literacy is assumed to be a set of neutral, decontextualised skills that can be applied to any situation”(p.53). She adds that “literacy is something that one either has or does not have; people are either literate or illiterate, and those who are illiterate are deficient” (p.53). Although not quite as bluntly stated, much of the writing on financial literacy certainly implies that financial literacy can be gained and that those without it lack the capacity to effectively take part in the economy; they are deficient. Looking at this from a different angle, Bartlett states:

> Popular conceptions hold that literacy has some kind of "effect," that it provides those who become literate with improved job prospects and/or empowerment. In their laudable attempts to garner international monetary support for literacy programs, development publications also suggest that literacy "confers benefits," such as improved employment opportunities and/ or political engagement" (2008, p.737)

This certainly harks back to Scribner's (1984) metaphor of literacy as a state of grace (or a state of want in this case). In a statement that outlines further links between the autonomous model of literacy and trends in financial literacy writing, Perry goes on to add: "the autonomous model attributes important consequences both to individual cognition and to society through the intrinsic characteristics that literacy is assumed to have" (2012, p.53). Indeed, many financial literacy articles, as already noted, point to a connection between an individual's financial literacy and a well-functioning economy.

Similarities between the autonomous model and the pervasive view of financial literacy are useful in what they might reveal regarding the conceptualisation of financial literacy. What is also interesting is what criticisms of the autonomous model might reveal about the place conferred on financial literacy. Bartlett (2008) outlines issues surrounding the autonomous model, noting that for it to work it must adhere to a narrow understanding of literacy that does not take into account alternative, diverse literacy practices. Instead, emphasis and support are given to certain types of literacy practice that are considered superior (which resonates with Scribner's (1984) literacy-as-adaptation metaphor and also evokes Lusardi and Mitchell's "big three" (2011) key concepts constituting the threshold of financial literacy). What Bartlett concludes, however, is that literacy should not be seen as something that has an "effect" (p.751), but, rather, we should examine the ways it is used and how it is affected by culture and society.

If Scribner's (1984) queries regarding the cause/effect relationship between literacy and social and economic change correspond to financial literacy's relationship to financial well-being and a stable economy, this switching of the point of view becomes pertinent, especially in light of findings like the following: "Although financial literacy levels are low in general for consumers, they are especially low for certain groups of consumers, such as the less–educated, those at the lower end of the income distribution, and minorities" (OECD, 2008, p.142). If it is found that improved financial well-being leads to improved financial literacy and not the other way round, continuing with the current course of financial literacy initiatives would not just be futile, with the heavy emphasis on personal responsibility, it would be setting these groups up for failure and blame. This is an important cause and effect relationship, the specifics of which Lauren Willis (2008) discusses in much detail, noting that questions are raised regarding the validity of research findings supporting both points of view. Ultimately, of the notion that educated consumers lead to a more secure financial system, Willis states “the predicate belief in the effectiveness of financial-literacy education lacks empirical support” (p.197). This is a significant claim. While it is not the intention of my present research to empirically analyse the links between financial literacy education and improved personal financial decisions or the health and security of the financial marketplace, what is of interest is what is embedded in the notion of empowerment through improved financial literacy and, in turn, what is elided in the shifts from the individual’s financial literacy, to improved individual financial well-being and a more stable financial system.

Bartlett’s (2008) writing encourages a closer examination of standard and non-standard literacy practices and, in turn, raises questions regarding the impact of culture and the inheritance and reinforcement of certain values to create what is then considered ‘normal’, or standard behaviours. In literacy studies, the ideological model of literacy, which Bartlett states is advocated mostly by anthropologists and other sociocultural scholars, offers an alternative school of thought to the autonomous model and indicates where, for financial literacy, the writing of both Willis (2008) and Williams (2007) might fit in. Williams points out that anxiety over the general population’s financial skills is not a new phenomenon, citing writing from 1920, 1950, and 1999 to prove her point. What is new, she notes, is that regulators who have previously been interested only in governing the behaviour of the financial markets have shifted their focus to the education of the consumer in order to change consumer demand. Harking back to some of the discussion regarding notions of governmentality, Williams details how the norms being shaped and reinforced now are ones that correspond to the “construction of the responsibilised consumer as a regulatory subject” (p.236). The step from financial literacy education to financially literate consumer allows the state and employers to divest themselves of a level of responsibility and take minor roles in the financial welfare of the public; it is, she states, the “*caveat emptor* principle” (p.238). For more detail on what may be masked in the journey from financial literacy to stable financial system, the writing of both Willis (2008) and Williams (2007) is useful (detailed further in the next section).

Once again quoting Street, Bartlett (2008) notes that those who follow the ideological model “view literacy practices as inextricably linked to cultural and power structures in society, and recognise the variety of cultural practices associated with reading and writing in different contexts” (cited in Bartlett p.738). Indeed, some of the more recent writing on financial literacy, particularly that of Arthur (2012), appears to indicate that financial literacy is also split into autonomous and ideological camps. Those who appear to align with the autonomous (Atkinson and Messy [2012]; Braunstein and Welch [2002]; Lusardi and Mitchell [2011]; Crossan, Feslier and Hurnard [2011]) see direct links between improved financial literacy, an individual’s improved financial situation and an improved economy and also see the learning outcomes of financial literacy as measurable. By contrast, those aligned with the ideological (Willis [2008]; Williams [2007]) see financial literacy as a difficult to measure, complex issue tied up with broader power struggles (see following section for an expansion of this).

Bay, Catasús, and Johed (2012), researchers with common interests in financial communication and accounting literacy, take time to situate financial literacy within general literacy theories. They note that the autonomous model is the dominant way financial literacy is viewed; however, using examples from two studies into financial literacy in two different population groups, they show how both the autonomous and ideological models are used to frame the needs of the research groups (the ideological model they re-label as 'situated' as they also critique the autonomous model as having ideological effects).

The first study examined by Bay et al. (2012) was done on high school students, identified in nationwide surveys (in Sweden) as possessing the most worryingly low financial literacy skills. The purpose of the study was to encourage reflection regarding how financial decisions are reached, rather than simply teaching the 'right' decisions to make. To encourage reflection, students were asked to complete a series of scenarios of hypothetical financial dilemmas. Bay et al. note that the process used to initially identify the group as requiring attention (via a study) follows the autonomous model. To identify the group, a desired norm was established against which survey participants were measured to pinpoint groups with relatively consistent deviations from that norm. Once the group was identified, Bay et al. note that those conducting the study shifted to a situated model of financial literacy as they then tailored their efforts to address the perceived deficiencies to the characteristics and needs of the group.

The second study analysed resulted from a government committee report recommending that "every public company should have an Audit Committee comprising at least three financially literate members" (Blue Ribbon Committee cited in Bay, Catasús, and Johed, 2012, p.6). Notably, the report also identified need for a member of that audit committee to have a second-tier, higher level of financial skills than the others within the audit committee. Questions were subsequently raised regarding what, exactly, financially literate meant in this context. The response indicated that in the audit committee environment formal education is not expected, but rather, the members must have gained knowledge through experience, for example, by fulfilling the accounting and financial management duties of a senior manager prior to joining the committee. In this study Bay et al. identify complex issues that preclude the use of the autonomous model. Financial literacy in this context is flexible and there is no norm against which committee members are measured. Despite this, ultimately Bay et al. do not completely rule out the usefulness of the autonomous model. They argue that instead both the autonomous and ideological/ 'situated' models should be considered in financial literacy studies, with the situated allowing for literacy developments in social contexts. Importantly, they state:

> …the autonomous model is of paramount significance as a way to introduce the problems of financial literacy. To mobilise resources to solve a problem, one initially needs to start out

> from an autonomous definition of the problem that reflects an overarching problematisation. (p.8)

While Bay et al. certainly make use of the autonomous and ideological/'situated' models, there is not enough clarity to justify their ultimate assertion of the "paramount significance" of the autonomous model. What is clear from their analysis of the two case studies, however, is that while recognising context and difference, the inherent complexities of the situated model make the creation of financial literacy policies and educational programmes problematic. They end their article by stating: "Although this study is framed in the financial literacy/ financialisation discourse, it also sets the stage for further research into how financial literacy interplays with the consumption of accounting information" (2012, p.8). They add, "accounting research might benefit from investigation into the interplay between skills and context and how accounting literacy is constructed and recognised to include and exclude actors from speaking and reading 'Accountish'" (p.8), which gestures towards the aims of my research with regard to financial documents.

Brandt and Clinton (2002) borrow from Latour a concept that is useful in my research: "folding in" (p.353). To explain, they use the example of a shepherd and his sheep. In building a fence to keep the sheep in, the shepherd has effectively delegated his role of protector to the fence; he has folded it into the role he has taken on. The fence is not an extension of the shepherd, and the sheep certainly do not experience the fence in the same way they would experience the presence of the shepherd, yet the fence does represent a continuation of one of the shepherd's roles without his needing to physically be there. Brandt and Clinton argue that via the concept of folding in, researchers in literacy can attend to interactions that are abstracted without falling into the trap of autonomous theory, which tends to consider the distant force acting on the local situation as disinterested. In their article discussing literacy practices, Reder and Davila (2005), do not specifically discuss folding in, but they do note that Brandt and Clinton's discussion regarding the formulation of context (which folding in is a part of) places these distant influences as "ideological players in their own right" (p.174). Viewing the globalizing connection as an 'ideological player', rather than a disinterested distant force seems appropriate when considering financial literacy. For my research, the concept of folding in is a useful one to consider when looking at how financial literacy works to regulate behaviour and whose interests are served in this.

To help discuss the role of the different actors on the financial literacy stage, it is useful to apply a term Brandt coined in discussing general literacy: sponsors. Brandt (1999), who is noted as a critical theorist (i.e. someone who is interested in power structures within society and culture, which Perry identifies as being distinct from a literacy as social practice, or multiliteracy theorist), defines sponsors as being "any agents, local or distant, concrete or abstract, who provide, enhance, or deny opportunities for literacy learning and gain advantage by it in some way" (1999, p.376). When considering the role of government, the OECD, the financial sector itself, as well as those directly involved in the provision of financial literacy education, the idea of sponsorship certainly appears applicable to financial literacy. Brandt elaborates:

> Sponsors, then, as I came to understand them, embody the resource management systems of literacy, particularly avenues to access and reward. Sponsors also introduce the instability in the worth of people's literacy. As various sponsors of literacy emerge and recede, and as their prospects rise and fall as part of economic and political competition, so do the prospects of those they sponsor, both in terms of opportunity for literacy learning and the worth of particular literate skills. (p.376)

The idea of sponsors embodying "the resource management systems of literacy" (p.376) indicates that, in sponsor/sponsored relationships at least, literacy is itself a resource from which benefits can be gained. More than this, with the idea that sponsors have power over "opportunities for literacy learning" (p.376), sponsors, therefore, in all their various forms, represent all the different ways literacy can be learned. In the article, Brandt goes on to highlight the role of sponsors via the stories of two women selected from a cross-section of 80 people she interviewed in her study. She shows how sponsors can be a variety of things from parents, teachers, and the school system in general, to employers, the church, and even the economy. Of note is that value is acquired and assigned via the sponsor/sponsored relationship. Without using the terms "sponsors" or "sponsorship", Willis (2008) discusses this very relationship in financial literacy, observing that those more critical of financial education see it as "responding to the interests of states and firms in expanding consumer markets for financial products, and as facilitating a shift from the state to the individual of responsibility for personal economic growth" (p.227). From this point of view, the state and corporations are in the role of sponsor, shaping the literacy imperative. What is of interest in my research is not so much who the sponsors of financial literacy are, though it will be necessary to identify them, but how these sponsors justify the consumer protection claims assigned to financial literacy and how this compares to the stated goals of financial literacy initiatives.

When looking at the range of theories that come under the umbrella of sociocultural literacy studies, Perry (2012) makes a salient point, noting that one of the limits to the sociocultural theories is that the definition they apply to the construct of literacy, especially for multiliteracy theories, can be very broad, running the risk of making it meaningless. She adds, "in fact, common parlance has co-opted the term *literacy* in this very way; thus, in terms like *financial literacy* or *cultural literacy*, *literacy* equals facility with a particular body of knowledge, and not necessarily the ability to engage with print" (pp.64-65). Indeed, when reviewing the sociocultural theories outlined by Perry, each was problematic in its application to financial literacy. Literacy as social practice encourages consideration of the real-world uses people make of literacy, looking beyond basic actions with texts to "unobservable beliefs, values, attitudes, and power structures" (p.54). This is similar to the multiliteracy model, with the latter concerned with meaning-making beyond print and a "much greater emphasis on the changing nature of the world and the power relationships that are constructed within" (p.59). Finally, the critical literacy model again looks at power, but the emphasis is on "issues of power, identity and agency" (Lewis, Enciso, & Moje as cited in Perry, p.60). Certainly, ideas of financial literacy as complex social practice, multimodal practice, or mediator of identity might be pursued following the framework of any of these theoretical bases; however, as Perry has noted, financial literacy does not have the same properties as general literacy, and while this does not preclude the use of literacy theory, it does limit its application.

Financial Literacy

When looking for work providing critical financial literacy analysis, two key researchers were found. The work of Chris Arthur (2012), an independent researcher with an interest in education, stood out in the sea of texts advocating financial literacy and its initiatives. With an emphasis on education, Arthur's writings on financial literacy focus predominantly on critiquing the development and worth of financial literacy within Canadian schools and arguing for an expanded model of financial literacy education that acknowledges and understands the range of actors served by financial literacy education, the subjectivities it supports, and the responsibilities we hold collectively. Arthur also raises the neoliberal connection to the development of financial literacy; however, while his work examines texts discussing financial literacy, it does not follow a described methodology in its analysis. The drive is a call for change in financial education pedagogy to include how financial literacy education is considered and presented within the education system. Another offering a critique of financial literacy is Lauren E. Willis, professor of law (2011, 2017). Similar to Arthur's work, while Willis' articles on financial literacy include some examination of texts, she does not take a stated methodological approach and her examination's purpose is primarily to offer a critique of claims made on behalf of financial literacy. Willis' overarching argument is that the drive for financial literacy is misguided.

As Willis (2011, 2017) and Arthur (2012) represent a non-mainstream view that provides work critical to financial literacy, it is also valuable to consider research from those advocating financial literacy. Although it will be useful to gauge how others have defined financial literacy in order to adopt a working definition for my research, and that certainly is the first area I look at here, my primary interest in this section is to gain some sense of the current parameters and themes within financial literacy discussions.

One of the discussion points around financial literacy, and perhaps the most fundamental, is about its definition. Sometimes called economic literacy or financial knowledge and experience, financial literacy is the focal point in a variety of texts coming from a range of different disciplines (law, education, consumer affairs, cultural studies, communication, accounting, socio-economics, and finance, to name just a few). Because of this it is not surprising and certainly not helpful that many are starting with a different point of departure. To provide comment on the framing of financial literacy, it is important to get the clearest possible shape of the financially literate being that financial literacy initiatives are working towards.

In her article discussing the difficulties of measuring financial literacy, Huston (2010) raises the issue of multiple definitions of financial literacy. Of the 71 studies on financial literacy she analysed, just eight provided definitions and all of those definitions were different. They ranged from the very simple and vague – "financial literacy is a basic knowledge that people need in order to survive in a modern society" (Kim, cited in Huston, 2010, p.311) – to the multi-pronged,

> Personal financial literacy is the ability to read, analyse, manage and communicate about the personal financial conditions that affect material well-being. It includes the ability to discern financial choices, discuss money and financial issues without (or despite) discomfort, plan for the future and respond competently to life events that affect everyday financial decisions, including events in the general economy. (Vitt, cited in Huston, 2010, p.311)

In light of these great differences, Huston calls for standardisation in the definition of financial literacy and how it is measured. To reach the definition she ultimately champions, Huston draws from research in general literacy, which she notes splits general literacy into two categories: understanding and use. With this and the use of the general themes in the definitions she found in her research, Huston proposes the following definition of financial literacy: "measuring how well an individual can understand and use personal finance-related information" (p.307). Falling closer to the simple and vague end of the definition spectrum, the definition does not actually define the specifics of either understanding or use and it is focussed on measurement, rather than ability. In other words, it does not provide a clear idea of what a financially literate person should be able to do.

A further interesting point is the outline of the financial world glimpsed via this range of definitions. In the definitions raised by Huston (2010), Kim's definition, while one of the vaguest, also positions the financial world as part of a modern society that must be survived. Financial literacy is seen as either weapon, shield, or hybrid of both that aids survival. The word 'survive' in itself evokes notions of life and death, hardship, trial. Passage through the financial world offered by Kim is one, I would imagine, that requires high levels of vigilance. In contrast, the financial world hinted at by Vitt and Huston herself is one that is far more sedate. There is time for discernment and discussion in Vitt's definition. The differences in how the financial world is framed in these definitions are important as they in turn help frame the financially literate being that must negotiate them. Although this is a minor point, it will be important to consider the view of the financial world given when arriving at a definition of financial literacy to use for the purposes of this study.

While the Vitt definition noted by Huston (2010) certainly provides a solid outline of the financially literate individual, given the New Zealand focus of my study, it is also important to consider definitions offered within the New Zealand context. New Zealand's National Strategy for Financial Literacy defines financial literacy as "the ability to make informed judgements and to make effective decisions regarding the use and management of money" (2010, p.3). This definition has subsequently been adopted by those conducting the Financial Knowledge Surveys for the ANZ and the Retirement Commission, with the interesting substitution of the second iteration of the word "make" for "take" (ANZ – Retirement Commission, 2009, p.3). The ANZ 2008 survey uses the same definition, with the "take" substitute, and goes further, stating that those with high levels of financial literacy, who are a step above those with simple financial literacy skills, are able to "make informed and confident decisions on all aspects of their budgeting, spending, saving and planning for the future as well as on their use of financial products and services such as everyday banking, borrowing and investing" (p.6). From this, it seems the ANZ report writers view the ability to *make* financial decisions (confident ones) as something requiring higher levels of understanding, which fits the change in meaning elicited by the 'take/make' substitution in the general definition. The use of "confident" should also be noted as it implies that there is security in gaining financial literacy skills.

The ANZ is also involved in the production of financial literacy surveys in Australia, where the Australian Securities and Investment Commission (ASIC) (2011) report on financial literacy also notes that the literature on financial literacy is often missing a clear definition of the term. As highlighted by Huston (2010), the vagueness around definitions of financial literacy enables each subsequent writer to re-frame the concept, highlighting angles that best suit their purposes. (As shall be discussed in more detail later in this review, one of the elements of interest is how this reframing is increasingly revealing a shift from financial literacy aimed at helping in day-to-day finances to financial literacy aimed at easing participation in investment markets.) After providing the OECD definition for financial education (given later in this review), the ASIC report states that in the Australian context, a definition for financial literacy has been used that is derived from one provided by the United States Federal Reserve, chosen because of its addition of a clause that focuses on the importance of translating knowledge into action: "using that knowledge and understanding to plan and implement financial decisions" (Fear cited in AISC, 2011, p.8). It then goes on to discuss definitions that focus on the importance of good financial choices and goal setting and the definition adopted by the Australian National Consumer and Financial Literacy Framework, which, in a seemingly small move away from the dominant trend towards individualisation, highlights the importance of considering "the community and the environment" when making financial decisions (cited in AISC p.9). Unfortunately, the report does not go on to elaborate on the implications of including consideration of community and environment in the definition of financial literacy. This is certainly a divergence from the norm that adds a hint of civic duty to what is otherwise, at least in all the definitions uncovered to date, very individual-focussed. However, despite all this discussion given under the heading “What is financial literacy?” (p.7), the report does not settle with any one definition or provide an alternative it intends to follow.

Tracing the origin of definitions used by researchers and entities in both New Zealand and Australia, many paths lead to the OECD, an organisation that acts as a policy textbook for member countries. In *Improving Financial Literacy: Analysis of Issues and Policies,* the OECD defines financial *education* as

> …the process by which financial consumers/investors improve their understanding of financial products and concepts and, through information, instruction and/or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being. (2005, p.26)

This definition leaves the reader to assume for herself the link between financial education and financial literacy, with financial literacy, the focus of the report, left undefined. For the readers of the “Improving Financial Literacy” document at least, they may then assume that the definition of financial literacy that the OECD follows is one where being financially literate means understanding financial products and concepts, having an awareness of financial risk and opportunities, and having the ability to make informed choices and take effective action, including knowing when to get outside advice, to improve financial well-being. That is a lot to cover, and, despite its breadth, the use of vague words like “awareness” and “effective” still leaves it very much open to varying interpretations.

In this definition of financial education provided by the OECD (2005), again the framing of the financial world is highlighted. In clearly stating that there are risks, the world of finances shown is not quite the sedate version of Vitt (as cited in Huston, 2010) and Huston (2010), yet in its focus on understanding, development, and growing awareness it is removed from the harsh environment hinted at in Kim’s definition (as cited in Huston, 2010). With financial risks seen as separate and therefore different from financial opportunities, the world being painted is one where real understanding enables the savvy consumer to identify which is which, avoiding potential pitfalls. Financial education here enables informed choices, which lead to improved financial well-being. Being educated means you can identify the risks and opportunities better, or, at least, know when you need to go to someone who has the level of education required to identify them. It seems a given that financial education will equal financial success, and, although the individual must negotiate this world alone, there are others who possess greater levels of understanding who can, and will, help. The dynamic, shifting, changing element is the consumer who is encouraged to gain knowledge of the environment she is entering into, one that others have successfully negotiated before.

Although the OECD (2005) document on improving financial literacy gives a definition of financial education rather than financial literacy, “Measuring Financial Literacy”, an OECD working paper by Atkinson and Messy provides a brief outline of financial literacy, simply stating that “a financially literate person will have some basic knowledge of key financial concepts” (2012, p.6). This definition is provided as an introduction to the questionnaire they developed, which used eight questions (see appendix 1) to measure the financial literacy of those in different countries. Despite the rather vague definition, which provides no elaboration of what those key financial concepts might be, the eight questions used in the questionnaire go some way to filling the gap and are significantly more useful in determining the exact expectations of the capabilities of the financially literate individual (at least, as determined by Atkinson and Messy, two significant names in the financial literacy field).

Interestingly, the Atkinson and Messy OECD (2012) working paper measured the financial literacy of the populations of 14 of its member countries, not including New Zealand; however, they do not acknowledge in their writing that three of the eight questions in their survey are heavily reliant on the work of Lusardi and Mitchell (2011). Lusardi and Mitchell’s research, due to its inclusion in the OECD working paper, has been influential in the composition of financial literacy measurements used internationally. Their experimental financial literacy model was designed to be part of the US 2004 Health and Retirement Study. When discussing their early work, Lusardi and Mitchell state:

> we relied on economic models of saving and portfolio choice to identify three economic concepts that individuals should have some understanding of, if they are to use them when making financial decisions: i) *interest compounding*; ii) *inflation*; and iii) *risk diversification* (2011b, p.3)

The Lusardi and Mitchell questions are detailed in appendix 3 and when compared to the eight questions in the Atkinson and Messy OECD working paper, it is clear that the latter was greatly informed by the earlier work. It is a minor point, but it is interesting that questions designed for a “national longitudinal study of the economic, health, marital, and family status … of older Americans” (National Institute on Ageing, 2007, p.1) were foundational in establishing generic measures of financial literacy. The 2007 Health and Retirement Study document states that the study is “designed to inform the national retirement discussion as the population so dramatically ages,” adding that it is specifically looking at “a nationally representative sample of adults over the age of 50” (National Institute on Ageing, p.4); however, perhaps to justify the later wider use of their questions, Lusardi and Mitchell note that they originally intended the questions to be relevant and “relate to concepts pertinent to peoples’ day-to-day financial decisions over the life cycle” (2011b, p.2). Indeed, the Lusardi and Mitchell questions have been used in surveys of financial literacy across seven countries, including New Zealand, to enable comparisons between the countries (Crossan, Feslier, & Hurnard, 2012). What is not so clear, beyond their relationship “to concepts pertinent to peoples' day-to-day financial decisions over the life-cycle" (Lusardi & Mitchell, 2011b, p.2), is why interest compounding, inflation, and risk diversification are the three primary concepts considered important enough to use as a measure of financial literacy. Certainly, Lusardi and Mitchell discuss the shift towards defined contribution plans and the subsequent need for individuals to select their own pension investment portfolios, which is linked to the inclusion of the third question, but no further discussion is given regarding the relevance of these particular areas of financial literacy and why they are more important than any others.

As can be seen in the definitions of financial literacy uncovered so far, in the phrases like "ability to make informed judgements" (National Strategy for Financial Literacy, 2010, p.3), it is clear that for some, successful participation in financial markets relies on accurate interpretation of received information. While not in the remit of a financial literacy definition to include nuances in the role of the information providers, without them it is almost as if the definitions imply that that information arrives in a pure form where only errors in interpretation could lead to financial losses. Regardless, as has been noted in the earlier discussion regarding definitions, there is some acknowledgement that sound financial decisions are only one part of an informer/informed relationship, which is an important element of my study. What is evident in each of the definitions examined to date is that the subject of each, the desired financially literate individual, is unquestionably ultimately responsible for his or her financial health. But what happens when the onus is put on the informed to be responsible for their own wellbeing in a world subject to extreme market fluctuations as capitalism's inherent instabilities have become intensified through the digitally-enhanced acceleration of financial transactions and through financial deregulation?

Fortunately, while the definitions themselves may tend to the vague, the criteria given by those who provide measurements of financial literacy flesh out financial literacy expectations. According to New Zealand's Commission for Financial Literacy and Retirement Income, "a financially literate person has basic capabilities in: setting goals and budgeting; managing income; spending; managing debt; saving and investing; and creating and protecting assets and wealth" (2012, p.9). This is a condensed version of a much more detailed financial literacy competency framework (see Appendix 2 for details regarding the 'Saving and Investing' and 'Creating and Protecting Assets and Wealth' segments of the framework). For the New Zealand-specific situation, the framework offers the most detailed outline of the financially literate consumer and, so far, appears the best starting point to gauge how the Commission, at least, frames the financially literate subject.

Financial Capability

In 2015, during the course of my research, what was then known as the Commission for Financial Literacy and Retirement Income became the Commission for Financial Capability. As will be discussed in a later chapter, the name change did not just indicate a shift away from an overt focus on retirement income; it also reflected a worldwide shift towards the broader concept of financial capability. While the development of financial literacy initiatives within New Zealand has been greatly informed by the OECD, the move away from discussions of literacy represents a slight separation from the framework used by the OECD, which, as of December 2020, still publishes material discussing the attainment of financial knowledge in terms of financial literacy. To better understand the significance of the Commission's rebranding, it is important to understand what the term 'capability' means within this context. J. Michael Collins (2013), an Assistant Professor in Consumer Finance, produced a concise brief on financial capability, outlining key moments in the shift from financial literacy to financial capability and providing an overview of how financial capability is conceptualised. Collins notes that the term financial capability is broader and more comprehensive than financial literacy, encompassing the current understandings of financial literacy and including "access to financial services, behavioural factors, social influences, and emotions" (p.1). While Collins does not provide a reason for this shift from financial literacy to financial capability, economic psychologists Vlaev and Elliot (2018) identify research in behavioural science in particular as complicating the notion that knowledge and skills alone equate to financial competence, noting "other ingredients are needed, such as internal motivations and external opportunities to perform the target behaviour" (p.190). Returning to the general literacy discussion, this decoupling from financial literacy and move towards a more complicated, involved ideological model perhaps signifies a dissatisfaction with the tendency for financial literacy to align more with an autonomous model, where literacy is seen as a neutral, technical skill that, once gained, improves the financial situation of the individual and strengthens the financial market. In financial capability, as it is framed by the researchers above, there is a clear alignment with the ideological model of general literacy, indicating a desire to make room in the model for contextual complexities, to acknowledge and address social and economic conditions that may be obstacles in the path to financial well-being.

Margaret Sherraden (2010), a research professor who has written much on financial capability, is more pointed in her outline of what sets financial capability apart from financial literacy and is clearly adhering to a more ideological model. The core element financial capability has added to the discussion, according to Sherraden, is the recognition that discussions centred on effective financial decision making must also include understanding and acknowledgement of "institutional barriers" (p.2). For a clearer idea of what this means, she states, "financial capability requires both the *ability to act* (knowledge, skills, confidence, and motivation) and the *opportunity to act* (through access to beneficial financial products and institutions)" (p. 2). Where financial literacy responsibilises the individual, putting the onus on them to acquire sufficient knowledge and understanding of the financial realm to navigate it appropriately and in their best interests, financial capability, as outlined by Sherraden, acknowledges that being financially literate alone is not enough to help ensure financial stability; external elements can have a significant impact on financial stability regardless of financial literacy levels. For Sherraden, ensuring people are financially capable equates to providing them with appropriate financial education and lifting their financial literacy levels, while also putting in place effective policies and regulations that not only give them access to appropriate financial products but also help improve their financial well-being.

Researchers Despard, Friedline and Martin-West (2020) tested this idea by analysing data specific to emergency funds from National Financial Capability Surveys in the United States to examine patterns in the predictors for emergency fund ownership. Solidifying the notion that achieving financial well-being requires more than financial literacy, they found that "economic constraint accounted for a sizable proportion of the variances in having an emergency fund" (p. 543). In other words – and perhaps unsurprisingly – improving financial literacy levels and knowledge of the importance of emergency funds is not enough on its own to help individuals actually establish an emergency fund; having an income sufficient to exceed normal regular expenses is also important. Simply put, the shift represented by financial capability that these researchers outline is one that considers and deems important the context in which the financially literate person is operating.

That OECD documents in this area still largely focus on financial literacy while the rest of the world is increasingly embracing and encouraging consideration of financial capability perhaps is indicative of the OECD's strong connections to neoliberal economic theory. Via the more complex view of the financial subject that is offered by financial capability, there is still a significant emphasis on the individual, but some of the burden of responsibility is lifted from their shoulders. Under financial capability, the individual may still be expected to work to achieve financial literacy, but that literacy is no longer framed as vital in achieving financial well-being. It is important, but its efficacy may be overridden by other external factors. Re-evaluating and broadening the financial literacy framework in this way moves away slightly from neoliberalism's drive towards responsibilisation of the individual and acknowledges the important role policy and regulation play in enabling or disabling the levels of empowerment claimed by financial literacy.

However, the view that the shift from financial literacy to financial capability indicates any kind of unbinding from neoliberal economic theory is challenged by Brown, Banks and Bowman (2020), who, in their article discussing financial capability in Australia, argue that both financial literacy programmes and the more recently developed financial capability programmes are a neoliberal response to risk re-allocation. For Brown, Banks and Bowman (2020) financial literacy and financial capability alike reinforce, rather than challenge, the pre-eminence of the financial market, placing the financially literate or capable subject as "subordinate and malleable before the market" (p.411). The type of responsibilisation highlighted by Brown, Banks and Bowman is one where the individual is framed as being a space for change – as opposed to the market, which is not – and therefore the individual is responsible for moulding themselves into whatever kind of financial actor they must be in order to operate within the market. Although Brown, Banks and Bowman acknowledge the overarching utility of individuals developing financial capability, they note that this capability operates as a tacit reinforcer of neoliberalism by encouraging people to self-manage risk, presenting this self-management as a way of helping people help themselves. The implication is that despite financial capability's inclusion of contextual consideration, while the individual is caught up in the changes they are expected to make to manage this risk, questions about risk mitigation or alleviation via policy or regulatory change are drowned out in the noise. Ultimately, to both operate effectively within the existing financial system and bring about structural changes Brown, Banks and Bowman argue for the development of collective capabilities that reverse what they term as the atomisation of individuals within neoliberalism, connecting people to each other in order to share deeper knowledge, counter structural injustices, and call for a re-evaluation of the pre-eminence of the financial sector.

Chapter 3: Managing Free Market Risks: OECD Policy on Financial Literacy

Documents from the OECD have been chosen for analysis as they appear to have played a large role in informing not just New Zealand's policy and initiatives, but those of many other nations. The OECD has published over 100 documents on the topic of financial literacy. While the first OECD documents specifically related to financial literacy were published in 2005 (an analysis of policies and issues related to the improvement of financial literacy and recommendations for good practice in financial education), three years after it "officially recognised the importance of financial literacy . . . with the launch of a comprehensive project on financial education" (OECD: International Gateway for Financial Education 1), nothing further was published with a specific focus on this area until 2008. That year appears to mark the beginning of a surge in publication on financial literacy and is also the year that the OECD launched its International Network on Financial Education, which is aimed at providing tools and information – published by the OECD – to help improve financial literacy and education in the countries represented by its members. Note that within the documents included in the OECD publications to be analysed is a 2007 report detailing results from an economic survey of New Zealand that, while not focused on financial literacy, does include a brief note commenting on financial literacy and education at the time. From these documents, my method of selection centres on the following:

- documents that offer policy advice for improvements to and measurements of financial literacy;
- documents that offer recommendations regarding good practices for financial education relating to pensions; and
- documents that discuss financial literacy and its relationship to the global financial crisis.

This set of documents excludes specific performance results from other OECD countries and material focussed on findings from and recommendations for school-based financial literacy initiatives. While it was hoped that the analysis of the documents selected would help answer key questions like "Why has financial literacy become so crucial in this era?", the findings here have also been used to ascertain the extent to which New Zealand's financial literacy initiatives have been informed by the OECD. In addition to the generic textual and conceptual questions that frame my research, I am interested in what institutions and subgroups within the OECD take particular interest in financial literacy – the sponsors of this literacy – and whether there are variations in emphasis and discursive framing of financial literacy between these groups. I am also interested in whether the OECD's framing of financial literacy evolves over time, particularly prior to and after the global financial crisis.

The first document published by the OECD focused purely on financial literacy was *Improving Financial Literacy: Analysis of Issues and Policies*. It purported itself to be "the first major international study on financial education" (p.26) and was released in 2005. The first publication stemming from the OECD's Financial Education Project, it was the culmination of international research on financial education with a purpose to address issues of financial education linked to work undertaken by the financial bodies supported by the Financial Affairs Division of the OECD. These bodies were specifically the Committee on Financial Markets, the Insurance Committee, and the Working Party on Private Pensions. As well as acknowledging a core focus behind the development of the project was to address issues faced by key entities with the financial marketplace itself, the research undertaken was also partially funded by a grant provided by the international financial services group Prudential plc (OECD, 2005), indicating the potential for bias towards the interests of financial service providers like Prudential. However, despite the heavy involvement of entities whose agendas arguably align with the interests of the financial marketplace, this first document provided a template for the publications to come.

As with many subsequent documents discussing financial literacy, *Improving Financial Literacy* takes time to define financial education. Indeed, the definition provided in this document remains the core definition of financial education throughout the bulk of the OECD documents analysed. Although financial literacy is not defined, the definition of financial education is such that a working definition of financial literacy can be extrapolated from it:

> Financial education is the process by which financial consumers/investors improve their understanding of financial products and concepts and, through information, instruction and/or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being. (p.26)

From this definition of financial education, it may be assumed that a financially literate person is one who understands financial products and concepts, is aware of financial risks and opportunities, and can either make decisions that improve their financial well-being on their own or has knowledge of how to identify and approach someone who is appropriately skilled to be able to help them improve their financial well-being.

Fitting nicely into Scribner's (1984) literacy as adaptation metaphor, this definition provides an outline of the core focus of financial education and, by deduction, the core capabilities of the financially literate, but also has a lot of grey areas. Beyond vague phrasing like "more aware" and "effective action", given the depth and breadth of available financial products and concepts and the financial market's drive to be constantly developing new products, there is surely also an unstated limit to what is expected to be understood and the depth of that understanding. As may be expected, the definition of financial education has a focus on the understanding levels and skills deemed necessary to perform the prescribed tasks, but as per Scribner's discussion of this type of functional literacy, which she calls literacy as adaptation, the application of this approach is problematic. While on the surface the outline appears common sense, the definitions are necessarily broad as specifying what is meant by something like "understanding", or "effective action" runs the risk of limiting what constitutes this type of literacy and thus limiting its application. The vague framing allows for variance and broadens the apparent utility of the type of education proposed; however, the lack of specificity makes it open to interpretation.

In what is arguably one of the most in-depth discussions about the role of financial education in relation to consumer protection within the OECD documents analysed, the definition segment then interestingly goes on to situate financial education alongside consumer protection. It begins by stating "financial education needs to be distinguished from consumer protection, although there is some overlap between the two" (2005, p.27). This is followed by an elaboration of the distinction between the two: "Consumer protection and financial education share many of the same goals but each takes a somewhat different approach. Both financial education and consumer protection have as aims to ensure the well-being of consumers and to shield them from harm" (p.27). The outline of the two approaches indicates that part of the separation between the two is down to a split between individual market users (the ones who must be financially literate) and the formal protections within the market – namely the legislation and regulations governing the actions of the market. Assuming that 'financial harm' equates to a loss of finances due to other's illegal activity, the idea here seems to be that consumer protection and financial education combine to create a barrier that keeps out financial losses while allowing the literate individual to nurture and grow their finances.

What consumer protection and financial education provide from this viewpoint is the space in which the literate individual can positively affect their financial future. Importantly, here, despite the acknowledgement of some overlap and the positioning of financial literacy as a form of consumer protection in later OECD documents, consumer protection is seen as separate from financial education. Where both have in common the sharing of financial information, the document notes,

> financial education supplements this information with the provision of instruction and advice while consumer protection emphasises legislation and regulation designed to enforce minimum standards, require financial institutions to provide clients with appropriate information, strengthen the legal protection of consumers when something goes wrong, and provide systems of redress. (p.26).

From this statement it is clear that financial education is considered separate from consumer protection because supplemental instruction and advice do not offer real protection from behaviour that requires legislation and regulation against. In other words, in this section of this early financial literacy document financial education does not equate to protection; legislation and regulation do.

Indeed, this section is not the only one that makes a point of highlighting the importance of both financial education and legislative or regulatory protections. In the final paragraph of the definition section, it states, “it is important for both consumer well-being and for the effective operation of financial markets that consumers have full knowledge of the range of products available and of various contractual rights and obligations” (2005, p.27). Though this is not the ‘financially illiterate people can cause financial crises’ or ‘financial literacy is a form of regulation’-type statement that will be seen in later documents (and can be seen in other sections of this one), admittedly, it nonetheless makes a clear connection between financial education and “the effective operation of financial markets” (p.27). What it does not do, however, is imply that the market is at risk due to financially illiterate people who do not know how to use sophisticated financial tools, nor does it imply that financially literate people who do know how to navigate the financial market require less regulation. Where later documents’ framing of the importance of financial education justifies that education in terms of the protections it can offer the market and the individual, this framing places consumer well-being first, implying that effective market operation is tied to consumer well-being and part of that well-being is both the existence and knowledge of legislation and regulation.

Despite the clear delineation of the different roles of financial education and consumer protection noted above, this document contains hints at the shared space future documents depict financial education and consumer protection inhabiting. In the opening section of writing prior to the definition, in a discussion about the benefits financially literate people can bring the economy, the authors state that “financially educated consumers are in a better position to protect themselves on their own” (2005, p.13) and that this education enables them to identify and subsequently report wrongdoing, adding that because of this “they [the financially literate] would facilitate supervisory activity and might in principle allow for lower levels of regulatory intervention” (p.13). Later documents will remove notions associated with the modifying ‘in principle’ but maintain the argument that financial education is a type of market protection. An example of this can be seen in the 2013 *Advancing National Strategies for Financial Education*, a joint publication by the OECD and Russia’s G20 Presidency, which states “in most countries, financial education is also considered the first line of defense and protection for consumers of financial products as a complement to appropriate regulatory measures” (p.18). Here, financial education might complement regulatory measures, but it combines with those measures to provide a layered consumer protection. This is also seen in the introduction to the OECD/INFE *High-level Principles on National Strategies for Financial Education* that was published in 2012, which makes note of “the limited ability of regulation alone to efficiently protect consumer” (pp.2-3), adding “financial education has thus become an important complement to market conduct and prudential regulation” (p.3). Another publication from the following year goes even further and is more specific in the claims it makes about the effect of financial literacy on a more nuanced form of consumer protection, stating,

> They [the financially literate] are also less likely to react to market conditions in unpredictable ways, less likely to make unfounded complaints and more likely to take appropriate steps to manage the risks transferred to them. All of these factors will lead to a more efficient financial services sector and potentially less costly financial regulatory and supervisory requirements. (OECD, 2013, p.141)

Here, the financially literate can protect the market and presumably others who are appropriately literate by interacting with the market in predictable ways and managing risks.

It provides the oil that helps the market run efficiently and in turn, as implied by regulatory and supervisory requirements being less costly, requires less regulation and supervision. While still depicting financial education and literacy as separate from regulation and supervision, regulation and supervision now combine with financial education to provide protection to the consumer.

The first financial literacy document also stands out in the extent to which it blends the types of approach to literacy discussed by Street (as cited by Bartlett, 2008). While later OECD documents more clearly depict financial literacy in a way that fits an autonomous model, perhaps indicative of the multiple authorship of the document, this, more than the documents analysed that follow it, shows moments of adherence to both an autonomous and ideological approach to financial literacy. The autonomous approach – one that positions literacy as a skill that is technical and neutral (i.e. not impinged upon by the likes of cultural assumptions) – can be seen throughout the document, from the opening definition, which positions financial education as a process through which financial understanding and, in turn, financial well-being is improved, to the conclusion, which states "ideally, more information needs to be gathered on individual programmes in order to more confidently produce a list of good practices [in financial education programmes]" (p.92) and notes more data is required to be able to compare financial literacy across countries. By drawing a direct line between financial education and financial well-being and making this concluding statement, the document indicates an assumed level of universality to financial education programmes that are run in multiple countries, a universality that enables a single list of internationally-applicable good practices to be reached, a universality that implies that international comparisons of financial literacy levels just require more data. It indicates a view of financial literacy that sees learning outcomes as measurable and financial literacy as equating directly to improved finances and an improved economy. It is a view that assumes a level of homogeneity in the population group it is observing, a view that follows an autonomous model of financial literacy, and a view that becomes increasingly pervasive in subsequent OECD publications.

However, in this first financial literacy publication and the occasional subsequent publication, there are also very clear instances that fit more comfortably into an ideological model of financial literacy. An example of a moment that reflects an ideological approach can be seen in the discussion of the "unable or unwilling to improve their financial literacy" (2005, p.27). The phrase "unable or unwilling" (p.27) is an interesting one to use in this context. It is used to signify those who cannot or intentionally will not improve their financial literacy, those who, thus, do not have “full knowledge of the range of products available and of various contractual rights and obligations” (p.27), knowledge that can be gained via financial education (p.27). In other words, it is used to signify the financially illiterate. To characterise those who are financially illiterate as unable or unwilling adds a potentially complex mix of assumptions to a term that, to this point, although undefined, has been implied to mean those not educated in the workings of financial products and concepts and their risks and opportunities. To allow that lack of financial literacy may stem from an inability or unwillingness to be financially literate alludes to potential complications in the attainment of financial literacy. Many factors can lead to someone being either unwilling or unable to attain financial literacy and the acknowledgement of this is a tacit acknowledgement that financial literacy, how it is attained and what it requires and enables is not straightforward. Following an autonomous model, people would be either financially literate or not. The attainment of financial literacy would simply be down to the application of financial education, as the connection between ability and education offered within the autonomous model implies that education equals ability. Yet this is not the image of financial literacy being presented via the acknowledgement of the “unable or unwilling” (p.27). Here, financial literacy has levels of complexity that may be expected in an ideological model.

That a document acknowledging multiple authorship appears to approach the topic of financial literacy from angles aligning with different theoretical viewpoints perhaps should not be unexpected; however, what must be kept in mind is that this document has a stated aim “to help governments respond to new developments and concerns” (2005, p.2). It looks to “seek answers to common problems, identify good practices and work to co-ordinate domestic and international policies” (p.2). This kind of document, presenting both an autonomous and ideological view of financial education creates uncertainties around what might be claimed on behalf of financial education, but the ambiguity created by moments that adhere to both views of financial education has the potential to appeal to a broader audience, one that via the information given has the option to create policies and programmes that frame financial literacy as straight forward or those that frame it as complex and complicated.

Although the OECD documents that follow the most pervasive framing of financial education follow an autonomous approach, moments of the ideological approach are still evident. Indeed, some like De Mello Ferreira’s OECD article “Can economic psychology and behavioural economics help improve financial education?” (2011) strongly adhere to an ideological approach, but they are the outliers. Apart from slight and subtle shifts in language use that will be discussed, on the whole the core OECD documents discussing financial education and literacy follow the template established by the 2005 publication.

When looking at the OECD documents discussing financial literacy as a whole, one area of interest is how they frame the financial marketplace. Of the various characteristics the OECD documents assign to the market, sophisticated is the one that remains most consistent throughout all documents analysed. From the 2005 *Recommendation on Principles and Good Practices for Financial Education and Awareness* publication, which is the first OECD document focussed solely on financial education, through to the most recent of the OECD documents in the analysis, a chapter titled "The Importance of Financial Literacy", which was part of a document titled *Education at a Glance 2014: Highlights*, the words "sophisticated" or "complex" are repeatedly used to describe financial markets.

There is little wonder that most, not just those who have written the documents examined, consider financial markets sophisticated. The positioning of economics and finance as sciences inevitably brings with it the idea that any tools or products from within these areas will be honed from years of research, complex and specially made to garner specific outcomes. However, as an adjective, 'sophisticated' brings with it implications larger than the idea of being complex or the product of years of research; it carries strong notions of worth. Nowadays, in people, sophistication denotes a greater level of experience, knowledge, and enlightenment than would be found generally. In tools or products, sophistication denotes technical complexity where results are more precise and the margin of error is slighter than in other, less sophisticated tools or products. Because of this, something that is sophisticated tends to be seen in a positive light. Indeed, Hamill (2010), who has written a book tracing the journey through the shifting meanings of 'sophistication', comments how the idea of sophistication as it is understood today is seen in such a positive light it is frequently used in advertising, where luxury products are described as 'sophisticated' to separate them from the rest and appeal to the aspirational middle class.

Still, the implications of applying the term 'sophisticated' to markets go beyond this positive viewpoint; it also helps, whether deliberately or not, to responsibilise the general populace and encourage the point of view that financial education is a necessity in modern life. A sophisticated market is more than complex; it is refined, finely tuned, and responsive. With tools and products this advanced, trained operators are required. Should anything go wrong, it is more likely it is an operator fault, rather than a fault in the sophisticated machinery of the financial market. Those expected to make forays into this type of environment, therefore, require specific education so that they neither harm themselves nor the market. If it is their money that is invested, it is their responsibility to be fully informed.

Further emphasising the necessity for stringent financial education, the level of sophistication assigned to financial markets in these documents is presented as ever-increasing. A clear, concise example that also shows how increasing sophistication is positioned in relation to financial literacy can be seen in the OECD document "Improving Pension and Retirement Savings Policies" in *OECD Economic Surveys: New Zealand* (2007), which states, "As the range of available financial instruments has become more sophisticated, the financial literacy levels required by individuals in order to make optimal decisions about saving and borrowing have risen considerably" (p.102). The idea that increasing levels of sophistication requires improved levels of financial literacy is repeated in various ways throughout these documents: "As financial markets become more sophisticated and households assume a growing share of the responsibility and risk for financial decisions, financial education is necessary to ensure sufficient levels of investor and consumer protection" (*Financial Literacy and Consumer Protection: Overlooked Aspects of the Crisis*, 2009, p.3); "[because] investors have to deal with a vast array of new and sophisticated financial products… decisions now require not only that individuals be informed about their pensions, but also that they be knowledgeable about finance and economics" (Lusardi, 2011, p.124); "Shrinking welfare systems, shifting demographics, and the increased sophistication and expansion of financial services have all contributed to a greater awareness of the importance of ensuring that citizens and consumers of all ages are financially literate" (OECD**,** 2014, p.82).

In these documents, there is something inevitable in the portrayal of the sophisticated market. Time passes; people age; financial markets become more sophisticated. The way the increased sophistication of the markets is presented implies it is inherently inevitable: "As financial markets become more sophisticated . . . financial education is necessary" (OECD**,** 2009, p.3). In the positioning of financial markets as ever-increasing in sophistication, it is almost as if the writers are discussing an irrefutable constant, like the endless march of time. The obvious difference here is that the passing of time is beyond our control, whereas increasing levels of financial sophistication are not. Not only does this kind of framing tacitly encourage the view that all financial market developments increase the sophistication of the market – and are therefore beneficial and well-thought out – but by implying that ever-increasing levels of financial market sophistication are inevitable in this way, market sophistication becomes something that is pointless to challenge or question and the focus justifiably shifts to the things depicted as being within our control, like financial education. This depiction circumvents discussions regarding the appropriateness or usefulness or value of ever-increasing financial sophistication and, once again, places the responsibility of keeping up on the shoulders of those using the financial markets.

However, for a term used so frequently when describing financial markets, very few of the documents detail what, exactly, is meant by ‘sophisticated’ in relation to those markets, beyond the odd, vague phrase like “improved technology and financial innovation” (Yoong, 2015, p.67). In leaving out specific details highlighting that innovations stem from human intervention, describing the market as increasingly sophisticated in this kind of dissociated way imbues it with a sense that its changes are due to spontaneous evolution. This omission is important. If the market were portrayed as a tool, something within our control, the urgency for financial literacy would ease. Governments or market regulators could simply put a stop to or reverse the uptake of these increasingly complex innovations. Furthermore, those driving innovations might be expected to modify the advances to suit the general consumer, the same consumer who is depicted as having potentially devastating limited understanding of financial markets. However, a self-sufficient market operates and changes seemingly spontaneously and intuitively in a positive response to ebbs and flows within it. A market that is complex and sophisticated and always evolving, a market positioned as the answer to personal financial problems and a market that responds best to minimal intervention in its operation is a market that requires careful, educated navigation.

Regarding the discussion of market sophistication, one OECD document stands out in its elaboration of what it means when it says financial products are increasingly sophisticated. After stating that financial markets have become more sophisticated, Messy and Grifoni, in their chapter titled “OECD: Advancing National Strategies for Financial Education Rationale, Global Policy Trends and Way Forward” (2015) go on to note that “developments in information technology and telecommunications have resulted in a proliferation of new financial products tailored to meet very specific needs” (p.16). They add, “even simple products such as savings accounts are now offered in a variety of forms and with different characteristics” (p.16). Ideas of sophistication offered by these examples have in common intricate parts formed to respond to different users, heavily designed products focussed on the specific needs of the end user.

For Messy and Grifoni, the specific type of sophistication in these products makes them "relatively straightforward" (2015, p.16) while also potentially being "complex to the average consumer" (p.16). The claim that increased sophistication results in "relatively straightforward products" (p.16) that may also be more complex to use, albeit illogical, sustains the idea that sophistication is a good thing (because of the responsiveness it brings to simple products) while also indicating that these products require consumer education (because their increased sophistication brings increased complexity). With this type of framing, questions regarding the appropriateness of products with increased sophistication are once again circumvented, maintaining sophistication as a motivator for improvements in financial literacy.

Interestingly, Messy and Grifoni's picture of sophisticated financial products also comes heavily intertwined with language of caution. After outlining how the latest changes in the levels of sophistication in financial products were spurred primarily by improved technology and the deregulation of financial markets, their statement (discussed above in relation to complexity) that "this increase in the sophistication of products . . . means that relatively straightforward products might become complex to the average consumer" (2015, p.16) also imparts a note of warning. Complexity is positioned as potentially problematic to the "average consumer" (p.16). They add, "facilitated access to a range of credit options by formal and non-formal institutions have led to worrisome overindebtedness levels among parts of the population" (p.16). By stating simply that "facilitated access" has led to "worrisome overindebtedness" (p.16), but again not discussing in any more depth or detail issues that might surround "facilitated access" (for example, how it came about), Messy and Grifoni are delicately acknowledging that deregulation has created problems for the "average consumer" (p.16) while maintaining the focus firmly on the need for improved levels of financial literacy. There are hints at more complicated discussions regarding the necessity of improvements in financial literacy in these fleeting phrases, but they are not returned to. Instead, the "worrisome overindebtedness" (p.16) they raise is used as motivation to provide consumers with the right instruments or education to better negotiate financial markets. Here, the type of hazard the financial markets present is positioned much like a National Park kind of hazard, where the public understand that there are entities tasked with looking after the park and ensuring points where interactions take place are maintained and hazards are signposted, but essentially the experience is a very individual and personal one. Outside intervention with the park itself must be minimal to ensure the visitor gets as un-fettered an experience as possible and certain hazards within the park must be accepted as part of the package to preserve a landscape deemed important; individuals are afforded a certain amount of warning and given safety precautions, but beyond that, there is the expectation that they will enter the environment appropriately informed and fully prepared. In the same way, this type of framing of financial markets positions financial education as a safety precaution, there to protect both the individual and the environment. Yet the financial marketplace is not a natural wonder. It is a place geared towards the creation (or loss) of capital.

How different would the discussion be if the pitfalls of deregulation and facilitated access were explored to more depth? Indeed, it would be hard to avoid discussing their justifications in the financial market, given their potential for harm, but perhaps this is why there is no further discussion, certainly not in these documents. Leaving out this kind of detail helps keep the focus on the immediate issues that require improved financial literacy and avoids a more detailed landscape view that takes in the potential causes of the situation in the first place. One view justifies increased financial education; the other justifies reconsideration of the way government and financial markets interact.

In framing financial markets as sophisticated, very little then needs to be done to label lack of knowledge of how to operate within these sophisticated systems as financial illiteracy, which, in turn, positions those deemed financially illiterate as vulnerable. In fact, another common occurrence in the OECD documents analysed is the consideration of the financially illiterate as vulnerable, with their vulnerability discussed in ways not too dissimilar from how diseases in need of inoculation are discussed. Their vulnerability is not just potentially harmful to them; it is also positioned as harmful to the financial system in which they operate, which, in a tightly packaged symbiotic relationship, leads discussions back to the protection offered by financial education.

The most prevalent framing of vulnerability in the OECD documents analysed supports the idea that lack of specific forms of financial knowledge leaves the financially illiterate prone to experiencing direct or indirect forms of financial loss. At times, the idea of vulnerability is merely alluded to; for example, the earliest document analysed states, “[surveys] show that consumers have low levels of financial literacy and lack awareness of the need to be financially educated” (OECD, 2005a, p.2). Here, the word “need” is enough to show the authors view financial literacy as a requirement for modern-day survival. Other times, the vulnerabilities are spelled out:

> the majority of individuals lack the knowledge of basic financial concepts, such as interest compounding, inflation, and risk diversification; concepts that form the basis of financial decision-making. Moreover and most importantly, lack of knowledge has been found to be associated with lack of retirement planning, lower wealth accumulation, problems with debt, and poor investment choices. (OECD, 2011, p.44)

While this stops short of saying lack of financial knowledge leads to poverty, poverty is certainly implied as being the last stop on the same track.

The pervasive notion of vulnerability derived from financial illiteracy, like most forms of vulnerability, has threatening undertones, but, within financial markets, vulnerable individuals are themselves shown to be a threat. In these documents, should the possible detrimental action or inaction eventuate, the financially illiterate, despite their role as mere consumers of financial products, are depicted as having the power to bring about a financial crisis. Certainly, many of the OECD documents analysed position the financially illiterate's vulnerability as itself a market vulnerability but stop short of calling it that. This can be seen in statements like "the crisis has exposed an array of vulnerabilities where many households have been brought to purchase unsuitable financial products, which played a role in setting off the crisis" (OECD, 2009, p.8); "a majority of individuals do not plan for the future and fail to make effective decisions to manage their finances. As the global crisis has shown, this can have a negative impact on financial and economic stability" (OECD, 2013, p.3); and "the consequences of the financial crisis have demonstrated the potential implied costs and negative spill-over effects of low levels of financial literacy for society at large, financial markets and households" (OECD INFE, 2011, p.3). Setting aside the tenuous nature of claims that financial illiteracy was the genesis of the global financial crisis, what can be seen here is that the financially illiterate are depicted as almost profoundly vulnerable; the ramifications of their illiteracy are great and reach farther than their own households. Yet rather than portraying the financially illiterate as a point of vulnerability for the market, the framing tends more toward the other side of the same coin: financially illiterate as threat.

Positioning the markets as threatened by the financially illiterate, but not themselves vulnerable, requires careful manoeuvring. Connotations of weakness linked to vulnerability do not sit well with the notion of the market as a sophisticated, perfectly formed financial system. To address vulnerability, the vulnerable person or object must be analysed, as can be seen in the discussion regarding the financially illiterate. The gaze is necessarily inwards and, by not being labelled vulnerable, financial markets avoid this gaze. To address a threat, however, the focus is primarily on the threat. While the frame through which these documents look at financial markets is a malleable one (as will be discussed later), from this angle, it appears almost common sense that wholesale improvements in financial literacy are needed to neutralise the threat of illiteracy and prevent the potential collapse of the markets. From the angle of market as vulnerable, however, the common-sense approach is arguably to put in place more robust checks and balances combined with increased regulation. From this angle (market as vulnerable), it is the weaknesses of the system that could potentially cause market collapse.

Interestingly, the earliest OECD documents indeed consider the relationship between the financially illiterate and the marketplace as one that reflects the need for multi-pronged approaches. In fact, as noted earlier, many of the earlier documents introduce discussions about financial literacy imperatives with acknowledgements of the parallel need for financial market regulations. This starts with the earliest of the documents, which is also the one that most clearly calls for improvements in financial literacy to go hand-in-hand with regulation, rather than serve as a replacement for it:

> Financial education should be taken into account in the regulatory and administrative framework and considered as a tool to promote economic growth, confidence and stability, together with regulation of financial institutions and consumer protection (including the regulation of financial information and advice). The promotion of financial education should not be substituted for financial regulation, which is essential to protect consumers (for instance against fraud) and which financial education is expected to complement. (OECD, 2005a, p.4)

After the 2009 document *Financial Literacy and Consumer Protection: Overlooked Aspects of the Crisis*, which contains phrases like “the OECD has been among the very few stakeholders to recognise the importance of financial education and consumer protection” (p.7) and “[Financial literacy] does not substitute for financial consumer protection and regulatory frameworks” (p.8), the OECD documents fall into comparative silence regarding the importance of financial education initiatives to work in parallel with consumer protection and market regulation. However, what can be seen is a continuation of the positioning of financial education/literacy as a form of consumer and market protection and illiteracy as a form of threat: “the financial crisis focussed the attention of governments around the world on the critical need to empower consumers through financial education" (OECD, 2011, p. 3); "the consequences of the financial crisis have demonstrated the potential implied costs and negative spill-over effects of low levels of financial literacy for society at large, financial markets and households" (OECD INFE, 2012, p.3); "Improving financial literacy has become … an integral part of financial reform to prevent future crises" (OECD & Russia's G20 Presidency, 2013, p.5).

Indeed, advancing chronologically through the documents, a shift can be seen in the positioning of financial literacy as complement to consumer protection and market regulation. Certainly, financial education/literacy remains linked to individual and market protection, but the financially literate also begin to take on the role of pseudo-market regulator: "better educated citizens can also implicitly help in monitoring markets through their own decisions, and thus complement prudential supervision" (OECD, 2009, p.8). By 2011, in the OECD book that stemmed from a 2011 symposium, touted as providing advice and evidence on financial education from "the best experts around the world" (OECD, 2011, p.3), Yoong states:

> Financial education that effectively supports this ability [to make intelligent and responsible financial decisions] has potential benefits for multiple stakeholders. For consumers, there is strong evidence that links more financial literacy to welfare-improving behaviour – more planning, more appropriate use of credit, more successful wealth accumulation lead [sic] to more successful financial well-being, which in turn is linked to greater long-term overall well-being. For the financial services industry, more participation and better-informed participants would increase demand for financial products, build competitiveness, promote market transparency and increase efficiency. Policy makers would benefit from a lighter regulatory and supervisory burden related to monitoring, intervention and redress in financial markets as well as a more successful environment for reforms. For the economy as a whole, more financially-secure households with higher savings rates should contribute to better-functioning markets, increased economic stability and development and a reduced need for future expenditure. (p.67)

For Yoong, the positive effects of financial education stretch far beyond its ability to protect both the individual and the market; financial literacy cocoons all involved in a protective sheath of success. However, the idea that the protection offered by financial literacy subsequently lightens the regulatory burden, while certainly pervasive in these documents, is nowhere more clearly stated than in this excerpt from Yoong.

The OECD’s financial literacy policy advice and information contains the occasional outlier that acknowledges improving a population’s financial literacy and well-being is more complex and nuanced than merely providing financial education. On the whole, however, the depiction of the financially literate individual within these documents very much fits within Scribner’s (1984) literacy-as-power metaphor, emphasising a link between obtaining financial literacy and gaining power over finances, a power which provides benefits to both the individual and society. The individual benefits by improving their financial situation and society benefits from financially educated people populating the sophisticated financial marketplace and, therefore, decreasing the threat to the market that financially illiterate people pose. In providing these benefits to society, the financially literate become exalted; their literacy is virtuous because it helps secure the market and avoid any potential future market crisis. It adheres to Scribner’s third metaphor: literacy-as-state-of-grace.

By equating individual benefits resulting from financial education with societal benefits, implying a clear delineation between the literate and the illiterate, and implying that financial literacy can be conferred via some homogenous form of financial education, these texts also follow Perry’s (2012) autonomous model of conceptualising literacy. Although the OECD has published writings on financial literacy that add complexity to the framing of the financially literate subject, these are few and far between and make little to no impact on the pervasive narrative of financial literacy and education presented by the OECD. The dearth of texts in tension with this thin conceptualisation of financial literacy is perhaps not surprising. After all, this is advice encouraging the establishment of financial education policies. Adherence to a more ideological model (Bartlett, 2008) of financial literacy would broaden the discussion and complicate the advice. It would also mean raising topics that risk venturing onto territory that neoliberalism tends to avoid, topics like the need for greater social welfare provisions, or more taxation. Admittedly, some of these texts acknowledge a continued need for regulation and monitoring. Indeed, regarding ensuring well-functioning markets, they position financial literacy as working in tandem with regulation and monitoring; however, these are passing mentions in texts that have in common the exaltation of the benefits of financial literacy to both the individual and society alike.

Within financial literacy discourse, the OECD represents a node of power/knowledge. Via the texts on financial literacy it has produced and disseminated, it has “represent[ed] the order of things” (Foucault, 1998h, p.264) and thus exercised power. Government in terms of state executive power does not appear in these texts, but it is ever-present as those afforded state executive power are their intended audience. These are texts shaped for Foucault’s (1998b) neoliberal government, not Palley’s (2007). That is, although the framing of the capabilities of the financially literate subject within these OECD texts supports neoliberal conceptualisation of market mechanisms, they do not represent appeals made to a rolled back state. They are appeals to a state expected to intervene in society itself (Foucault, 1998b). Both the OECD and the government act as sponsors (Brandt, 1999) for financial literacy and, as will be seen in the following chapter, within New Zealand, government plays an important role in “the resource management systems” (Brandt, 1999, p.376) of financial literacy.

Chapter 4: A Neoliberal Articulation?: The Introduction of KiwiSaver

This transitional chapter provides important background detail in the connection between the OECD conceptualisation of financial literacy and local savings initiatives, with a focus on KiwiSaver. It outlines pertinent stages in the development of KiwiSaver and aspects of KiwiSaver's operation and provides an overview of the key institutions supporting KiwiSaver. Although KiwiSaver is primarily a vehicle for retirement savings, KiwiSaver providers and a number of supporting institutions and non-governmental organisations have mandates to improve financial awareness among consumers of financial products. This chapter maps the discursive terrain of financial literacy in New Zealand to help situate the case study that follows in part two of this thesis.

The first section of this chapter breaks down pertinent moments in the development of retirement provisions in New Zealand, spanning from the first government-funded pension scheme in 1898 through to the creation of the Retirement Commission and the implementation of KiwiSaver. Key similarities and differences in the focus on ageing populations and the burden they place on retirement funds and the framing of individual, market, and government responsibility are discussed and detailed information regarding the operation of KiwiSaver is outlined.

The second section provides an overview of the institutions linked to financial literacy, KiwiSaver and the Commission for Financial Capability, detailing their key roles and reporting systems. It outlines different sites within New Zealand focused on improving financial literacy and supporting KiwiSaver, from government-funded entities to entities providing financial reporting or advice for the public.

Section three looks at voices in the public sphere in the lead-up to the institution of KiwiSaver and beyond. With widespread enrolment in KiwiSaver broadening the financial market's investment base, the audience for financial journalism and critical scrutiny of the finance sector has also broadened. Coupled with developments in social media, channels that amplify the public voice have additionally become more diverse and accessible. Using Jane

Kelsey as a representative public intellectual figure, this section outlines key public sphere commentators and networks for public criticism of the financial and social risks of neoliberalism's autonomous market model and the gradually broadening public understanding of the operation and outcomes of neoliberalism.

Policy Transfer: From the Old Age Pension (1898) to KiwiSaver (2007)

The implementation of KiwiSaver in 2007 was a crucial development in NZ's government-sponsored financial literacy policy, but KiwiSaver is not the first instrument for retirement provision the government ostensibly created to address concerns about an ageing population. To understand the important moment KiwiSaver represents and the role financial literacy plays in its implementation, it is necessary to look at the history of retirement provisions in New Zealand.

The 1898 Old Age Pension Scheme

Up until 1898, elderly New Zealanders primarily had to rely on themselves or the support of family to survive. Although government support existed in the form of pensions for military and public service and subsidised charitable aid, there was no formal public pension system (Preston, 2008). With increased concerns regarding the growing number of elderly living in poverty and projections indicating that the elderly would make up an increasing percentage of the population, in 1898 the government introduced the first Old Age Pension, a means-tested benefit for those 65 and older that provided individual recipients with what then equalled around a third of a working man's wage. To qualify for the pension, individuals also needed to indicate that they were not "criminals, drunkards and wife-deserters" (Preston, 2008, p.11) by providing evidence of their good character and by making their pension application in a public court session. Both Pakeha and Māori were entitled to apply for the pension; however, Asians were excluded and remained so until 1936. Overall, these restrictions meant the number who actually qualified for the pension was only slightly higher than a third of the aged 65-plus population (Preston, 2008).

In 1938, after various attempts to encourage people to increase their private retirement savings – including a fund with almost pound-for-pound government subsidies, private superannuation tax concessions, tax deductions to private superannuation contributors, concessions on investment earnings from private superannuation funds, and tax concessions for employers contributing to private superannuation funds – the then first Labour government replaced the Old Age Pension with the Age Benefit (Preston, 2008). At a time when New Zealand was still recovering from the impact of the Great Depression that hit the world in 1929 and lasted well into the 1930s, the Age Benefit offered a greater sense of security to a population with an increased appetite for the more socialist approaches that were gaining popularity in Europe (Easton, 2012). Still means tested, the Age Benefit differed from the Old Age Pension in that the age of entitlement was decreased to 60 and the maximum pension amount raised from £18 a year to £78. Part of a two-tier public pension system that resulted from the 1938 Social Security Act, the Aged Benefit was intended to work in conjunction with the soon-to-be-established Universal Superannuation (Rashbrooke, 2012). Free from means-testing, Universal Superannuation was implemented in 1940 with the intention to provide cover to those aged 65 and older who were not entitled to the Age Benefit. While the initial payments were small, they increased gradually each year until 1960, when they reached the point where they matched the Age Benefit (Preston, 2008). Although a Social Security tax had also been implemented to help cover the costs of both pensions, at 5% of earnings, it was not enough and the funding deficit had to be met from the government's general revenues (Preston, 2008).

The 1977 NZ Super Scheme

In October 1973, after the Royal Commission on Social Security in 1972 recommended that levels for pensions and other benefits be raised, New Zealand's economy was hit by the Oil Crisis (Preston, 2008; Easton, 1980). Although expert in New Zealand politics and economics Brian Easton asserts that New Zealand's subsequent depression in the mid to late 1970s had its beginnings far earlier – in the 1960s – the essential point with regard to pensions is that the revised National Superannuation scheme set up by the National Government and effective from 1977, a scheme marked to be set at 80 percent of the average wage and without income or asset testing, was implemented at a time when government finances were already under strain.

Indeed, since the inception of New Zealand's Superannuation scheme in 1977 (originally called the National Superannuation Scheme), it has faced scrutiny over its affordability and sustainability (Preston, 1997). In the face of major economic reforms, including superannuation policy changes early in the 1990s, and concern over an ageing population, the Task Force on Private Provision for Retirement was established in 1992 (also known as the Todd Task force, as it was chaired by Jeff Todd) (Preston, 1997). Within a climate of economic rationalism driven by the notion that governmental bureaucracy is less efficient and productive than the markets (Easton, 1994), its mandate was to examine and report on key policy options aimed at improving retirees' financial self-reliance, including looking at the ramifications of compulsory contributions to superannuation and different options geared towards improving private retirement savings (McKenzie, 2019; Preston, 1997). Ultimately, the Task Force aligned with the drivers behind existing government policy, recommending – amongst other things – the implementation of a form of voluntary retirement income scheme to operate alongside the existing Superannuation scheme. One of the schemes rejected by the Task Force was a scheme requiring compulsory retirement contributions – rejected due to the perceived negative effects on those on low incomes; however, despite the rejection, the Task Force nevertheless created a potential model for such a scheme as it noted that should the voluntary option fail, the compulsory scheme would need to be revisited (McKenzie, 2019). Out of the Task Force's overall feedback came a multi-party Accord (the Accord on Retirement Income Policies, 1993) that led to the establishment of the Office of the Retirement Commissioner (McKenzie, 2019). Appointed to monitor the retirement needs of the New Zealand population and "improve the regulatory framework for private savings" (McKenzie, 2019, p.254), one of the Retirement Commissioner's key tasks was to educate the public on the need for private retirement savings (Preston, 1997). In December 1992, the Task Force released its final report where one of the four key recommendations was "a much-improved public understanding of retirement provision issues" (McKenzie, 2019, p.268). In August 1993, the Retirement Income Act was written up, coming into force in April of 1994, along with the Office of the Retirement Commissioner (the Retirement Commissioner and the associated Retirement Commission will be discussed in more detail in the following section).

This increased focus on private savings and the ageing population also led the then New Zealand government to create the New Zealand Superannuation Fund (NZSF) in 2002. Operating as a separate investment fund intended to act as a pre-fund, the NZSF was established to cover the projected liabilities the ageing population was seen to be bringing to New Zealand Superannuation (McKenzie, 2019). A protected fund that can only be drawn on to cover New Zealand Superannuation payments after 2020, initial predictions estimated that by 2050, the NZSF would cover "up to 8 percent of the cost of New Zealand Superannuation" (McKenzie, 2019, p.369). As of August 2019, the fund has an estimated value of over NZ$42 billion (NZ Super Fund, 2019) and is expected to grow as "capital withdrawals are projected to be less than the Fund's income" (Kritzer, 2007, p.114). Despite the performance of the NZSF and OECD 2011, records indicating that New Zealand's public pension spending in 2007 was the 6th lowest of OECD member countries, along with New Zealand then having "the lowest relative poverty rate among people age 65 and over in OECD countries" (Rashbrooke, 2012, p.105), concern over the sustainability of New Zealand Superannuation and its ability to provide for the needs of those drawing on it was still voiced.

The Clark Coalition Government and the Third Way

Fifteen years after the fourth Labour Government had instituted far-reaching neoliberal reforms, towards the end of 1999, the New Zealand voting public again elected a Labour-led government. The intervening fourth National Government had continued the implementation of neoliberal reforms the previous administration began, including, inter alia, introducing significant cuts to social welfare spending, increasing government housing rents to meet market rates, and introducing user-pays charges to previously free public services (Evans et al., 1996). Where the fourth National Government was seen as "complet[ing] the 'unfinished business' of implementing the remainder of the neoliberal policy agenda" (Roper, 2005, p. 192, as cited in Redden, Phelan, & Baker, 2020, p.73), the fifth Labour Government "presented itself as offering a pragmatic pathway between the imagined ideological extremes of the pre-1984 and post-1984 periods" (Redden, Phelan, & Baker, 2020, p.74). Unlike previous administrations that had represented the relationship between business and labour interests as having tensions, the fifth Labour Government represented business interests as vital in reaching the nation's shared purpose of overcoming challenges posed by economic globalization (Skilling, 2010). The idea was that governance at a time of increased globalization requires an adaptation of social democracy that embraces the neoliberal focus on dynamic, efficient markets, an idea that is part of an ideology famously supported by one of the creators of the term 'reflexive modernity', Anthony Giddens (Piercy et al, 2017). The ideology is known as the Third Way.

Within the number of governing styles termed 'Third Way', this particular one rose to prominence in the 1990s, under the stewardship of a variety of leaders, including Tony Blair in the United Kingdom, Bill Clinton in the United States, and Helen Clark –leader of the fifth Labour Government – in New Zealand. Presented as a new way of doing politics, working to integrate free-market capitalism with social welfare policies focused on equality, the Third Way was a political position that philosophically sought to modernize social democracy while tapping into the popularity of free-market policies (Romano, 2005). When technological developments were making significant advances in our ability to connect with each other globally, economic globalization provided a pathway through which politicians could promise expanded opportunities for their populations. Positioning themselves as presenting pragmatic solutions to the problems of their times, Third Way politicians (made up of those from traditionally Left leaning parties) eschewed traditional political ideology for ideology's sake, professing to be maintaining core Left values while embracing policies from across the political spectrum (Martell, 2004, p.5). Under the Third Way, government maintains an active role, but it is to tackle poverty, facilitate social inclusivity and ensure people are given the opportunity for equality of outcomes (as opposed to mere equality of opportunity) (Martell, 2004). From this overview, it is clear to see how neatly KiwiSaver and the push to improve financial literacy fit within the pragmatic Third Way vision – they are working to help people help themselves. However, despite proponents like Giddens positioning the Third Way as being anti-neoliberal, in the very framing of the Third Way as promoting capital interests through facilitating economic globalization, pursuing deregulation, competition and free markets while upholding social policies that address social exclusion (Martell, 2004), the Third Way at its heart appears to be neoliberalism 2.0. While much has been written about the Third Way and its intricacies, I tend to sympathise with Cammack's (2004) view of the Third Way as a "promot[ion of] the hegemony of the neo-liberal project" (p.152). Accordingly, the overarching contextual horizon for my own analysis is the broad neoliberal ideology informing the rise of KiwiSaver and its influence on the construction of financial literacy within New Zealand.

KiwiSaver

In a landscape of increased global concern for ageing populations, three years after the creation of the NZSF, the New Zealand government announced its KiwiSaver Workplace Savings Scheme, which was set to begin in 2007 (McKenzie, 2019). According to a report prepared by the National Research and Evaluation Unit for the IRD-based KiwiSaver Evaluation Steering group, KiwiSaver's main legislative objectives were to "encourage a long-term savings habit and asset accumulation by individuals who are not in a position to enjoy standards of retirement similar to those in pre-retirement" (2015, p.1) and to "increase individuals' wellbeing and financial independence, particularly in retirement, and to provide retirement benefits" (2015, p.1). A further, less stated objective in establishing KiwiSaver was to "support local capital markets by providing an additional source of investment funds"

(Rashbrooke, 2012, p.108). As set out by the KiwiSaver Act 2006, the Financial Markets Authority (FMA), an Independent Crown Entity, is responsible for regulating all KiwiSaver schemes and producing an annual report summarising their regulatory activities and statutory data pertaining to KiwiSaver and its providers. While the FMA is tasked with regulating retirement schemes, investment risk in KiwiSaver is shouldered by the individual, with the government offering no guarantee.

The two most common types of pension scheme are defined benefit schemes and defined contribution schemes. Defined benefit schemes agree to pay out a set amount upon retirement and this is normally funded by contributions from the individual and their employer, based on the individual's income and years of employment. In defined contribution schemes the amount a person contributes is agreed and their employer often matches a portion of their contributions, but how much the individual receives upon retirement is not set. Because funds placed in defined contribution schemes are invested, how much the individual ultimately receives upon retirement depends on the amount contributed and how well the investment has done. Defined contribution plans are more popularly implemented worldwide as the amount paid out upon retirement includes the returns on the investment, which act as an incentive for the individual, and it is the individual who bears the risks, which is an incentive to the employer.

KiwiSaver is a voluntary defined contribution plan, administered primarily by the Inland Revenue Department (New Zealand's Government department responsible for collecting taxes) via the PAYE (pay as you earn) tax system. While the scheme is voluntary, it operates under an opt-out system, where individuals who are not already members are automatically enrolled when starting a new job and must complete an opt-out request form between two and eight weeks from automatic enrolment if they wish to be unenrolled (KiwiSaver website). The implementation of the opt-out requirement is based on notions surrounding inertia and studies concerned with people's cognitive bias against change, with the belief being that if people are already enrolled, which is the government's preference, they will be less likely to be inclined to make the effort to unenroll themselves. Opting out after the initial eight weeks is allowed under special circumstances, many of which are linked to the timeliness of the provision of necessary information during the decision-making process. In addition to this, those under 18 and over 65 who are normally excluded from automatic enrolment are able to opt-in to KiwiSaver.

Those enrolled in KiwiSaver have the option to have their funds invested via a KiwiSaver provider of their own choice, one chosen by their employer, or, if neither they nor their employer have chosen a provider, via one of nine (now six) default providers that have tendered to be a default provider and have been vetted by Government based on their investment capability, corporate strength, administrative capability, track record, and stability (Ministry of Business, Innovation & Employment, n.d.). Default providers are required to fulfil additional reporting and monitoring requirements for their default KiwiSaver schemes and the default schemes must also be invested conservatively, with caps on the percentage of funds that can be invested in shares and property, which are considered growth assets and tend to be higher risk (Rashbrooke, 2012). If their workplace has not chosen a default provider, the default provider an individual is allocated to is decided by the Inland Revenue Department (IRD). If an individual wishes to change their KiwiSaver provider, they may do so at any time and the change is normally handled by the provider they are changing to. KiwiSaver providers are private financial services companies. Each of the main banks in New Zealand operates its own KiwiSaver scheme, with schemes also offered by other entities that have traditionally provided fund management services or insurance and entities set up purely to provide KiwiSaver services. As of March 2020, there were 29 registered KiwiSaver scheme providers listed on the IRD's KiwiSaver website. According to CANSTAR – an entity that provides a rating system for financial institutions – KiwiSaver providers were offering between them 270 different funds as of July 2020(Pitchers, 2020).

All KiwiSaver scheme providers must have product disclosure statements readily available to potential investors. These statements must include information regarding the scheme's fees and terms and conditions. They must also cover "how your money will be invested, who is responsible for managing your money, [and] what returns you can expect" (IRD, n.d., para.2). From 1 April 2008, the disclosure statements also needed to include a statement about the scheme's approach to responsible investment, including environmental and social considerations (IRD, n.d.). All KiwiSaver scheme members are required to sign a statement confirming they have read and understood their scheme's disclosure statements prior to joining that scheme.

At the time of its launch, individuals could choose their KiwiSaver contribution rate at either 4% or 8% of their gross salary, with employers contributing 1% of gross salary from 2008 and the intention of increasing this to 4% by April 2011. By 2019, KiwiSaver contributions had changed, allowing individuals to contribute either 3%, 4%, 6%, 8% or 10% of their gross salary, with the default set at 3%. Employer contributions in 2019 had not reached the 4% estimated by 2011 and remained at 3%. All contributions are collected by the IRD, which passes them on to the chosen providers.

Upon reaching the set eligibility age (currently set at 65), the retiree investing in the defined contribution plan can withdraw their investment in a lump sum to do with as they choose. In addition to this, some providers offer their investors the ability to draw down regular payments from their funds, rather than withdraw the bulk of their funds. While it is relatively uncommon in New Zealand, those investing in the defined contribution plan, or their provider, can also use the funds to purchase an annuity from an insurance company. The first KiwiSaver-specific annuity was launched in 2015 by the Retirement Income Group (Clement, 2015). The annuity provides a set amount of payments to the retiree for a set period of time. Annuities are not common in NZ, one reason being the appetite in the market to offer them is curbed by the "slight tax wrinkle with annuities" (RNZ, Sept. 11 2019, para. 9) that has the corporation taxed at a corporate rate, rather than the individual taxed at a lower marginal tax rate a retiree might normally pay if placing their money in an investment fund (Gibson, 2011). This ultimately means that insurers offering the annuity have to allow for these higher rates in their pricing, which in turn makes the annuity a less attractive option.

Since its inception, KiwiSaver has survived relatively intact despite political parties from different spectrums being in power. Perhaps an indication of the amount of sway neoliberal-leaning OECD advice holds over the various governing entities, notwithstanding the then opposition party leader John Key stating during the first reading of the KiwiSaver Bill (2006) that it is not appropriate as New Zealanders "simply do not earn enough" (Key, 2006, p.1673), when John Key's National Party came into power KiwiSaver remained. KiwiSaver fits the brief the OECD sets out for coping with the problems it outlines with ageing populations and, after being brought in by a Labour-led government and surviving through three subsequent National-led governments, it remains relatively unchanged with the current Labour government.

Having a population that has made its own retirement provision is advantageous to a government in many ways. It allows governments to avoid discussions about increased taxes to maintain pension fund provision; it provides a safety-net of sorts should the government-provided pension be put under any strain; and it helps ensure that individuals are able to more closely maintain their usual standard of living post-retirement, which ensures a smaller dropoff in levels of consumption post-retirement. Having a large percentage of a population that might not normally invest in the financial market commit to regular set contributions via the likes of KiwiSaver not only serves as an on-going windfall for the financial market, it also puts a large percentage of the population's retirement funds at risk should we encounter another global financial crisis. The Financial Markets Authority 2018 KiwiSaver Annual report indicated that at that time, 2.8 million New Zealanders had funds totalling over $50 billion invested in KiwiSaver. That number has since increased and serves as an indication of the boon that KiwiSaver is to the financial markets. That number represents 2.8 million New Zealanders participating in the financial marketplace; 2.8 million expected to have a level of financial literacy that some, including certain OECD documents, claim justifies reduced market regulation; 2.8 million investing in a financial sector that pushes for self-regulation and arguably lacks transparency; and that is an extra $50 billion of New Zealander's savings going into the financial sector, money that the New Zealand government has divested responsibility for.

Following the global financial crisis, with significant numbers of New Zealanders and their retirement savings invested in the financial markets, the question might be asked if the faith the government has placed in KiwiSaver and those markets to achieve the desired outcome of encouraging long-term savings habits, improving asset accumulation, and supporting local capital markets via additional investment funds has been well placed. A look at the 2015 KiwiSaver Evaluation report put out by the IRD-based KiwiSaver Evaluation Steering Group goes some way to answering this question. Three of the five objectives of the report were "to assess whether the key features of KiwiSaver are generating expected outcomes; to determine the impact of KiwiSaver on individuals' savings habits and asset accumulation; [and] to determine the impact of KiwiSaver on superannuation markets and the financial sector" (National Research and Evaluation Unit, 2015, p.1). As might be expected, the analysis of the efficacy of KiwiSaver's opt-out mechanism (one of its noted 'key features') indicated that KiwiSaver in this regard was successful. Decreasing numbers from 2007 to 2014 were opting out of the scheme and, along with those being auto-enrolled, a relatively large number were opting in (National Research and Evaluation Unit, 2015). KiwiSaver was also found to be successful in its impact on superannuation markets and the financial sector, with the report noting that it had stimulated New Zealand's financial sector and "was a medium to long-term growth opportunity for the sector" (p.3).

However, with regard to improving savings habits and asset accumulation – the two key objectives in the establishment of KiwiSaver in the first place – the report suggested KiwiSaver was not as successful. While the report stated that in relation to policy objectives "the success of KiwiSaver in achieving these is marginal at best" (p.4), focusing on improvements in savings habits, it added that "much of the savings accrued through KiwiSaver are the result of substitution from other forms of savings and debt reduction" (p.4). In other words, much of those KiwiSaver savings were not additional to the amounts people might have been saving already via more traditional methods, or using to pay off large debts like mortgages. KiwiSaver was found to be predominantly used to replace traditional savings methods, rather than serve as an additional savings mechanism. Now, however, via KiwiSaver, rather than those savings for the most part remaining relatively secure in standard bank accounts, they are being invested in the financial market.

When looking at asset accumulation, despite adding a vague statement of caution when considering the findings, the report stated "KiwiSaver had not been successful in improving the accumulation of net wealth of its members" (p.4), adding "there was no evidence of a positive effect on net wealth accumulation from KiwiSaver for any subgroup when classified by gender, homeownership or income" (p.4). Although this part of the findings is framed by a caution, the findings firmly suggest that the financial marketplace is not more capable of improving net worth accumulation than traditional savings methods. Certainly, the degree of success with regard to asset accumulation KiwiSaver might have experienced by the time of the report would have been impacted by the market's recovery from the GFC. However, fluctuations in asset accumulation are one of the risks inherent in the structure of KiwiSaver funds. Furthermore, the report proved erroneous the expectation that KiwiSaver would support local capital markets with an increase in funds being channelled its way, noting "a significant portion of KiwiSaver funds are invested overseas… the impact on the capital markets remains small" (p.4). Yet despite these findings and the lessons learned from the global financial crisis, KiwiSaver remains relatively unchanged.

KiwiSaver Infrastructure and Supporting Institutions

As touched on in the previous section, a number of entities support or oversee various aspects of KiwiSaver. KiwiSaver funds go from the individual to the Inland Revenue Department (IRD), which then passes them on to the individual's chosen or assigned scheme provider. The IRD also allocates applicable Government contributions and oversees any applications for opting out or suspending savings. Regulation and enforcement of laws related to the provision of KiwiSaver schemes is managed by the Financial Markets Authority (FMA), which is responsible for the regulation of New Zealand's financial sector. Most KiwiSaver investors will get information about their KiwiSaver funds directly from their KiwiSaver provider. Depending on the scheme, investors will be able to check their KiwiSaver balances via their provider and that provider will also supply them with annual and quarterly reports. Upon retirement, individuals are able to withdraw their KiwiSaver funds directly from their scheme provider tax-free.

Entities that offer advice about KiwiSaver range from the scheme providers themselves to financial advisers, journalists, independent bloggers, and charities like Mindful Money; however, the primary avenue for government supported advice on KiwiSaver, budgeting and investing is Sorted.org.nz. Launched six years before the implementation of KiwiSaver, Sorted provides New Zealanders "free, impartial and independent financial information and resources" (Commission for Financial Capability, n.d.c, para.1). The Sorted website also includes a KiwiSaver fee calculator, a fund finder and general information aimed at helping people "maximise their KiwiSaver" (para.2). Sorted is managed by the Commission for Financial Capability, which falls into the portfolio of the Minister of Commerce and Consumer Affairs, housed within the Ministry of Business, Innovation and Employment. Figure 1 provides an overview of KiwiSaver's infrastructure, with the government-linked entities in blue and the industry entities in green.

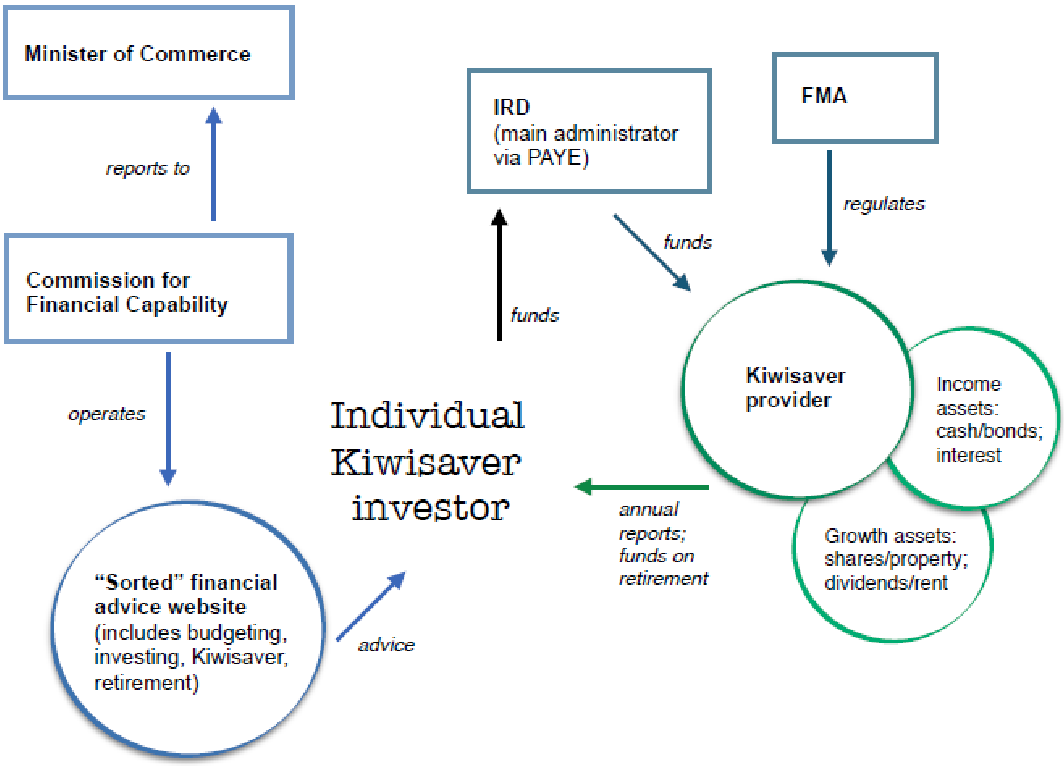

Figure 1. KiwiSaver infrastructure

As well as providing KiwiSaver advice via Sorted, the Commission for Financial Capability plays a pivotal role in the promotion of financial literacy in New Zealand. Establishment of the Commission began with the creation of the position of Retirement Commissioner in 1993. As indicated by the title, the Retirement Commissioner was tasked with developing, promoting, and reporting on interests and issues related to retirement income. The Commissioner's original remit regarding education was limited to the promotion of education about retirement issues (An Accord on Retirement Income Policies, 1993). However, the ensuing years saw the Commission's educational interests develop to such an extent that by 2011, the Retirement Commission changed its name to the Commission for Financial Literacy and Retirement Income. This name change coincided with responsibility for the Commission being shifted from the Ministry of Social Development, which provides the public with social services and government with advice on social policy, to the then Ministry of Economic Development (now called the Ministry of Business, Innovation and Employment), which plays "a central role in shaping and delivering a strong economy by delivering policy, services, advice and regulation to support business growth" (New Zealand Government, n.d., para.1). Diana Crossan, the Retirement Commissioner at the time stated, "the new name better reflects the Commission's twin goals of providing impartial advice on retirement income policy and improving the financial wellbeing of all New Zealanders throughout life and in retirement" (Scoop, 2011, para.3).

In December 2014, the Commission for Financial Literacy and Retirement Income underwent another name change to the Commission for Financial Capability. Diane Maxwell, who replaced Diana Crossan as Retirement Commissioner in June 2013, said of the name change "it recognised that for many the term literacy suggests a dauntingly academic approach, whereas capability is as much about what you 'can do' as what you know" (2015, p.2). From the Commission's website, financial capability means "everyone getting ahead financially… [t]hat includes everyone saving and investing, managing debt to their advantage, having a current financial plan, being prepared for the unexpected, learning about financial capability and being comfortable talking about money" (Commission for Financial Capability, n.d.d, para.4). However, other than being more detailed and specific, it is not clear how this places an equal emphasis on what individuals are able to do, more so than the previous financial literacy definition of "the ability to make informed judgements and to take effective decisions regarding the use and management of money" (ANZ & Retirement Commission, 2009, p.3). Each of the elements in the financial capability definition is arguably a step in the literacy definition.

While definitions of financial capability are as varied as those of financial literacy, they tend to be broader than a focus on what people know and can do. Following capability theory, the functioning of financial capability should entail "a combination of an individual's ability to act, along with the individual's opportunity to act" (Caplan, Sherraden, & Bae, 2018, p.153). In breaking down what this means for financial literacy, Caplan, Sherraden and Bae note that capability encompasses both the social and individual. They assert it "captures the nature of the interaction between individual and social structure" (2018, p.154), where social structure includes "access to financial services, community supports, and social and economic development policies" (p.154). For J. Michael Collins, financial capability "includes financial literacy, but adds access to financial services, behavioural factors, social influences, and emotions" (2013, p.1). What these outlines of financial capability have in common is their folding in of contextual detail associated with the individual and their environment.

Despite some aspects of these outlines of financial capability being missing from the Commission's definition of financial capability and little change in official statements of the Commission's responsibilities other than the word 'literacy' being replaced by 'capability,' the change in name appears to be more than a rebranding exercise. 2014 saw the Commission establishing "a cross-government financial capability network with the ministries of education, health, social development, and business, innovation and enterprise, as well as the Inland Revenue Department, the Financial Markets Authority, Treasury, the Reserve Bank, the Commerce Commission and more" (Dale, n.d., para.7), which could be seen as a move to include social structure in the development of financial capability.

However, tensions exist in how the Commission frames financial capability and the role of government. These tensions speak to the difficult position the Commission is in as a mouthpiece for and implementor of government-supported initiatives, a policy advisor, a market collaborator, and an educator, particularly post rebranding to focus on capability rather than literacy. An example of one area of tension can be seen in the Commission's very careful framing of financial capability that, despite the inclusion of some social structure elements, maintains a tight focus on the individual. Figure 2 on the following page, taken from the Commission's website next to the heading "What influences our decisions?" (Commission for Financial Capability, n.d.d), illustrates this. In the section of the illustration representing how government policies influence our decisions, the heading is "How we choose", rather than "What choices we have" or "What policies enable", either of which surely more accurately represents how government policies impact our financial choices. Regarding our financial situations, the process of choosing in relation to government policies is arguably of lesser consequence than what choices are available to us.

While KiwiSaver providers offer advice regarding which type of fund best suits the investor's stage in life and preferences, the default providers are also expected to address their members' financial literacy, albeit with the primary aim of encouraging those default members to actively choose a fund (FMA, 2017). In addition to this, some in the industry look to acknowledge elements of the importance of financial literacy by aligning themselves with the Plain Language/ Plain English movement. Consistent in the stated objectives of Plain English initiatives is the desire for public documents in particular to be written clearly and concisely without unnecessary technical language and in a manner that the target audience finds accessible and easy to understand (Watson-Brown, 2009; Campbell, 1999). Gareth Morgan Investments – rebranded as Kiwi Wealth in 2017 – for example, made a point of announcing their intention to follow plain language protocols within the first report that adhered to plain language, heading its title page with "Finally An Annual Report Written For You" (2011, p.1). Given that more than any other investment provider, KiwiSaver providers are more likely to have a significant portion of investors who are unfamiliar with investment language and processes, adherence to Plain English protocols seems wise; however, as will be explored in the case study, language accessibility is only one part of enabling informed choices. If the information given is limited, then regardless of how well it is written, the level to which the audience becomes informed will also be limited.

Although the Sorted website is New Zealand's primary site for supporting financial education, there are other government and non-government affiliated entities offering New Zealanders help with their financial education. The SuperSeniors website, aimed at those

Figure 2. Financial Capability: What influences our decisions? (Source: Commission for Financial Capability, n.d.d).

aged 65 and over, offers a range of information on topics from health and wellbeing to finance and planning. It also provides detailed resources on Superannuation. Despite a strong focus on topics connected to finances, unlike the Sorted site, the SuperSeniors site is run by the Office for Seniors, which is under the Ministry for Social Development. The Massey

Financial Education and Research Centre is a financial education provider that consults with the Commission for Financial Capability, but otherwise has no government affiliation. A joint initiative with Westpac, the Centre "is part of the OECD's International Network on Financial Education" (Massey Financial Education and Research Centre, n.d., para.2) and has ex Retirement Commissioner Diana Crossan on its board. Reflecting its location within a university, the Centre offers short courses on different aspects of financial education. Visa is another significant entity within New Zealand offering financial education. Unlike Massey's Financial Education Centre, Visa's Practical Money Skills site provides resources for individuals and educators alike, providing syllabi for pre-school financial education through to resources for those close to retirement.

Creating a Public: Consumer Voice and KiwiSaver Investor Networks

In New Zealand, prior to both the global financial crisis (GFC) and the implementation of KiwiSaver, public awareness of the workings of finance companies had been heightened due to a series of finance company collapses that began in 2006. National Finance 2000 was the first company to collapse, owing more than NZ$20 million to over 2000 investors (FMA, 17 May 2019). Their fall started a run of near-daily news headlines dominated by the happenings within the finance sector, and before the 5th of the final tally of 51 New Zealand finance companies had collapsed, finance-related news had solidified its presence in the daily headlines with the onset of the GFC. During this time, journalists whose work had previously remained largely within the realms of the finance or business sections of their news outlets found their work dominating the front pages and leading the televised news hours. If the New Zealand public following this period were categorised as cautious or cynical in their view of the finance industry, one look at the headlines making up the wide press coverage of the time would provide fair reason: "National Finance collapse 'highlights flaws'" (Bennet, 2006), "Capital+ Merchant collapses, $167m owed" (McManus, 2009), "Bridgecorp investigation: The buck stops where?" (Scherer, 2007). This was the financial climate in New Zealand when KiwiSaver was introduced.

With its broad investor base, KiwiSaver solidified public interest in markets even further and opened the financial market to a wider range of channels for public discourse and debate than had previously been seen. Included in the discourse are the voices of commentators who are relatively embedded within the financial sector, such as business/financial journalists Rob Stock, Anusha Bradley, Brian Fallow, Brian Gaynor, Bernard Hickey, and Mary Holm, and economists/ media commentators Shamubeel Eaqub and Cameron Bagrie. Along with heightened awareness of the work of these journalists and media commentators, the intervening years since the first finance company collapse also saw increased attention paid to public intellectuals discussing issues of finance and economics. These include Brian Easton, independent scholar and, until 2014, economics columnist for *The Listener,* one of New Zealand's top selling magazines; Susan St John, economist, Associate Professor at the University of Auckland, founding member of the Child Poverty Action Group and regular contributor to multiple news outlets and online magazines like The Spinoff and The Daily Blog; Max Rashbrooke, a journalist, academic at Victoria University's Institute for Governance and Policy Studies, and author of a number of books focused on inequality and democracy; and Jane Kelsey, Professor of Law at the University of Auckland, critical commentator, and author of a number of books including best-sellers on neoliberalism within New Zealand. In conjunction with the financial company collapses, the GFC, the implementation of KiwiSaver, and reports and commentary by journalists and media commentators, these public intellectuals helped give new prominence to a public discourse more willing to critique the financial sector.

Jane Kelsey's book *The FIRE Economy* (2015) provides an example of one such critique that contains a segment that draws attention to the intricacies of KiwiSaver and points out their connection to neoliberalism. Within this segment, Kelsey outlines KiwiSaver's development and role in New Zealand but also highlights the findings from a Treasury report that suggest enrolment in KiwiSaver had not at that point equated to individual increases in net wealth or subsequently improved the final retirement incomes of individuals enrolled in KiwiSaver. Yet, in an indication of the type of windfall KiwiSaver represents, Kelsey states immediately after making this point, "the funds management industry has certainly benefited from a lucrative new business opportunity, claiming more than $220 million in total fees and expenses for the financial year to June 2014" (2015, p.115). To underscore the relevance of the connection between KiwiSaver and the financial sector, and perhaps providing a real-life example of Duménil and Lévy's (2005) claim regarding the close connection between neoliberalism and the hegemony of finance, Kelsey reminds her reader of the neoliberal climate within which KiwiSaver is positioned, noting that KiwiSaver's strong reliance on the financial sector means that "KiwiSaver funds are at risk from bad investment decisions, the failure of funds or fund managers, or a broader financial collapse" (2015, p.116). Furthermore, rather than creating a regulatory environment that might curtail some of these risks, Kelsey adds, “the regulation of the scheme has always been light-handed” (2015, p.116).

Indeed, solidifying Harvey’s (2005) assertion that the neoliberal state looks to enact minimal intervention in markets other than those interventions that enable them to freely operate, Kelsey points out that very little regarding the regulation of KiwiSaver has changed, despite the then Retirement Commissioner “call[ing] for a stronger consumer voice on KiwiSaver issues” (2015, p.116) and the then Chief Executive of New Zealand’s Financial Markets Authority “argu[ing] that KiwiSaver should be subject to prudential supervision” (2015, p.116). As a product of a neoliberal drive to shift risk from the shoulders of government to those of the individual, operating in a system informed by neoliberal aversion to market regulation, Kelsey shows how the KiwiSaver scheme offers KiwiSaver providers relatively unfettered management of large numbers of New Zealanders’ savings without requiring any guarantee of returns, where the increased risk from light regulation could lead to many New Zealanders losing their savings.

Response to Kelsey’s book from individual bloggers, journalists, commentators, and fellow academics and the like indicated an appetite for this type of critique and a sense of solidarity with the views presented. Morgan Godfrey, on Stuff, stated, “Kelsey is offering an optimistic call to action” (2015, para.6); on IdeaLog, a blog site for entrepreneurs, Mike Hutcheson said of the book “[it] needs to be read, absorbed and acted on by anyone with an ounce of economic common sense” (2015, para.8); and in an academic journal, Grant Duncan from Massey University’s Business School, stated, “this book is one important contribution… towards changing popular and political beliefs and goals” (2015, p.177). These represent just a handful of the positive reviews the book received. Of course, Kelsey’s book was not the first piece of writing to point out problems with adhering to a neoliberal political agenda, but it was part of renewed public criticism of the financial and social risks of neoliberalism’s autonomous market model post-GFC and added to the growing number of works drawing attention to and gradually broadening public understanding of the operation and outcomes of neoliberalism. As *The Routledge Handbook of Critical Finance Studies* (Borch & Wosnitzer 2021) attests, the GFC spurred a burgeoning interest in critically engaging with the financial market not just within New Zealand, but internationally.

KiwiSaver represents the most significant conduit to the financial markets New Zealand has ever seen. Overnight it made and continues to make investors of a significant portion of the

New Zealand population. KiwiSaver is more than a savings tool. It is a move away from a socialist model of retirement provision to a neoliberal one: the market provides the service, individuals have their own individual funds, and the government is divested of responsibility. In the shift toward a more financialised society, the implementation of KiwiSaver was a Rubicon-crossing move.

By making investors of a large percentage of the population and providing the financial market with on-going access to significant amounts of previously untapped funds, KiwiSaver may have been one of the most significant developments in the act of embedding the interests of the financial marketplace into New Zealand society; however, it also opened the market up to the desires, expectations and scrutiny of large numbers of New Zealanders unused to investment norms, some not inclined to solely seek investments providing the largest profits or profit by any legal means. KiwiSaver may be a powerful tool in embedding financialisation, but in making investors of such a large portion of the New Zealand public, it may also be a significant tool in the democratisation of the financial market. Indeed, the drive for financial literacy framed as an individual responsibility and perhaps the broader neoliberal and reflexively modern focus on individualism, responsibilisation, and risk may end up bringing the types of market reforms advocates of neoliberal economic theories have long been railing against. The large numbers of ‘average’ New Zealand investors, coupled with the focus on individual responsibilities, risks and the need to be literate and informed have – as will be seen in the KiwiSaver munitions case study in part II of this thesis – also opened the market up to closer scrutiny by those very same responsible, risk-aware individuals.

In 2006, Twitter was founded and Facebook, which was originally launched in 2004 but to a limited membership, was made available to anyone over 13 with a valid email address. The following year electronics company LG unveiled the first touchscreen phone with the capacity for full internet connectivity, closely followed by the launch of Apple’s first iPhone. The development of social networks coupled with technological advances has enabled people to connect with each other online and share information and ideas with increasing ease. They have enabled the rise of new discursive sites where the rules of construction and evaluation do not place limits on who may contribute based on social standing, education, qualification, occupation, or any of the like. The primary limitation is access – or rather lack thereof – to the technologies that enable connection to these sites.

Following the ideas of Jäger (1999), who built on Foucault's discussions on discourse, these social media sites enable knowledge to flow and be stored and, as such, have the ability to consolidate understanding. By functioning as sites through which discourse can flow, constructed and evaluated by a comparatively wide representation of society, they also have the capacity to become sites where individuals are able to consolidate action, shape society, and exercise power. Some have described these sites as a new public sphere, due to their ease of access and comparative lack of hierarchy in relation to who has the ability to construct and evaluate (Datts, 2020); others note their capacity to enable more inclusive debates where gatekeepers in more traditional discourse channels are bypassed, allowing previously marginalised concerns to be voiced (De Blasio, Kneuer, Schünemann, & Sorice, 2020). All point to social media's power to change the democratic landscape. This and KiwiSaver's potential to democratise the financial market is examined in more detail via a case study in the second part of this thesis.

This transitional chapter has mapped out the agents and interests behind the development of KiwiSaver, KiwiSaver's connections to the push for financial literacy, and the potential KiwiSaver has to bring about the largest democratisation of finance in New Zealand's history. 'Democratisation' as discussed in this chapter has two key senses: broadening the investor base, and hence the interest in financial markets, and ensuring that people outside of the professional finance sector have a voice and sufficient understanding of – and access to – systems to scrutinise the markets effectively. The mechanisms of KiwiSaver encourage investors to have awareness and personal concern for their scheme and, by default, the financial market it is in. In the case study that follows, public debate regarding KiwiSaver munitions investment in 2016 is analyzed with the aim to gather evidence to answer the question: "how does KiwiSaver effect a new type of economic subjectivity?"

Part II: Case Study: Public Responses to the KiwiSaver Munitions Investment Controversy

Chapter 5: Raising the Alarm: Journalism on Munitions Investment

In 2016, a Twitter storm erupted in New Zealand, triggered by news reports about the possibility of KiwiSaver funds being invested in companies that manufactured cluster bombs and land mines. This event provided an opportunity to examine real-time discussions surrounding KiwiSaver both in the media and on a social media platform. What was immediately interesting was that the discussions showcased a variety of views regarding many of the themes that had come to the fore in my research. In their specific focus on KiwiSaver, they provided a spontaneous moment around which public views regarding the role of KiwiSaver, KiwiSaver providers, government and the individual were voiced. The Twitter storm is an opportunity to take a very granular look not just at how the themes I have traced from the earliest OECD documents, through to NZ government documents were played out in the interface between the media and the public, but also at how the public was responding to the different ways the different actors (including the public themselves) were being framed.

The following case study will break down key pieces of media coverage in the KiwiSaver munitions investment discussion, discuss the relevance of Twitter as a source for primary texts and examine the subsequent Twitter discussions that stemmed from media reports on KiwiSaver munitions investments.

Both the media texts regarding the KiwiSaver investments in munitions and the response on Twitter are analysed as they represent the more personal, public end of the intertextual discussion regarding defined contribution plans and financial literacy I have traced from the OECD documents. The media documents are important to this research because, as Schrøder (2012) highlights in his discussion about the development and importance of content analysis to media studies, the concerns of the public are both represented and influenced by the media. In the case of the KiwiSaver munitions uproar, it seems that the trigger for the ensuing Twitter storm was the news media providing a certain type of framing of information that had been published earlier, yet at the time had caused barely even a ripple of discontent.

As has been discussed in the literature review and earlier "analysis" discussion, and will be discussed more extensively in the later section outlining my methodology for this case study, I will follow a blend of rhetorical analysis and the discourse-historical CDA approach, looking for continuations of themes already seen and any new themes that might be arising. Ultimately the tweets provide the possibility of an alternative framing of the story of financial literacy and defined contribution plans as offered by the OECD. They insert the voice of the individual in a narrative where that voice was missing. Where the OECD documents present a view of markets and governments that suggests a certain element of timelessness and rigidity in their function and purpose, the various points of view displayed in the Twitter exchanges highlight tensions, uncertainties, and a level of reluctance to take on all that is assumed of the financially literate individual. In the multitude of voices sharing a spectrum of views, they inject the possibilities for change connected to the types of democratic and civic demands being made. These are not individuals uniformly accepting their role as financially responsible beings who require a certain level of financial literacy to safeguard their assets and ensure the efficient and safe running of the financial marketplace; this is a cacophony of voices highlighting a variety of viewpoints spread along the spectrum from aligning with elements of OECD framing to repudiating them. These are not individuals who are uniformly content to be made responsible for decisions made in the face of unequal information distribution. Through their discussions and utterances, weaknesses in elements of the established financial literacy framework are highlighted and explored. By worrying these weak points, the discussions show that the claims made on behalf of financial literacy by the OECD and those informing and informed by it are too broad and simplistic and do not take into account issues surrounding market opacity or the variety of interests, situations and concerns held by a diverse population.

The Initial Media Coverage

On August 18, 2016, news creating a flurry of interest in KiwiSaver funds being invested in companies manufacturing cluster bombs and land mines first broke with Radio New Zealand (RNZ) journalist Anusha Bradley's report revealing that five of the then nine default KiwiSaver providers invested in Northrop Grumman, an anti-personnel mine manufacturer, and Fluor Corp, Honeywell International and Lockheed Martin, manufacturers of military weapons, including components for nuclear weapons (Bradley, 2016, August 18). Later that same day, reports on the same topic came out in other news agencies, including the *New Zealand Herald* and *Stuff.* Over the next few days, the reports continued to come, with further detail of where investments were going and comments from key politicians, financial analysts, KiwiSaver fund spokespeople, and KiwiSaver investors.

Bradley's article was not the first to break the story of KiwiSaver funds not being invested responsibly. The previous year, Sustainable.org.nz posted an article revealing the investment of KiwiSaver funds in mining and fossil-fuel-intensive industries (Investing responsibly: The basics, 2015, February 24). More significantly, journalist Rob Stock wrote an article printed in the business section of *Stuff* discussing KiwiSaver investments in companies that the NZ Super Fund had placed on its exclusion list for not meeting the necessary requirements under the Super Fund's responsible investment framework (Stock, 2015, August 23). When considering what are viewed as the foundational factors dictating news value – "frequency, threshold, unambiguity, meaningfulness, consonance, unexpectedness, continuity, composition… [and] reference to elite nations, elite people, persons and something negative" (Bednarek & Caple, 2017, p.28) – the Stock article clearly met more than one of the criteria. As an article about questionable KiwiSaver fund investments, it certainly was meaningful, presented something that the KiwiSaver-fund investing public might find unexpected, and referenced something negative, to name just the obvious news values it met. However, despite meeting these news values and being from a mainstream outlet, the Stock article did not achieve the wider media that the Bradley article did.

The greater attention gained by the Bradley article could have arguably been due to the fact that, whilst the Stock article was placed in the Business section of *Stuff* Bradley's article was positioned in the digital equivalent of the front page of the RNZ site. Furthermore, the Bradley article was also organised around the news factor of personification, focusing on the "human face" (Boukes & Vliegenthart, 2017, p.282) of the munitions investments. Where Stock could be seen to be considering commercial considerations, Bradley's article personalized the news, focusing on and highlighting the elements more likely to be of interest to the outlet's demographic and thus making an arguably intricate and specialist news item more accessible, a tactic Boukes and Vliegenthart (2017) note is commonly used by popular news outlets. Reflective of the personification and negative focus in Bradley's article, munitions investment was framed as something investors had done to them. However, Stock's article included the tacit understanding that if people had concerns about where investments were going, according to the laws governing KiwiSaver provision, they should have been able to easily check. Certainly, with the KiwiSaver Periodic Disclosure Regulations 2013 – amongst other things – requiring KiwiSaver investment funds to provide annual disclosure statements including "a complete list of individual assets of the KiwiSaver fund and related underlying funds" (p.21), information regarding where funds have been invested has been required to be publicly available as addendums to KiwiSaver annual reports from the end of the 2014 financial year.

The differences in emphasis in the two articles are evident in the way they framed their findings. Certainly, both headlines were similar: "KiwiSaver, cluster bombs, mines and nukes" (Stock, 2015, August 23), and "KiwiSavers invest in cluster bomb, land mine manufacturers" (Bradley, 2016, August 18). However, the opening sentences were very different and provided a clear indication of the different foci of the articles. Stock's started by saying "The NZ Super Fund pays MSCI ESG Research to examine stockmarket-listed companies, and excluded stocks based on its reports" (2015, August 23, para.1). In an article about KiwiSaver investments, it is odd that Stock started with a focus on the NZ Super Fund; however, comparisons with the SuperFund appear to be a key point. Via these comparisons, the potential for KiwiSaver investments to fund entities with dubious ethical practices – entities the Super Fund was screening out – were highlighted. The article discussed how KiwiSaver schemes do not have the same level of concern regarding responsible investment as the Super Fund and how some schemes, at the time of writing, were investing in companies on the Super Fund's exclusion list.

Stock's article was heavy with comparison between practices of the Super Fund in ensuring it adhered to its responsible investment framework and KiwiSaver scheme investment practices. Midway through the article, after discussing the reasons specific companies were on the Super Fund's exclusion list, Stock noted that three KiwiSaver scheme providers showed investments in these companies in their end of March 2015 disclosure statements (para. 8). Although he then went on to temper this revelation by noting that the funds invested were only "a small proportion of the funds' total investments" (para. 9), what followed was a detailed elaboration of why each entity was on the exclusion list and why the KiwiSaver schemes had invested in them. Indeed, the bulk of the article from this point swung from specific reasons the Super Fund's external research group had excluded a company to justifications from the KiwiSaver providers for why they had investments in those companies. This comparison ended with a statement from an academic who had called for Government to require KiwiSaver default funds to have policies similar to the Super Fund's regarding socially responsible investment. The final statement, however, focused on the profitability of investments in "defence stocks" (para. 24).

Despite the strong focus on the activities of the entities excluded by the Super Fund yet invested in by KiwiSaver providers, Stock did not discuss the New Zealand policies and regulations that informed the Super Fund exclusion list and, therefore, could potentially lead to questions regarding the legality of KiwiSaver investments in entities on the list. More precisely, he did not discuss how the Super Fund's Principles of Responsible Investment are in part informed by the Cluster Munitions Prohibitions Act 2009 (Government Superannuation Fund Authority, n.d.), which makes it an offence to invest funds in companies using them for the development or production of cluster munitions. It is also in part informed by the Treaty on Non-Proliferation of Nuclear Weapons and the Nuclear Free Zone, Disarmament and Arms Control Act 1987 (Government Superannuation Fund Authority, n.d.), with which investment in entities used to develop or produce nuclear weapons would be inconsistent. Finally, it is also informed by the (Ottawa) Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines, 1997 (Government Superannuation Fund Authority, n.d.), to which New Zealand is a party. Investment in entities undertaking the activities outlined in this convention would contravene New Zealand's agreement with it.

While Stock took pains to point out his findings that highlighted the complexities around justification for exclusion, at no point did the discussion widen to what this meant for the individual KiwiSaver investor. Instead, statements from providers asserting that they had nothing to be concerned about regarding where they were placing their investments were juxtaposed against statements from others contradicting these claims. Interestingly, perhaps in an effort to appear impartial, Stock's presentation of these contradicting claims was always done without modifiers or signal phrases. For example, the sentence

> BNZ said Russell Investments had assured it that General Dynamics was not involved in the manufacture of cluster munitions, and ANZ said: "Our managers have advised us that there are not red flags for cluster munitions or landmines" for Northrop Grumman. (Stock, 2015, August 23, para. 13)

is immediately followed by the sentence "Michael Salvatico from MSCI ESG Research, which has around 150 ESG analysts around the world, said Northrup Grumman was involved in the development of the Spider anti-personnel munitions system …, which was remotely controlled by an operator" (Stock, 2015, August 23, para. 14). After a number of these signpost/modifier-less juxtapositions Stock simply stated "it seems there is debate over what is a cluster munition" (2015, August 23, para. 19). In Stock's discussion the individual KiwiSaver investor is barely a shadow on the landscape; it is the KiwiSaver scheme provider that is negotiating difficult terrain and the idea that they might be turning a blind eye to potentially illegal or at least morally questionable investments is alluded to in the juxtaposed comments, but never overtly stated.

By providing key details of the Super Fund's policies and practices regarding responsible investment, Stock was drawing into question KiwiSaver scheme practices regarding responsible investment, albeit without making it a clearly framed question of legality. However, in leading with a statement outlining the Super Fund's use of an external research group to ensure none of its investments go to companies on its exclusion list, Stock immediately implied that meeting responsible investment principles is complicated: complicated enough to require external help. Indeed, when discussing the corporations defending their KiwiSaver schemes' investments in companies on the Super Fund exclusion list, Stock revealed that those schemes are themselves managed externally and, via specific detail regarding the particulars of the technology that put one of the excluded companies on the exclusion list, Stock showed that the decisions made by those managers regarding responsible investment are not necessarily straightforward.

Bradley's article took on the same key points but framed them differently. Her focus can be seen clearly from the opening sentence: "Hundreds of thousands of KiwiSaver members in government-appointed default schemes may be unknowingly investing in companies making cluster bombs and anti-personnel mines" (2016, August 18, para.1). Right away, the focus is on the individual member. They are "unknowingly investing", implying that there is information they are not being given by those default KiwiSaver scheme providers. Although the article did note the requirement for KiwiSaver providers to make available information regarding where investments are going, it was not until the 18th paragraph that the article mentioned KiwiSaver disclosure regulations, quoting from an interview with then Commerce Minister Paul Goldsmith, stating: "Mr Goldsmith said regulations required KiwiSaver providers to disclose the investments they have made and annual statements would also include a full list" (Bradley, 2016, 18 August, para.18). Mr Goldsmith was then quoted as saying “New Zealanders with KiwiSaver accounts have a choice about which scheme to join and can find out what that scheme invests in” (Bradley, 2016, 18 August, para.19). However, the article did not then go into detail outlining what the disclosure regulations entail, or how readily available information is regarding where, exactly, investments were being made. This is significant as, as will be discussed further on, the article subtly frames the New Zealand public as having been duped and KiwiSaver providers and, by default, the government, as having been complicit in that deception. The idea that investors are provided information regarding where funds go and are able to choose not to invest with funds they find morally or ethically objectionable does not fit with this framing. Here, KiwiSaver providers and the government are framed as responsible for ensuring that funds are morally and ethically acceptable and the individual is framed as simply on the receiving end of those safe-guarded fund management decisions. Indeed, given that KiwiSaver providers are required to disclose where all funds are distributed in their annual reports, the opening focus in Bradley’s article stands out as misleading. If hundreds of thousands of KiwiSaver investors are unknowing, it is because either they have not read the additional information in their annual reports, or they have read it and have been unaware of the activities undertaken by some of the entities on the list. Had the opening sentence of Bradley’s article read “hundreds of thousands of KiwiSaver members in government-appointed default schemes, without reading their provider’s annual statements, may be unknowingly investing in companies making cluster bombs”, the story would be more clearly framed as a warning against financial illiteracy, or, perhaps more precisely, against investor financial indifference. However, this article is not focused on the individual’s ability or inability to navigate financial information provided by their KiwiSaver scheme. Indeed, as further examination of the availability of information regarding where schemes invest bears out, there is a case to be made that the process to gain that information is full of enough hurdles to make it a disclosure requirement that is essentially not being met. However, this is a path Bradley does not go down in the article.

Where Stock’s article mentioned government only briefly (in relation to an academic’s call for government to require social responsibility in its default fund investments), in Bradley’s article, government is placed in prime position, implying that it had failed in its duty of care for New Zealand citizens. The KiwiSaver members who were “unknowingly investing” (para.1) were not just in default schemes; they were in “government-appointed default schemes” (para.1). Those KiwiSaver providers were not just investing in companies “making cluster bombs and anti-personnel mines” (para.1); they were able to do so despite investment in those companies “being banned by government agencies such as the New Zealand superannuation Fund and ACC” (para.2). Indeed, in stating “People who sign up to KiwiSaver but do not pick a scheme to enrol in are automatically allocated to one of the nine providers hand-picked by the government” (para.6), a repetition of a point in the opening sentence, Bradley implicated the government. The phrase “hand-picked” (para.6) distinctly shortens the distance between the government and the schemes it has chosen. It implies a considered and thorough approach and, in relation to the munitions discussion, positions the government as having almost a more personal part to play in ensuring these default schemes are worthy of the seal of approval they are being given, justifying the scrutiny the article puts them under. Further solidifying the importance of government in the discussion of KiwiSaver investments, Bradley's article also featured responses from the Green Party, Commerce Minister, and the then Prime Minister.

Within Bradley's framing of the unwitting individual KiwiSaver default-fund munitions investor was the broader point that, as default providers, these government-chosen KiwiSaver schemes should be under the same regulations as other government agencies. Bradley highlighted the importance of this by noting that "more than 50,000 people are enrolled in default schemes" (para.8) and quoting Jonathan Beale, the ASB general manager of wealth, who stated "people are still wondering 'who's my provider and what fund am I in?' rather than the detail of where[their] fund was invested" (para.30). The KiwiSaver investor primarily represented in Bradley's article is one who finds the process of choosing a KiwiSaver provider perhaps too daunting, but who, from the framing of the article, is deemed to be interested in where funds ultimately go, or, at least, to have a clear idea of where they do not want funds to go. Where Stock's article, which highlighted complexities involved in deciding whether a potential investment fund met the necessary legal requirements, left the individual investor unmentioned and created no visible stir on social media, Bradley's article, with its focus very much on the unassuming individual, the complicit government, and the unethical KiwiSaver provider, gained immediate purchase.

Presented as unassuming, yet legally provided with information regarding where funds are invested, Bradley's article perhaps unwittingly positioned a large portion of KiwiSaver members as what the OECD would define as financially illiterate: too overwhelmed to choose a provider and read or decipher detail within an annual report. Unlike much of the OECD writing regarding the financially illiterate, however, Bradley's financially illiterate were not presented as a burden to themselves or society – those who through inept choices have the potential to bring down markets. Rather, they were presented as those who may be unable to navigate within the financial system, but who, if properly enabled, would make specific choices, guided by their sense of social responsibility.

At this point, it seems pertinent to consider the impact of the intended audience on these pieces of writing. Stock's article appeared in the business section of *Stuff*. Online this is a section you have to scroll to, buried in almost Google-like 'second-page death' and easily passed over by those not interested in business news. While business articles certainly can and have appeared as part of the main news, it is not too much of a stretch to assume this is only when they are deemed of interest to a broader readership. Articles that appear only in the business section clearly have a business audience in mind; main news articles tend to be those that are sensational with a greater likelihood of engaging broader audiences. Bradley's article, by comparison, appeared as part of the main news headlines on the RNZ website, presumably also making it to the main news on the RNZ broadcast itself. Regardless of difference in readership numbers for both news sites, in accordance with its appearance on the main news section of the website, the audience for Bradley's article was certainly broader than Stock's. Where Stock's article was focused on those with working connections to KiwiSaver fund management, Bradley's was primarily on those with investment connections to KiwiSaver fund management, the "hundreds of thousands of KiwiSaver members" (Bradley, 2016, 18 August, para.1) she noted in her opening sentence. With this in mind, Bradley's framing of the possibly (unwittingly) financially illiterate KiwiSaver investor as also socially responsible is understandable; that is her core audience and it is unlikely they would take well to being positioned as both illiterate and uncaring.

In Bradley's framing, the position of government is presented as one that holds some responsibility for how KiwiSaver is run. The article highlights its role as the implementer of KiwiSaver and the entity that chooses which KiwiSaver fund providers are assigned default provider status, and this, in turn, is shown to make it more directly responsible for those who join KiwiSaver default funds and more broadly responsible for KiwiSaver investors in general. Because of this, in the uproar about investment in munitions, the role of government is pinpointed as one that needs to protect the assumed preferences for socially responsible investment and apply existing regulations to KiwiSaver default schemes. From this perspective, without regulation, the providers (and, by extension, the financial market) would continue to operate outside the realms of social responsibility. What follows is that by safeguarding the ethical concerns of the financially illiterate who are encouraged to invest in the market via KiwiSaver, the government regulation would, therefore, be protecting society.

In both Stock and Bradley's articles, the act of ensuring socially responsible investments is shown to be a complicated one that requires extra effort, an effort that, in Stock's article, is framed as coming from the KiwiSaver scheme provider that decides for itself the level of social responsibility it wants to take. In Bradley's article, the framing is different, with the extra effort needing to first come from the government, protecting the unwary investor against unethical investments. However, for both articles, the financial marketplace was presented as one that, in a natural state, runs unimpeded and unconcerned by socially responsible choices.

In a later article by Stock, "KiwiSaver and ethical investing" (Stock, 2015, August 26), still published almost a year before Bradley's catalytic article, he once again set up a comparison with Super Fund practices; however, the focus this time was on the intricacies of socially responsible investing. Stock noted, "the realities of capitalism mean even ethical funds find it hard to stamp out all traces of the industries they want to avoid" (para.20). To illustrate his point, he stated that funds that exclude companies profiting from pornography, for example, will often have deposits or shares in banks that almost certainly would have those involved in the pornography industry as borrowers or account holders (para.21). Stock also pointed out that what one person might consider an ethical investment, another might not and the trick is for the individual to research different KiwiSaver providers to get the best fit, according to personal beliefs (Stock, 2015, August 26). By detailing the difficulties involved in fund providers completely avoiding investments with any financial connection to certain industries and by outlining the subjectivity of ethical investing, Stock laid the groundwork for the article to imply that the responsibility of true responsible/ ethical investment lies with the individual.

Where in his earlier article Stock very much positioned the fund providers as having to negotiate difficult terrain when deciding where to place funds, in this article the responsibility of the decision-making process is very much on the individual. In noting that even fund managers that had signed up to the United Nations Principles of Responsible Investment were not prevented from holding funds in any ethically dubious company, and by framing the availability of true ethical investment providers as something dictated by the laws of supply-and-demand, Stock was indicating that, essentially, if individuals want to invest ethically, they must take an active role in their investments. Indeed, Stock made the statement, “care needs to be taken when reading and interpreting the ethical claims of companies” (2015, August 26, para.24). This seems like a lot to expect of the average KiwiSaver investor, given that each fund tends to have investments in hundreds of entities. Certainly, the statement could be aimed at those managing the KiwiSaver funds, but then that would not fit the way the article as a whole is framed, or even the presumed intended audience of the article: KiwiSaver investors. What is clear from this later Stock article is that the focus shifted away from the responsibilities of the KiwiSaver fund provider and moved to the individual investor, who, if wanting to invest ethically, must research not just the scheme providers, but whom they invest in, too.

In a slight change in course from his first article, Stock’s “KiwiSaver and ethical investing” presented the investment in self-described ethical KiwiSaver funds as relatively easy for the individual as “ethical investing has screened out companies involved in tobacco, alcohol, gambling, pornography and weapons” (Stock, 2015, August 26, para.16); however, there was a proviso. Although the first segment of the article noted that KiwiSaver investors wanting to invest ethically simply need to choose the fund that excludes companies they deem unethical – as much of the work of the screening is done by the providers themselves – the article moved on to outline how difficult it is to find investments completely free from unethical practices. Starting the discussion about the complexities of finding blemish-free investments with the statement “the realities of capitalism mean even ethical funds find it hard to stamp out all traces of the industries they want to avoid” (para.20), Stock repeated ideas about investment complexities from the first article, adding further examples to illustrate his point. This time, however, Stock framed the negotiation of the difficult ethical investment terrain as the responsibility of both the scheme provider and the KiwiSaver investor. After outlining the complexities involved in screening investments, Stock went on to note that even after screening, KiwiSaver funds might still have investments in companies deemed unethical by investors. He then noted, “it’s a reminder that care needs to be taken when reading and interpreting the ethical claims of companies" (para.31). This almost *caveat emptor* warning is aimed at the individual KiwiSaver investor, who, from the start of the article with the opening statement "Your choice: Invest for good, or for only profit" (para.1) appears to be the article's intended audience. Where previously KiwiSaver providers were presented as responsible for providing ethical investments, in this article the individual investor is shown as having an equal role to play.

Indeed, where Stock's first article focused on the difficult task faced by the KiwiSaver provider in negotiating the complexities of ethical investments, this second article presents the issue as one faced by both the provider and the individual KiwiSaver investor. The "realities of capitalism" (para.20) discussed by Stock depict the financial marketplace as too vast, too complex, and too interconnected for easy or guaranteed vetting of ethical investments. Here, both the provider and the individual investor are babes wandering in the heavily-branched financial woods. If the provider misses that one investment is in some way connected to a company with dubious practices, it is to be expected and, for added protection, the individual must also be vigilant. Similar to the OECD's framing of the financial markets, the market as depicted by Stock is one that stands somehow separate from those operating within it, a kind of nebulous entity that must be negotiated. As with much of the OECD's discussions regarding the financial markets, in Stock's writing, it is taken as a given that financial markets are – and should be – left to their own devices.

Except, while there is no discussion of any sort of regulation of the financial market itself, Stock reflects ideas found in the OECD writings by implying that individual action will act as a sort of regulatory force, changing the marketplace by following the principles of supply and demand: more demand for ethical investments will make investments more ethical. Indeed, the last segment of the article goes from detailing how "ethical investing is mainstreaming" (para.36) to stating that companies that have better sustainability ratings provide better returns. From this perspective, not only is ethical investment changing the financial market, but it is, from a purely financial perspective, the best type of investment as it provides better returns. Thus, the nebulous entity that is difficult to navigate through can be changed and, as if to emphasise the effective workings of the financial system, the external demands for ethical investments are hinted at as essentially unnecessary. Stock illustrates this by stating that "a recent paper from Harvard Business School" (para.44), showed that "strong ratings on 'material' sustainability topics delivered better investor returns than companies which score poorly on these fronts" (para.44); in other words, what is good for the markets is good for the planet. Despite the call for caution when looking for ethical investments, in this article Stock presented a financial marketplace that is responsive and already reflecting ethical principles in its positive returns for companies with better sustainability ratings. Here, the individual investor must take more care, but there is no need to change the market, which will change itself anyway, based on the concerns of the individual.

At the beginning of 2016, Stock wrote another article focused on KiwiSaver investments, one that this time discussed the potential need for a KiwiSaver 'ingredients' label and framed KiwiSaver investors as apathetic and ignorant, albeit in a slightly distanced way. The article, "KiwiSaver should have 'ingredients' labels" (Stock, 2016, April 17), is essentially a report on a call for KiwiSaver ethical investment labels by Binu Paul, the founder of SavvyKiwi, a company specialising in helping people choose KiwiSaver providers and track their progress in comparison to other providers. In this article, Paul is noted as calling for fund ingredient labels that indicate the percentage of funds allocated to industries investors might be ethically against investing in. Citing research from Kiwibank's KiwiWealth scheme, which found that 27 per cent of participants were unaware of the type of KiwiSaver scheme they were invested in, Stock stated that Paul "believes the ignorance runs deeper" (para.8). Of the statement from Paul that "just 3 per cent of KiwiSaver funds are invested in 'sustainable' funds" (para.9), Stock adds, "misguided fear of lower returns may be playing a part, but Paul believes apathy and ignorance plays a major part" (para.10).

Given that the article was published in the business section of a national online newspaper, it is safe to assume that the intended audience for the article was not primarily KiwiSaver providers or policymakers, but members of the New Zealand public interested in business and information about KiwiSaver. While some of the readership may be part of the 3 per cent investing in sustainable funds, it is probably also safe to assume a large portion are not and, therefore, make up a portion of those Paul has labelled apathetic and ignorant. Setting aside Paul's unaddressed assumption that, if given the chance, more people would invest ethically, labelling KiwiSaver investors apathetic and ignorant plays into the rhetoric surrounding those deemed financially illiterate. Again, what is presented is a situation where the financially illiterate have a negative impact on the financial sector – here, by not creating enough demand for ethical investments. By blaming the mere 3 per cent of sustainable KiwiSaver funds on KiwiSaver investors, rhetoric regarding the potential for financially literate individuals to help create a self-regulated financial system is taken a step further, calling out the financially illiterate for, through their lack of literacy, not creating a more ethical investment environment.

It is curious that none of the three articles Stock wrote prior to Bradley's August 18, 2016 article garnered anywhere near the sort of attention or reaction that Bradley's did, especially given they were discussing the same issue. Certainly, some of the difference in uptake could be put down to the intended audiences for their pieces, with Stock writing for a business audience in the business section of *Stuff* and Bradley's pieces going to a broader audience of Radio New Zealand (RNZ) listeners and RNZ website news readers. However, where other journalists picked up on Bradley's initial report and developed their own stories in relation to it, Stock's articles caused no such reaction from news-reporting peers.

While it is not in the realms of this discussion to examine why one piece provided the catalyst for social action that the earlier pieces did not, what is clear is that Bradley's article framed the discussion very differently from the articles by Stock. In his three articles, Stock made no mention of the government or its role in KiwiSaver, while government and its connections to KiwiSaver was a significant focus of Bradley's article. For Stock, KiwiSaver providers were depicted as well-intentioned, but faced with very difficult and complex information to sift through to ensure ethical investments. For Bradley, KiwiSaver providers had more than a little hint of the duplicitous about them, investing funds in companies those they represent would have concerns about. Despite noting that KiwiSaver providers gave full lists of where investments went, the strong implication in Bradley's article was that investors remained uninformed of where their investments were going. Finally, for Stock the individual investor needed to take the same amount of caution as their provider, researching where funds were going and playing an active role in their investment portfolio. For Bradley, despite noting – briefly – that information regarding where investments were going was, by law, supposed to be provided to the individual investor, there was no mention was of the individual needing to take more care reading this information. Rather, the focus was on the individual investor as an innocent dupe who needed the protection of the government against the unethical investments of KiwiSaver fund providers. In Bradley's article, there is no question of the individual needing to take on more personal responsibility. KiwiSaver investors have been automatically enrolled into this government-created and endorsed scheme and led to government-chosen default providers if they do not select one themselves. Because of this, the government is depicted as needing to take a more active role in protecting the ethical interests of the individual KiwiSaver investors. The Bradley article implies that individuals should not need to read the extra information regarding investments and their financial literacy should not factor into whether the money they are investing is invested ethically; ethical investment should be automatic in default schemes.

What is of interest in the responses to Bradley's article is how the texts might be symptomatic of a tension in the neoliberal framing of the financially literate subject. Bradley's depiction of the KiwiSaver investor is a repudiation of the neoliberal push towards responsiblisation (and the subsequent Twitter uproar perhaps a public act of reclamation of more civic ideas of responsibility). While she notes there are regulations requiring investment disclosure, the need for the individual to read the lists outlining where their investments go is irrelevant. Individuals are encouraged to ask questions, rather than decipher addendums to annual reports. This encouragement is less about investors needing to understand the segment of the financial market they are investing in than consumers needing to make sure they get the product they were sold. The focus for Bradley is more on consumer literacy and empowerment than financial literacy. In the articles that spread from Bradley's, the framing was similar, with the focus firmly on the role of government, the duping of the individual, or brief but unexplored acknowledgement of disclosure regulations.

The Twitter Storm

After Anusha Bradley's initial report discussing KiwiSaver investments in companies manufacturing munitions, New Zealanders started taking to Twitter to ask questions and voice their opinions. Thus far, information regarding how people view the financial market, financial literacy, and KiwiSaver has been gleaned from surveys and questionnaires that in their very nature pre-frame responses. However, as a reaction to a situation specifically focused on financial knowledge and KiwiSaver, these tweets offer a unique opportunity to gauge what the general public consider important regarding their role as KiwiSaver investors and the role of the government and KiwiSaver providers. As Macy and Golder (2015) note in the introduction to an edited book on Twitter as a social science resource, one of the benefits of analysing tweets is that "data from online social networks – email archives, phone logs, text messages, and social media postings – allow researchers to relax the atomistic assumptions that are imposed by reliance on random samples" (p.3). Where surveys and random samples give us a very individual, hermetically sealed idea of certain views from each respondent, an analysis of tweets goes further and provides a platform that enables insight into the more fluid relationship between people and the information they are posting and receiving; it reveals the interplay between those sharing information. Because, as Macy and Golder argue, "Twitter stands out as by far the largest and most comprehensive publicly accessible source of online data on human behaviour and social interaction" (2015, p.3), the tweets regarding KiwiSaver investment in munitions are considered a valuable resource in helping to understand how themes identified in earlier documents play out in this model of social life.

To date, analyses of people's levels of financial literacy have been greatly informed by the work of financial literacy researchers Lusardi and Mitchell, whose focus on the 'big three' (knowledge of compound interest, inflation, and risk diversification) can be seen in a multitude of financial literacy surveys and questionnaires. In financial literacy research, data has been gathered via these surveys and questionnaires and arguments formed about people's financial literacy levels and their views on and knowledge of the financial sector. This pre-framing of the focus of what is important in financial literacy works well to indicate the percentage of participants who meet the desired levels of financial literacy centred on knowledge of the 'big three', but it fails to consider how the individual perceives their role as financially literate beings – what *they* view is important. Where the information gathered from the surveys concentrates on the likes of whether an individual can determine which of three numbers represents inflation in a hypothetical question, the information gathered from the tweets analysed in the case study provide less filtered or pre-set information about individuals' perceptions of financial literacy, their role as financially literate beings, and the role of those within the financial markets. By analysing these tweets, I hope to have a less prescribed, more fluid vision (at least in the less rigid focus on the 'big three') of individuals' expectations surrounding financial literacy and financial markets.

It is perhaps to be expected that the tweets responding to the KiwiSaver munitions investment news are, initially at least, closely tied to the news articles that triggered them and therefore are more likely to mirror the types of framing seen in the articles. What will be of particular interest is what aspects of that framing the tweeting public deem appropriate to mirror, modify, disregard or otherwise as their response is constrained only by the limit on the number of characters that can be used.

Chapter 6: Munitions Investment Twitterstorm: Methods for Analysing Twitter

Methodology

Because news indicating that KiwiSaver default schemes were investing in companies manufacturing munitions initially broke in August 23rd 2015, to capture discussions heralded by this news and gauge whether this news really was triggering increased discussions via Twitter, I started my data collection from a few days prior to this date and collected data through to August 23, 2016. I further limited my search to only tweets in English and included retweets. Unsure of what information would end up most useful, the intention was to collate all tweets responding to the breaking munitions news (rather than simply discussing other aspects of KiwiSaver), noting the number per day, key themes within original tweets, number of retweets, and themes within conversations generated from original tweets.

As I am interested in the themes, patterns and relationships that might be revealed within the tweets, and have followed a non-linear research path, I have focused on soft data collection and qualitative analysis. Zappavigna (2012) discusses some of the various ways researchers have approached tweet analysis, stating that researchers tend to “taxonomise the functions of microposts based on user intention” (p.30), highlighting the use of categories based on whether the intention is, for example, to share, report, or converse. While limitations of Twitter research show that the findings from the Tweets cannot be assumed to represent New Zealand society as a whole, Zappavigna (2012) also notes that data collected from tweets after an impactful event is useful for sentiment analysis. This idea is supported by Gayo-Avello (2015), who in his discussion about tweet analysis in relation to political opinion argues that nuanced sentiment analysis is important when seeking to understand opinion. Gayo-Avello also urges caution when considering using digital methods of tweet analysis due to the complex nature of how language is used.

In light of this, the process I followed most closely resembles that described by Strauss (1987 as cited in Neuman, 2014), where, rather than relying on programmes that can analyse language data, I undertook an initial run-through of the tweets by hand, open coding for themes and patterns. I initially tried collecting data via the Twitter application programme interface (API), but found the platform was primarily geared to either those looking to monitor, develop and analyse their own Twitter accounts or towards researchers doing quantitative analysis. The data collected via the API also gave no indication of tweet threads, removing any sense of conversation from the tweets. As the data collected via the API was not useful to my qualitative analysis focus, I used the more time-consuming method of collecting tweets using the Twitter advanced search link. Using the advanced search criteria, I looked for all tweets including the word "KiwiSaver" and any of the words "munitions, responsible investment, cluster bombs, weapons, mines, and ethical". In addition to limiting the search to tweets in English, I filtered the search to include replies and tweets with links and I specified there did not have to be a minimum engagement, number of likes, or retweets in the search sample. I further limited the search to between August 20, 2015, and August 23, 2016, to encompass the articles' publication dates. This delivered a data set that I then saved into a word document totalling around 280 pages. From this data set, I undertook what Strauss terms 'selective coding', looking specifically for themes common to the texts in my research. Rather than outright axial coding, which Strauss indicates is the usual second step that involves organising the codes and linking them, following selective coding I compared the themes I found after the open coding to the themes I had earlier identified in my analysis of the OECD, NZ government, and financial literacy texts, looking for ways these themes as a whole might be related and grouped. Beyond the commonalities, the hope was that the analysis of the tweets would provide a different perspective on the key themes identified and broaden understanding of the framing of financial literacy.

In analysing these tweets, I am not just interested in what they might reveal with respect to the indicated themes, but what they reveal about the public's perceptions of the primary actors within the story of financial literacy in New Zealand and the role of the financially literate.

Twitter in Brief

Twitter is a social networking service that was created in 2006 (MacArthur, 2018). It allows users to post microblogs (tweets) via their own Twitter feeds. Prior to November 2017, these microblogs were limited to no more than 140 characters; however, after this date, the number of allowed characters doubled to 280. Twitter feeds, or 'streams', can be 'followed' by other Twitter users and if the person has made their stream public, they can be viewed by anyone with an internet connection and knowledge of the usernames of those whose posts they wish to view. When visiting Twitter, users immediately see the most recent tweets made by those they follow and they are able to respond to those tweets, making a separate dialogue thread that others can follow and respond to in kind. Users are also able to post another Twitter user's username alongside a tweet to notify that person of the tweet, regardless of whether either user follows the other.

Twitter as a Genre

While Twitter allows for direct, one-on-one communication (that can be viewed by anyone if the users have a profile that is open to the public), the types of discourse shared on Twitter are, as Murthy (2018) notes, "more of a stream, which is composed of a polyphony of voices all chiming in" (p.21). Zappavigna (2012) points out that this polyphony of voices is organised by the digital technology that enables virtual groupings, aiding in the creation of social bonds between people who may share no other connection, virtual or otherwise. This notion of virtual groupings is expanded on by Gayo-Avello (2015), who indicates that Twitter is not a tool providing communication within a public sphere as it is more commonly understood (i.e. a single open space where ideas can be shared and others persuaded) but, rather, it is a tool that enables multiple public spheres connected in a variety of ways via the networks established by individual users. Twitter allows people to view a multitude of individual utterances or conversations and contribute, regardless of geographic, political, social, or any other sort of standing that might otherwise limit someone's involvement in a discussion.

Although Twitter has the potential to give individuals a large platform through which to share their utterances, because of its character limit, posts must be succinct. This point is highlighted by Gayo-Avello (2015), who notes in his discussion about social media tools like Twitter, "the brevity of microposts … forces users to get to the point when discussing any given topic" (p.52), making it a useful medium for those interested in the sound-bite version of what others want to say. Indeed, Twitter's usefulness is also outlined by Zappavigna (2012), who discusses how the real-time searchability of Twitter increases its utility as people have instant access to what others might be saying about specific, searchable topics. Via such searches, people are able to instantly tap into, have discussions, and share thoughts and information about real-time events taking place around the world.

That these utterances are brief, Murthy (2018) notes, should not delegitimise their role as a barometer for public discussion or serve as an indication of exchanges that are less meaningful. Rather, he adds, "the assumption needs to be made that the actors in Twitter are satisfied by the sub-140-character responses they receive" (p.53). However, it is useful to keep in mind Zappavigna's (2012) indication that discussions on Twitter do not carry the same expectations as face-to-face conversations, or conversations had on many other social media platforms. On Twitter, not only are the public posts made searchable and available to be commented on any time after they have been posted – even years later, but they also follow very loose terms of engagement. For example, while it is possible to direct a Twitter comment to another user using their @ user name, Twitter users have an understanding that there is no expectation that that person will respond (Zappavigna, 2012).

Certainly, only a small percentage of those reading these tweets or contributing to Twitter threads will hold any influence over the events or ideas they may be focused on, but as Murthy (2018) notes, Twitter does more than simply provide a way of amplifying individual voices by giving them a bigger potential audience. It also transforms discourse by providing tools like the @ or # keys that enable people to link their voices to others, giving their utterance a boost by either positioning it alongside others sharing on the same point or by connecting it directly to an utterance made by someone who might hold some influence over what is discussed. A tweet being seen and shared by the right people can help make that tweet go viral, that is, shared by a great number of people, making it spread rapidly over social media. In this way, Twitter not only affirms an events-based focus that Murthy (2015) notes is an aspect of modernity, it allows its users to contribute to those events and even be the people who position those events as important.

Why Twitter?

In his book about Twitter, Dhiraj Murthy (2018) notes that Twitter is both a technology and a social tool. Via Twitter people are able to represent themselves and, drawing on a variety of theorists including Bourdieu and Bauman, Murthy (2018) indicates that even the most meaningless of tweets can have historical worth. For Murthy (2018), Twitter has democratised the building of self in the public realm. This is a social media that rather than providing a medium through which cultural identities are broadcast, provides a medium through which cultural identities can be authored, indicating a potential for a power shift as 'ordinary' people have the power to create not only the online digital version of themselves but also to create what can directly influence others.

The idea of Twitter enabling a power shift through its ability to subvert traditional information pathways is one of growing interest to social media researchers. Indeed, the idea of shifting power dynamics is supported tangentially by Zappavigna (2012), who notes that a common driver behind the use of social media platforms like Twitter when seeking answers to questions is the perceived social bonds between users. Zappavigna (2012) indicates that studies have shown users view those they know as more trustworthy than search engines when providing answers to potentially subjective questions, noting that "social bonds have become increasingly important in the way information is located and consumed with the internet" (p.7). This is not just networked communities, but networked information and knowledge, driven by those social connections.

Indeed, the power of social media like Twitter to capitalise on both the social bonds driving it and its reach and immediacy as a communication network is highlighted in the work of Bennett and Sergerberg (2012), who examine connective action, a term they coined to identify the new form of coordinated protest action that they see happening globally in the likes of the Arab Spring and Occupy Wall Street. Connective action, which differs from collective action in its lack of formal connection to any ideology or organisation, relies on social media's networking of people and the speed at which information can be disseminated across those networks. Connective action, in its ability to conduct direct and personal approaches to individuals via their social media networks, has a great deal of flexibility in how it responds to potential changes that might occur in the environment in which the action is taking place. This type of action is powered by the likes of Twitter, and its ability to connect networked individuals also allows those individuals to be flexible in the way they choose to participate. As Murthy (2018) points out, posts from social media like Twitter are more than someone merely building an identity online; they are someone building that identity with at least an idea of the community who might be viewing it in mind. The connection, the social bonds, transcend geographic boundaries and are both individual and collected at once.

Certainly via these complexly linked social networks momentous social action might cohere, but, as Murthy (2012) – drawing on the work of Enteen (as cited in Murthy, 2012, p.42) – notes, while the technology enables infinite groupings of people (and therefore infinite possibilities for meaningful connections and even social action), in reality, people rarely make use of more than a fraction of the possible connections on offer. However, this "networked individualism" (Rainie & Wellman, as cited in Murthy, 2012, p.111) and the uptake (or not) of the various connections on offer is not the primary concern of the research here. Of primary interest is what this information-sharing within the network of individuals discussing KiwiSaver and investment into munitions reveals about the ways individuals themselves frame responsibilities connected to financial literacy.

Twitter and Journalism

As part of this research is interested in the types of framing of the financially literate subject undertaken by traditional journalists and the Tweeting public, observations will be made about shared themes. Certainly, much has been said about the impact Twitter has had on journalism (Zappavigna, 2012; McGregor & Molyneux, 2018; Swazy, 2017; Jewell, 2013) and in the case of the munitions uproar, there is a definite connection between the traditional news media articles and the Twitter storm; however, deep analysis of this connection is not in the realms of this research. What is important to note is that a symbiotic relationship between standard news media and Twitter has been firmly established (Zappavigna, 2012; McGregor & Molyneux, 2018; Swazy, 2017, Jewell, 2013). As Jewell (2013) outlines, Twitter can be used to break news and what is tweeted can itself become news, thus the original role of journalists as gatekeepers or arbiters of what is newsworthy has been reformulated by the likes of Twitter. Bentivegna and Marchetti (2017) argue that this reformulation does not remove journalists from their gatekeeping role, but reinterprets it, positioning them as "curators or guides in the sea of digital information" (Molyneux, 2014, as cited in Betivegna & Marchetti, 2017, p.19). In their focused discussions on the interconnected role of Twitter and journalism, McGregor and Molyneux (2018) note that journalists often monitor Twitter to see what might be trending or to screen for potential tip-offs to larger stories. They argue that this screening of Twitter and its multitude of voices has an influence over what those journalists view as newsworthy. This symbiotic relationship is seen clearly in the munitions tweets where initial retweets of links to the Bradley article reinforced its newsworthiness and were followed by a multitude of further news articles in conjunction with a Twitter uproar. How much one was propelled by the other is less important here than the idea that a certain type of framing of the financially literate subject seemed to resonate and gain purchase in both realms.

Twitter as a Data Source

Ultimately, Twitter is a useful data source as it is a space where identity can be produced and reproduced, a space where meaning can be created, making it a space that deterritorialises fields of influence and allows people who range from very different to very similar, familiar to unfamiliar to share conversations (Murthy, 2012). Indeed, Golder and Macy (2015) argue that analysis of data collected from Twitter provides an opportunity to “understand human behaviour and social interaction in ways we could not do before” (p.2). This claim stems from the notion that Twitter enables the observation of social interactions on a large scale (Golder & Macy, 2015), something that Zappavigna (2012) also positions as a strength of Twitter analysis. For Zappavigna (2012), having access to searchable, “unprompted, spontaneous opinion” (p.173) enables researchers to analyse those opinions in a very targeted way without having the concerns associated with the formulation of survey questions or the like. Highlighting the exciting opportunities offered by Twitter as a resource, Zappavigna states, “analysis of reactions to significant world events in real-time across large populations has not been readily achievable prior to the advent of social media” (2012, p.172). Golder and Macy (2015), go even further, noting that “Twitter has emerged as the single most powerful ‘socioscope’ available to social scientists for collecting fine-grained time-stamped records of human behaviour and social interaction at the level of individual events” (p.1), underlining the potential utility of an analysis of the Twitter utterances surrounding the breaking news of 2016 regarding KiwiSaver and munitions investment.

Reflecting the changing views of Twitter as a data source, at the time of data collection Twitter prohibited the publication and storage of the data set collected specifically via the API; however, as of January 2021, Twitter launched a new Academic Research product that enabled researchers to have “free access to the full history of public conversation via the full-archive search endpoint” (Tornes & Trujillo, 26 January 2021, para. 7). Although I did not use the API to collect my data, and the tweets collected are not related to sensitive topics, I am reluctant to archive for public access the data set obtained via the advanced search criteria for reasons discussed below. That said, out of curiosity I returned to the advanced search link and put in all the original parameters and found that all the original data is still available to view.

In a relatively recent article, Norval and Henderson (2020) discuss the debate surrounding the ethics of researching social media data, noting on one side a survey of researchers that found “many believed social data posted online are fair game to collect and analyze as long as they are accessible without signing in” (2020, p.187). Arguments regarding greater ethical consideration, Norval and Henderson note, are related to the processing and dissemination of social media data, which in changing the original intentions of the utterances has the potential to change the original poster’s ideas regarding the privacy of their posts. Indeed, in their research of willingness to share Facebook posts with researchers, Norval and Henderson (2020) found “one third of publicly available data were deemed by the participants to be inappropriate for sharing with researchers” (p. 198), pointing out that this is “an empirical confrontation to the belief that publicly available data are fair game” (p.198). However, they also found that some of these refusals to share information were due to the participants deeming the data to not be of interest and they ultimately argue for greater consideration of not just whether consent for use of publicly available data in research is necessary and how it might be obtained if it is, but the inherent biases and pitfalls that may arise from the culling of representative samples.

Fiesler and Proferes (2018) are researchers on internet research ethics that looked specifically at perceptions of Twitter research ethics. In their research, they found slightly over half of their participant sample of 267 tweeters believed researchers could use tweets without first requiring permission from the tweeter. Although this is higher than those in Norval and Henderson’s Facebook study, it is still a concern. Fiesler and Proferes also add that slightly over 20% of users erroneously believed that Twitter’s terms of service forbid the use of tweets by others when they in fact clearly state public information tweeted is broadly and instantly disseminated to a variety of users that then analyze the information, confirming findings that people do not read terms of service before signing on to platforms like Twitter. Fiesler and Proferes conclude that there are many contextual questions that shape the ethical use of data from platforms like Twitter and help inform best practice, but their research indicates how this is an area still very much in its infancy. Considering the contextual detail in my own research and in light of these potential issues raised by Norval and Henderson (2020) and Fiesler and Proferes (2018), I decided to anonymize posts from non-public figures that are not already anonymized.

Within New Zealand, governance around data collection is evolving and current guidelines (as of 2020) focus on Ngā Tikanga Paihere – 10 values to guide and inform data practice. These require researchers to “consider the effect of their research on the people whose data and personal information they are using” (2020, p.5) and to “consider whether their research carries the potential to discriminate people on the grounds of race, ethnicity, age, gender, persuasion, ability and religion” (2020, p.5). Although these guidelines did not exist when I began my research, this research is not considered to have the potential to discriminate against anyone.

When I began, there was no specific ethical framework regarding the use of Tweets in the Massey Code of Ethical Conduct for Research Involving Human Participants. My intended methodology and data interests were reviewed and discussed in light of the existing Code and the research was deemed to be low risk.

I acknowledge the public nature of the discourse and its accessibility does not automatically confer ethical status to the use of Twitter data; however, as the method of collection did not include the possibility of including protected Tweets or Direct Messages, as the Tweets collected were engaged in open discussions about a public topic (some making use of hashtags, links to news sites, and links to other's usernames, and public figures themselves), and as the subject matter itself was not sensitive, the data was deemed as not presenting ethical issues.

Twitter Analysis Limitations

When discussing Twitter as a data source perhaps one of the most important potential limitations to note is its famed echo chamber effect, which would have an impact on any claims that could be made regarding the extent to which ideas put forward within the Twitter munitions uproar might reflect those of the general public. Murthy (2018) discusses in detail the on-going debate of whether Twitter is working to support homophily (like-minded people grouping with like-minded people) or working to expose users to those who are different and therefore encourage tolerance and understanding of others. While Murthy presents both sides of the discussion, he ultimately ends with a note that Twitter "has a propensity to act as an echo chamber" (2018, p.45), acknowledging that these echo chambers exist, but not taking a side with regard to the type of impact these echo chambers might have on people's mindsets.

Garimella, Morales, Gionis and Mathioudakis (2018) agree with Murthy's summation regarding the existence of echo chambers on Twitter. In their research into political discourse on Twitter, they note that they found evidence of these echo chambers; however, their findings reveal they were notable only when the topics of the discussions were particularly polarising, noting that "the phenomenon does not manifest itself when the topic of discussion is not contentious" (p.921). Shore, Baek, and Dellarocas (2018) take this idea a step further, with their research finding that while there is evidence of polarisation on Twitter, the partisan ideas put forward tend to come from a small group of tightly networked individuals. They note that the tweets from these individuals may have a large readership, but the average Twitter user tends to post more moderate points of view. For Shore, Baek, and Dellarocas (2018) Twitter echo chambers are created by a tight core of people and what is echoed does not necessarily reflect the leanings of the general Twitter user.

The worry of the echo chamber, as noted by the politics focussed Gaimella et al. (2018), lies in its potential to curb the democratic process by presenting for contemplation only one side of any discussion. Certainly, in relation to the Twitter munitions discussions, these kinds of polarised views are apparent; however, questions regarding the extent to which the uproar may have been propelled by potential echo chambers are important, but not within the scope of this research. While the echo chamber effect might affect the number of times a sentiment is reiterated within the data set, what is of more interest for my research is the individual, localised sentiments and what they might reveal. That there is the potential for those sentiments to be echoed back by others who are subscribed to that particular echo chamber limits possible claims that might be made about the extent to which these sentiments could be ascribed to the New Zealand populace as a whole; however, what is of primary interest to this research is the framing itself: what ways are the Twitter public framing the financially literate being? Undoubtedly, it would be useful to be able to gauge the level to which the broader public shares the sentiments that appear within the Twitter data set, but, again, that is beyond the scope of this research.

Another important limitation of this Twitter analysis is the idea that Twitter as a medium does not lend itself to in-depth understanding of issues. While Murthy (2018) brings this issue up, adding that this prerequisite for brevity limits Twitter's usefulness as a medium that can support conversations covering longer periods of time, as noted earlier, he also states, "the assumption needs to be made that the actors in Twitter are satisfied with the sub-140-character responses they receive" (p.23). Undoubtedly, the brevity of the posts has the potential to limit the depth of analysis, but for this particular research, even in the 140-character responses, clear ideas are presented that provide useful insights into how the tweeting public view their role within the financial literacy framework. Indeed, as will be shown, the Tweets gathered for this research indicate that some do view Twitter as a medium through which they can gain a deeper understanding of the munitions discussion.

Perhaps the most significant limitation of using Twitter as a resource for further understanding of how some members of the New Zealand public frame the financially literate subject is the number of users it has in New Zealand. According to statistics obtained from Statista (2019), in 2018 74% of the New Zealand population were active social media users and in 2016 this was lower at 66%, with the trend indicating that over time the number is increasing. Of that 66% of active social media users in 2016 (2018 data was not available), under 4% were using Twitter (StatCounter GlobalStats, n.d). This immediately draws into question how representative of the New Zealand public as a whole Twitter users are. Without doubt, as a snapshot of the New Zealand populace, they represent just those who have access to the technology needed to be able to access social media in the first place. Added to this, if the findings of Wojcik and Hughes (2019) are translatable to the New Zealand Twitter setting, of the under 4% of social media users who used Twitter in New Zealand in 2016, it is possible the majority of the tweets were created from just a small percentage of tweeters. Furthermore, according to Wojcik and Hughes (2019), who focused their research on Twitter users in the United States, U.S. Twitter users tend to be under the age of 50, have a high degree of education (defined as at least a bachelor's degree), and be slightly more left-leaning in their politics than the general populace. While no similar study could be found analysing the make-up of New Zealand's Twitter audience to the same degree, this data indicates the very real probability that the views presented on Twitter with regard to the KiwiSaver munitions investments do not map on to the views of the New Zealand public as a whole. Indeed, as Golder and Macy (2015) point out, even though there are definite advantages to using Twitter as a data source, “one important limitation on the predictive power [of Twitter] is that users of social media are not randomly selected” (p.8). However, while this curtails any observations that could be made in relation to the broader populace, it does not negate the potential usefulness of an analysis of the ideas surrounding the financial literacy themes represented via the tweets responding to the KiwiSaver munitions discussion. These might not be notions that are shared any further than the tweeting public, but they are still notions that shed light on the different ways the various actors on the financial literacy landscape are framed. This analysis is not to show what New Zealand public opinion is, but rather it is to show and analyse the opinions of some members of the New Zealand public.

In relation to the research scope rather than limitation, it is important to note that without question the Twitter uproar on its own did not bring about changes in how KiwiSaver providers disclosed investments or catered to those wanting more ethical investments, but as part of a community of voices that included those represented within an integration of both ‘old’ and ‘new’ media, it certainly did. Although it is not in the remit of this research to examine the ways old and new media logics interacted, those wanting to better understand those types of interaction, their relation to power and the opportunities they offer a mobilized general public, should consider Chadwick’s (2017) arguments regarding what he has termed the hybrid media system. Integrating Chadwick’s ideas about the interconnection and interdependence of different media systems would offer further insight into the flow of information, the actors involved, their relationship to each other and the nodes of power within this complex and ever-evolving field.

Chapter 7: Twitter Debate: Discourse Analysis and Findings

Results / Analysis

From the data collected to date, I found a very drastic difference in the number of tweets generated by Stock's original breaking news regarding munitions in August 23rd 2015 (Stock, 2015, August 23) and the same news that broke again in August 18th 2016 (Bradley, 2016, August 18). Following the 2015 news, very few tweets indicated outrage. Although the total number of tweets on the topic between the 2015 news and the 2016 news was relatively small (42 on KiwiSaver and ethical investments in general, four specifically related to the Stock article about munitions investments), the tweeters themselves ranged from those within the industry noting that munitions investments only made up a small proportion of total KiwiSaver investments to individuals not obviously connected to the industry asking questions about where to find ethical KiwiSaver fund providers. From these numbers, it is safe to say the initial news hardly created a stir, let alone an uproar.

After the news re-broke via Bradley's RNZ report (Bradley, 2016, August 18), the Twitter-sphere response was significant and immediate (close to 1000 tweets, retweets and responses specifically discussing KiwiSaver and munitions investments before midnight on the 18th alone). A brief first glance at the collated tweets shows people were initially outraged, but as the day (August 18th 2016) rolled on, the discussions generated by the original tweets deepened, revealing beliefs that government should play a greater role in protecting KiwiSaver investments, cynicism towards government-initiated schemes, distrust of the financial sector, inability to access information necessary to make what is perceived to be an informed financial decision, and the perception of a clear divide between the motivations of government, financial markets, and the individual (to name a few). It is understandable none of these tweets showed an interest in any of the 'big three' other than the odd industry-linked tweet with an educational tone, indicating that some investments are put into munitions because of the need to diversify risk. However, interestingly, many of the themes discussed by researchers outlined in my literature review and in my initial analyses of OECD documents and survey of New Zealand documents are apparent in many of the tweets: ideas surrounding responsibilisation, regulation, role of government, complexity of financial products, financial literacy and virtue, availability and accessibility of information, and civic responsibility. After collating the tweets, I then separated them into these themes. As might be expected, some tweets and tweet discussions could be (and were) placed under multiple themes.

After the first-pass coding of the tweets collated from August 20, 2015, to August 20, 2016, many tweets were filtered out as they were either simply links to news articles from *Stuff* or *The Herald*, or calls to ban or sign a petition to ban investments in munitions and the like (as can be seen in the examples below).

Ryan Mearns @ryanmearns

Sign this petition: Ban Kiwisaver from investing in arms, weapons and war https://our.actionstation.org.nz/petitions/ban-kiwisaver-funds-from-investing-in-arms-weapons-and-war?source=twitter-share-button … via @actionstation

1:52 PM - 18 Aug 2016

《KESARA》@K3SARA

Ban Kiwisaver from investing in arms, weapons and war https://our.actionstation.org.nz/petitions/ban-kiwisaver-funds-from-investing-in-arms-weapons-and-war … via @actionstation

4:16 PM - 18 Aug 2016

Stop IEDs @StopIEDs

Revelations of Kiwisaver fund investing in cluster bomb company sparks calls for review: "I think all ... http://bit.ly/2b2MvJN #bombs

5:21 PM - 18 Aug 2016

Role of Government

In response to news reports of interviews where government officials, including the then Prime Minister, were declaring that ministers were not responsible for how KiwiSaver providers invest KiwiSaver funds, certain tweets indicated those posting perceived the government to have an integral role in how KiwiSaver funds are managed. Perhaps reflecting the tone of the news articles that triggered the tweets, many were critical of the government or specific government ministers. For example, some saw the munitions investment problem as one caused by government negligence, others saw it as the then Prime Minister pandering to the banks, while still others saw it as evidence of a government out of touch with the people it is representing. As can be seen from the examples below, the tone of these types of tweets tended to be cynical.

Steve @SteveBriscoe6 18 Aug 2016

@Suzyiam isn't the original default provider via IRD? Doesn't that fall under a ministers portfolio?

Miss BetseyTrotwood @Suzyiam 18 Aug 2016

@SteveBriscoe6 I would have thought so? Sounds like government is pass the buck.

Idiot/Savant @norightturnnz

John Key relaxed about default kiwisaver providers criminal investments

6:42 PM - 18 Aug 2016

Lee @fngrscrssd 18 Aug 2016

@norightturnnz he's working for his team, sadly that team is not the New Zealand public. And we stiltane phillips @PhillipsTane 18 Aug 2016

@norightturnnz @melmac21 He's a banker no morals their!l pay him to do this.

Boundary-Runner @boundryrunner 21 Aug 2016

Replying to @five15design

When a government doesn't reflect the values of it's nation, surely they are due for replacement. Start with #localelections

In these tweets, KiwiSaver providers may be depicted as responsible for investing KiwiSaver funds in munitions, but ultimate responsibility is seen to lie with government and its representatives. While the comments in the press from the then Prime Minister and cabinet members from his party sought to highlight that KiwiSaver investments are a personal matter, with the onus lying with the individual to ensure their money is invested according to their personal preferences (Bradley, 18 August 2016, para. 16), these tweets indicate that, for some, government cannot extricate itself from being ultimately responsible for the policing and overall management of the likes of KiwiSaver.

Finding that some see the government as having a share of the responsibility for KiwiSaver is not surprising. This fits Bradley's (18 August 2016) framing of the role of government regarding KiwiSaver and is perhaps a logical response given KiwiSaver is a government initiative. As outlined in the OECD's economic survey of New Zealand (2007), it is the New Zealand government, in an effort to address concerns about insufficient retirement savings and to "insulate the government from pressure to augment the level of benefits" (OECD "Improving Pension and Retirement Savings Policies", 2007, p.75) that put this opt-out scheme in place. It has government-appointed default providers. While the scheme may have been crafted to remove some level of responsibility for retirement provision from the shoulders of the government, the mere act of creating KiwiSaver and having ongoing connections to it via the selection of the default providers, as well as being involved in the creation of the acts and regulations to which KiwiSaver is bound puts KiwiSaver, whether peripherally or centrally, under the umbrella of entities for which the government has some form of responsibility.

Unsurprisingly, the most pointed tweets indicting those in government were those from other politicians, most notably those from Labour and the Green Party. For example, Grant Robertson, the finance spokesperson for Labour tweeted "Why shouldn't default providers play by same rules as Super Fund? Minister has power by law to set conditions on them" (1.50pm, 18 Aug 2016). Metiria Turei, the then Green Party co-leader tweeted, "How many default kiwisaver companies invest in cluster bomb manufacturers? Minister: meh, dunno" (3.42pm 18 Aug 2016); and Julie Anne Genter, a politician for the Green Party tweeted "If it's not Govt's responsibility to ensure default KiwiSaver finds are legally invested who's [sic] is it?" (4.29pm 18 Aug 2016). Certainly, it is not unusual that politicians in opposition parties would use a discussion like this to raise criticisms of the ruling party, and certain members of the public responded in reasonably partisan ways, with some stating "National aren't the ones investing tax payer money in cluster booms" (Hungry@platesempty 18 Aug 2016) and "Typical of this govt – can't be bothered getting off their butts to actually do anything" (Allan Alach @allanalach, 18 Aug 2016). What is interesting in these tweets and their responses is that while in the demand for the government to better police KiwiSaver funds and providers there is a push back against the responsibilisation of the individual, there is also unequivocal support for less government involvement and more personal choice and responsibility, as seen in tweets like "@NZGreens why should the government be telling people how they should and shouldn't invest? Consumers are free to make that choice" (Jay @Jay_Hadfield, 18 Aug 2016), and "If the investor has a problem with their investment they should have checked before investing and they can move their investments anyway" (Ambassador Satan@AmbassadorSatan 18 Aug 2016). However, of the tweets collated, those discussing responsibility tended to show a belief that the government needed to take more responsibility.

The idea that responsibility lies with the government, rather than the individual is an interesting inversion of the dominant message touted by the OECD documents researched. While the documents indicate the need for a sound regulatory framework, the primary focus is very much on the importance of improving the financial literacy of the general public to help avoid any possible future market crashes. In these documents, the market is an efficient, sophisticated machine that requires financially literate users, and the individual is responsible not just for themselves, but for "more efficient, transparent and competitive practices by financial institutions" (OECD, *Financial Literacy and Consumer Protection: Overlooked Aspects of the Crisis*, 2009, p. 8). The chapter titled "Improving pension and retirement savings policies" in *OECD Economic Surveys: New Zealand* (2007) notes that risk in defined contribution plans is shifted to the individual. With the individual shouldering increased risk, they also become more responsible for themselves within that risk-filled environment.

Indeed, KiwiSaver is positioned as presenting the government with an opportunity to be insulated from the retirement fund demands of the general public (p.75), where it is simply, but perhaps portentously noted that "so far" (p.75) the government has not shown an intention of scaling back New Zealand Superannuation. Here, KiwiSaver is presented as an opportunity for the government to be less responsible for the general public. A key message from the OECD documents is that while the government is responsible for encouraging and enabling higher levels of financial literacy, the onus should be on the individual to take responsibility for not just their own finances, but, by their choices and interactions within the financial market, for the efficient running of that market.

While discussions in the OECD documents regarding government and responsibility are mostly focused on the shouldering of risk and financial burden, with some mention of protection of the vulnerable – the vulnerable being the financially illiterate who pose a threat to the financial market itself – in the Twitter storm surrounding the KiwiSaver munitions uproar a concern for the government's broader ethical responsibilities could be seen. Again, not surprisingly, some of the criticism came from other political parties, with the Green Party on-brand tweeting:

> Green Party NZ @NZGreens
>
> The Government shouldn't let Kiwisaver providers get away with unethical investments in weapons of war #nzqt
>
> 3:48 PM - 18 Aug 2016 from Wellington City, New Zealand

And the then leader of the Young Nats (the youth wing of the New Zealand National Party, the leading party of the coalition government of the day) again, on-brand challenging the idea that these kinds of ethical concerns should be shouldered by the government:

> Joel Rowan @JoelRowan
>
> You've got choice over your KiwiSaver scheme. If you want to make ethical statements with that, please do, but don't demand govt to fix it.
>
> 3:56 PM - 18 Aug 2016

However, these discussions regarding ethical concerns and the role of government were not merely the thrust and parry of political sport; a discussion around the expectation of government to show more ethical stewardship could also be seen in tweets from members of the general public. The following examples show concern on a more human level, one with a focus on those who might be harmed by munitions and the other calling out the Prime Minister by name, demanding more. For Paul Le Comte @five15design (see tweet below), the issue is framed as a big one because of the potential for harm munitions have on the most vulnerable. Where the OECD documents that I examined in chapter three were very much focused on the financial benefits to both country and individual that could be brought by well-functioning markets navigated by financially literate subjects, here, with both words and image Paul Le Comte @five15design draws attention to the children who might be maimed by products made by one of the companies operating within those same markets. The implication is that no amount of return on investment can justify harming others.

> Paul Le Comte @five15design
>
> Mr @JohnKeyPM could you explain to this child that #KiwiSaver investment in Land Mines 'isn't a big enough issue"
>
> 
>
> 6:32 PM - 18 Aug 2016

In a similar vein, Among the Vines @amongthevines steps away from the partisan discussions seen in earlier tweets that focused on government and not only names the Prime Minister, demanding "moral leadership", but names him by using his Twitter handle, which is essentially a Twitter equivalent of putting the message in his Twitter in-box:

> Among the Vines @amongthevines
>
> Actually investing our KiwiSaver funds in #clustermunitions is a big deal @johnkeypm show some moral leadership here.
>
> 6:53 PM - 18 Aug 2016

These tweets have stepped away from more abstract notions of risk, return and responsibility and are demanding a more personal view and approach. They have in common that they are focused on the individual human in the munitions investment story; it's just the humans are at either end of the perceived power chain.

Personal Responsibility

As in the OECD documents, another theme that could be seen threading through the tweets was the idea of personal responsibility. While some discussing individual responsibility on Twitter framed their discussion as a reminder – of sorts – that if an individual does not want their money invested in munitions, then they must make sure they have researched their investment funds appropriately, others took the angle that individual responsibility, rather than being a burden, enables them to make choices other tweeters found unpalatable. This can be seen in tweets like the following:

> Matthew Beveridge @matthewjpb 18 Aug 2016
>
> I have the right to pick how my investments are invested. I have no issue investing in weapons makers.

> Ambassador Satan @AmbassadorSatan 18 Aug 2016
>
> 7) And if they're not in breach of any law then who's business is it but the individual investor as to what they are investing in?

In these tweets, individual responsibility is seen positively, something that enables certain investment opportunities, and something that enables individuals to choose for themselves what takes priority in their investments. Indeed, a small percentage of the tweets collated indicated that for some the primary role of KiwiSaver providers was to bring in maximum profits for investors, with ethical investment little to no concern. The following represent almost the sum total of this type of tweet that was collated over the time period, which perhaps explains the confrontational tone a few of them take.

> Rajy S @_rajy
>
> Bullshit @nzherald article of the day: "WAHHH KIWISAVER INVESTS IN COMPANIES THAT ACTUALLY RETURN INVESTMENTS WAHHH"
>
> 1:05 PM - 18 Aug 2016

Reed Fleming @reedfleming

This Kiwisaver news has made me realise that my ethical fund performs about 10% worse than funds investing in bombs. Might switch.

3:08 PM - 18 Aug 2016

Vince @vinsanity_nz 18 Aug 2016

@nzherald the only unethical investment is the one that doesn't make the most money... what the companies do is the least of my concerns.

Jon O'Brien @stagnant16 18 Aug 2016

@nzherald If it shows me a strong return I'm all in!

Paul Kasner @Paul_Kasner 19 Aug 2016

@zenpeacekeeper @economicsNZ @actionstation Couldn't care less. Their job is to maximise gains for my account. The End.

Ambassador Satan @AmbassadorSatan

1) Apparently I need to change my Kiwisaver scheme to invest in weaponry. I expect pretty good profit margins there. #kiwisaver

4:35 PM - 18 Aug 2016

Of note in the tweets like these that prioritise profits over ethical concerns is the use of investment terminology. One is focused on "strong returns", another wants their KiwiSaver investment company to "maximise gains" and another is after "good profit margins." While these phrases do not necessarily indicate that the tweeters are experienced investors or people who work within the financial market, their use does point to a certain level of comfort with the language of investment returns. In these tweets, the duty of investment companies is simple and there is no room for the concerns of wider society. Perhaps unsurprisingly, tweets that stood in support of investments into munitions came from individuals, rather than any account linked to any investment companies or KiwiSaver providers – even those that were revealed as having KiwiSaver investments in munitions.

In these tweets we can see an interesting level of adherence to the type of neoliberal view of the financial marketplace discussed by Thorsen and Lie (2006), who state that within their view of neoliberalism,

> [i]ndividuals are also seen as being solely responsible for the consequences of the choices and decisions they freely make: instances of inequality and glaring social injustice are morally acceptable, at least to the degree in which they could be seen as the result of freely made decisions. (p.15)

However, in these tweets, whether the individual might have actively chosen a provider that invests in companies manufacturing munitions, or chosen a provider that posts the best returns, regardless of where they invest, the part that makes these decisions morally acceptable is not the degree to which they are "the result of freely made decisions" (Thosen & Lie, 2006, p.15), but, rather, their potential to return a profit. Here, the key is the individual must be free to make a profit.

Yet of the tweets collated, this notion of profit over ethics is a minority view. Undoubtedly, the predominant tone of the tweets indicated shock and disbelief, the majority noting their primary interest was in ethical investment:

> Give it up @olderhooligan63
>
> How can I get out of KiwiSaver ? I do not support these companies who are making profits out of war ! #SoAngry
>
> 2:05 PM - 18 Aug 2016

> Clarabelle @AucklandIsland 19 Aug 2016
>
> @zenpeacekeeper @musenz @actionstation
>
> I care. I'm moving to an ethical investor. Don't want to make money from war.

> *˚·☆· ˚§tëph˚·☆· ˚* @StephanieMarija
>
> Speaking of KiwiSaver, I need a new Provider who can promise ethical investment. Who can help? @BNZ @SuperLifeNZ @KiwibankNZ @WestpacNZ
>
> 5:50 PM - 18 Aug 2016

Where many of the OECD documents allude to an inherent morality in the individual being financially literate, these individuals demanding munitions-free KiwiSaver schemes indicate that for some there is the expectation that the market itself, or at least their KiwiSaver portal into the markets, have an inherent morality. For these people, the focus was on *not* profiting from unethical practices, rather than profit at any cost. Like those making more personal appeals in their calls for more ethical consideration from the government, here again the emphasis is on the human element in the KiwiSaver munitions investments; however, in these tweets the focus is on the moral agency of the individuals investing. While they are not overtly demanding that their current providers change, they seem to see their course of action being to shift provider or get out of KiwiSaver altogether. They are 'voting with their feet.' Threatening action that neatly fits into economic textbooks discussing how markets work, this might be seen as a clear case of the market deciding and Adam Smith's invisible hand at play, with an increased demand for an ethical KiwiSaver service presumably eventually leading to an increase in the market of such service providers. Not just fitting in with the rules of supply and demand, this type of action also fits in with the OECD notions of the financially literate having the ability to act as a form of market regulator. Indeed, the OECD writings seem to predict the actions discussed in these tweets, noting that citizens who are better informed "can also implicitly help in monitoring markets through their own decisions, and thus complement prudential supervision" (OECD3, 2009, p.8).

However, even if these demands for more ethical KiwiSaver investments lead to an increase in ethical KiwiSaver investment products, fitting neatly into economic theories of supply and demand, what is happening here is more complex, as it also provides an example of Akerlof, Spence, and Stiglitz's information asymmetry discussions (Löfgren, Persson, & Weibull, 2002), which highlight the impact of discrepancies in information possessed by market participants. In the case of the KiwiSaver providers and investors, the information asymmetry presents the type of moral hazard outlined by Gabriela Gheorghiu (2013), who in her writing about information asymmetry and the particular type of moral hazard known as the principal-agent problem notes that these come about when the principal (investor) lacks the specialized knowledge necessary to stay abreast of decisions made on their behalf. Rather than providing an opportunity for the market to correct itself, information asymmetry is seen as signifying a type of market failure as the theories of rationality that are traditionally believed to guide the market are circumvented via an imbalance in information. These KiwiSaver investors, for whatever reason, did not have the necessary information to make rational decisions that adhered to their principles. However, as they do not seem to be looking to increase their active participation in the market, rather than demand for the information imbalance to be addressed, they are simply looking for a provider that can guarantee the level of ethical investment assurance they seek. They are demanding a specific service to be supplied.

Yes, this might result in more KiwiSaver providers putting in place more ethical investment portfolios, but if the rhetoric in the OECD documents examined is to be believed, markets are increasingly sophisticated. More importantly, the reality of ethical investments is more complicated than simply not investing in ‘A1 Munitions Manufacturing’. With commonplace financial products like index funds routinely used as part of more conservative passive fund management plans (Folger, n.d.) it is easy to see how keeping to even basic mutual fund packages might have some grey areas when it comes to precise knowledge of where investments might be going at any given time. (Index funds are funds that are linked to a market index. For example, in the United States, the three main indices are the Dow, S&P and the Nasdaq; in New Zealand, the main index is the NZX 50. These indices track the stocks from certain areas of the financial market to gauge how the market is performing. An index fund is one that invests in the stocks of the companies within its chosen index, following the ebbs and flows within that index [Folger, n.d.]). Even for an actively managed fund to be able to guarantee all investments are ethical with regard to munitions, it would require those active managers to know not just the products and services offered by every single company they might invest in, but also, depending on the extent of people’s ethical considerations, whether those companies supply other companies with parts or services that may be used in the manufacture of munitions. With munitions manufacturers having company names like BAE Systems, General Dynamics, Finmeccanica, and Raytheon (24/7 Wall St, 2012) they are hardly announcing themselves as munitions manufacturers, and knowing which companies supply parts and services to them is even more opaque. As the OECD documents have pointed out, the financial marketplace is a difficult thing to regulate due to its argued sophistication; however, if those coming up with the sophisticated products and those presumably more specifically educated to manage funds using those products have difficulties keeping up with changes or obtaining relevant information at any given time, what chance does the average KiwiSaver investor have trying to ascertain which type of fund aligns with their moral compass?

‘Bad’ Financial Market

Some of those tweeting went a little further than questioning the ethics of government or fund provider and saw munitions investments as symptomatic of a flawed system and unregulated financial markets, framing financial markets themselves as wholly devoid of moral or ethical guidance, as can be seen from the following tweets:

> Alex Hotere-Barnes @HotereBarnes 18 Aug 2016
>
> @mojomathers this is what happens when markets are privileged over regulation - violence with political impunity ☹

Morgan @Morgan_Jones 18 Aug 2016

@matthewjpb @pitakakariki Personally I'd want to see munitions manufacturers/suppliers on that register, but democracy decides in the end.

Morgan @Morgan_Jones 18 Aug 2016

@matthewjpb @pitakakariki Needs to be such a system though. Leaving it to market disclosure is insufficient/immoral, as we've seen.

Sir Stephanie @bootstheory 18 Aug 2016

It's 100% shifting blame from the amoral black soul of the financial sector to start accusing normal citizens of "not really caring

In these tweets, the amoral financial marketplace takes on a kind of nebulous quality. There are no decision-making human beings emerging from the murk; the market itself is the decision-maker. Where the OECD documents outline images of sophistication and finely tuned operations that require limited intervention from human beings, particularly financially illiterate ones, they are minting the other side to the same coin discussed in these tweets. In both the OECD documents and these tweets there is a certain imprecision to the financial marketplace, an obscurity in how it is portrayed, yet where one sees a finely tuned machine working to create wealth emerging from the haze, the other sees more malevolent forms.

In the OECD documents, with the almost backstory-less genesis of sophisticated financial tools leading to a sophisticated marketplace, the marketplace again seems to take on a nebulous quality. From the OECD viewpoint the highly responsive, seemingly spontaneously evolving sophisticated financial space that requires minimal intervention is cast as a positive thing to be nurtured. Yet in these tweets, it is easy to see how the same idea of sophistication with minimal intervention may also be at the root of the contrasting negative view.

In these tweets, perhaps more revealing than the proposed notion that the market has an "amoral black soul" is the notion that it is sentient enough to have a form of morality at all. This anthropomorphism of the financial marketplace reveals that for some the marketplace is not a sophisticated machine that churns away, processing whatever is input, mechanically producing results. In bemoaning the lack of morality in the financial marketplace these tweets are also indicating that a level of morality is expected. Here, the market can commit violence and have a soul and while Alex Hotere-Barnes @HotereBarnes may note that via certain political freedoms the market has no accountability, accountability is tied to notions of choice that rest in the shadows of these human traits assigned to the financial market. If you can be immoral or in possession of an “amoral black soul” then you can be held responsible for the choices you make. In these tweets, there is an underlying demand for this anthropomorphised financial market to be held accountable or better regulated. For AlexHotere-Barnes@HotereBarnes the financial market has unfair protections. More than this, it is not simply allowing investments into companies that manufacture munitions, it is somehow the genesis of violence that is essentially unchecked. Here, the solution is seen to be more regulation. For Morgan@Morgan_Jones, the financial market, when left to its own devices will not disclose appropriate information but will make immoral decisions – hence choices need to be curtailed via a register. For Sir Stephanie@bootstheory the financial sector is at fault because it is depicted as unjustly trying to shift blame to “normal citizens” and, therefore, is also accountable. In each of these cases, the financial marketplace is untrustworthy. It is not a benign, sophisticated entity working for the greater good.

As noted, this is very unlike the view of the financial market put forward by the OECD documents. The genesis of the idea that the financial market is a dangerous, unlawful place or entity falls beyond the boundaries of my research, but this view of the financial market is certainly not new and not unique to the Twitter munitions discussion. This view most fervently represented in these tweets and more subtly seen in many of the tweets already discussed shows that – in the Twitter storm around KiwiSaver munitions, at least – the OECD framing of the financial market, a framing very much informed by neoliberal economic theory, has not carried through intact to all members of the general population.

Complex Markets

However, not all tweeters who criticised the financial marketplace saw financial markets as singular, nebulous entities possessing an amoral soul. Some, like Daggett Ghostchips @orinococd, noted distrust of both the free market system and those working within it:

> Daggett Ghostchips @orinococd 18 Aug 2016
>
> Replying to @five15design
>
> Yep, the free market forces come into their own again. We never learn, esp when a suit says *trust me*

Others, like `   b @jellymeatheart, perceived those operating within the system as being deliberately deceitful:

> `   b @jellymeatheart 18 Aug 2016
>
> Replying to @_writehanded_
>
> fault and we have all been TRICKED into being complicit in something unforgivable. Don't judge yourself for other's sins x

Here again the question of responsibility is raised, with `   b @jellymeatheart indicating a belief that responsibility for investments in munitions does not lie with the individual investor, something that tweeter Simon @simonpnz reiterated while noting that people working within the investment companies must have been responsible. In the specific tweets that follow Graeme Edgeler @GraemeEdgeler responds to Simon@simonpnz's tweets focused on responsibility with a comment that queries just how much can be known about other companies:

> Simon @simonpnz 18 Aug 2016
>
> @GraemeEdgeler I suspect you were more asking "are you in favour of prosecuting individual investors" and the answer is no, but someone at
>
> Simon @simonpnz 18 Aug 2016
>
> @GraemeEdgeler each of the companies was making investment decisions, and should have known the applicable laws.
>
> Graeme Edgeler @GraemeEdgeler 18 Aug 2016
>
> @simonpnz question is really: did they know what the company did. Maybe they didn't look particularly closely for that type of stuff.

Here, Graeme Edgeler @GraemeEdgeler touches on an idea raised by others tweeting at this time, one that is brought up often in OECD documents and has been discussed in this research before: that financial markets are complex and difficult to navigate around.

For Simon@simonpnz and Graeme Edgeler @GraemeEdgeler, the financial literacy of the individual KiwiSaver investor does not even come into play; it is the knowledge of those making the investment decisions that is the more significant concern. In a framing that is repeated in various tweets analysed, the question of responsibility lies more with the investment companies than with the individual investor. The requisite knowledge for decisions like which funds are appropriately ethical is seen here to be beyond the scope of the individual investor, but fundamental for those responsible for making those investment decisions; they “should have known the applicable laws” (Simon @simonpnz). From this point of view, when it comes to ethical investments, claims like “better educated citizens can also implicitly help in monitoring markets through their own decisions, and thus complement prudential supervision” (OECDe, p.8) gain no traction. What the tweets of this ilk might be enacting is that better-*informed* citizens can *demand* more prudential supervision, but the type of financial literacy necessary for that prudential supervision is seen to lie purely at an expert level. In pointing out that those responsible for the investment decisions might not have known what the individual companies being invested in did, Graeme Edgeler @GraemeEdgeler is implying that even for those with more expert levels of financial literacy, there is an envisaged problem with information accessibility. In the particular instance of KiwiSaver investments in munitions, not only is it bearing out that there is a demand for more clarity around the expected financial knowledge of KiwiSaver providers and investors, but through points of conflict with claims made by the OECD documents, it is highlighting an important difference between being financially educated and being appropriately informed. While the OECD may present financial literacy as a pseudo market regulator, with tweets like these indicating there are questions around whether even the perceived experts have the necessary information to make educated financial decisions, the drive for financial literacy in the general populace in relation to financial markets appears more like a vehicle through which responsibility can be divested and deregulation justified than a genuine push for something that will improve the lives of New Zealanders interacting with financial markets. What Graeme Edgeler @GraemeEdgeler is pointing to is if those with expert financial knowledge are unable to make informed decisions, what chance does the general public have?

In the Twitter exchange between Simon @simonpnz and Graeme Edgeler @GraemeEdgeler – and echoed in other tweets – there is an indication that there are complexities to the notion of financial literacy that the OECD framing does not take into account. The KiwiSaver munitions discussion as a whole shows that the simplistic vision of the capabilities of a financially literate populace presented by the OECD documents is problematic. Perhaps the OECD outline of financial literacy should be viewed as a simple placeholder for a more detailed discussion to be had at a more granular level. However, even as a placeholder, it is problematic. Quite simply, the OECD outline of the capabilities of a financially literate populace does not work as a placeholder, as it is flawed. It is based on the assumption that pertinent information is readily available. For financially literate people to be able to act as pseudo market supervisors that lighten the load of those required to monitor the market (OECDi, p. 67), they would need to have access to pertinent information that, in the case of the munitions uproar, did not seem to be available to those with greater financial education and presumably more ease of access to mechanisms that might be able to provide that information. Indeed, this goes deeper than even information asymmetry.

Returning to the various definitions of financial literacy considered in the literature review, even in relation to Vitt's more detailed definition of financial literacy, where those who are financially literate need to be able to "discern financial choices" (Vitt as cited in Huston YR, p.311), that ability to discern requires both knowledge of what an appropriate choice might be and accurate information relevant to the choices on offer. Viewed in relation to the New Zealand Strategy for Financial Literacy definition that financial literacy is "the ability to make informed judgements" (YR, p.3), it appears that in relation to this definition, even the experts managing those KiwiSaver funds might not meet the requirements for being financially literate. Indeed, even the OECD's own definition of financial education notes that via the process of financial education individuals "develop the skills … to make informed choices" (OECD, 2005, p.26), acknowledging the importance of pertinent information in that decision-making process.

Certainly, one of the problems for the drive for financial literacy highlighted by the KiwiSaver munitions uproar is that environments without the necessary information flows render even more advanced levels of financial literacy almost ineffective. When this is put in relation to the work of Akerlof, Spence, and Stiglitz (Löfgren, Persson, & Weibull, 2002), pioneers in market theory regarding asymmetric information, the notion of the responsible, financially literate individual operating within the financial market becomes even more complicated. Key to claims made about asymmetric information is the idea that markets typically do not operate with perfect flows of information. Via a large variety of examples in what is considered one of his more important papers, Akerlof (1970) details various ways information asymmetry can be seen in the market and the far-reaching ramifications of this. To sum up the issues with information asymmetry, he concludes, "the difficulty of distinguishing good quality from bad is inherent in the business world; this may indeed explain many economic institutions and may in fact be one of the more important aspects of uncertainty" (Akerlof, 1970, p.500). As a measure to counteract this uncertainty brought about by information asymmetry, Akerlof states, "in some cases, governmental intervention may increase the welfare of all parties" (1970, p.488). Here, Akerlof does not even raise the prospect of increasing the education of those taking part in these markets, as it is clear from his argument that this is not a question of whether someone knows how, say, interest works, but, rather, a question of whether they have been given the right information to apply their knowledge about how interest works.

In the OECD documents and NZ government documents examined, financially literate people are framed as those able to make informed choices, but any questions that might arise regarding where that information comes from are overshadowed by rhetoric that works to responsibilise the individual. In the case of the KiwiSaver munitions uproar, pertinent information would logically include lists detailing where, exactly, KiwiSaver funds are invested. The easiest-to-access information that goes some way to detailing where funds are going can be obtained from quarterly fund updates or annual disclosure statements, available to download from the websites of most, if not all, KiwiSaver providers. These documents include lists of the top 10 investments for the different KiwiSaver fund types that that particular provider offers, but that is just the top 10 in a long list that might potentially include hundreds. In addition to this, that top 10 may also represent no more than 10% of the total funds invested. Finding out where the remaining 90+% is invested is a much more difficult task. When the discussion regarding KiwiSaver and munitions first began, full lists detailing all the different entities the funds invested in during the previous financial year could, for some providers, be obtained with relative ease, albeit via downloadable Excel files buried at the end of confusing pathways of links on different provider sites. As of 2019, detailed lists are still obtainable, sometimes via downloadable files buried at the end of confusing pathways of links (AMP), sometimes via links attached to annual disclosure reports (ASB), and sometimes as separate, unlinked information (Westpac's "Portfolio Holdings"), but only on four of the then nine default providers' websites. For example, on the ANZ KiwiSaver website detailing investments in a growth fund, under the heading "What does the fund invest in?" the following is the only information provided:

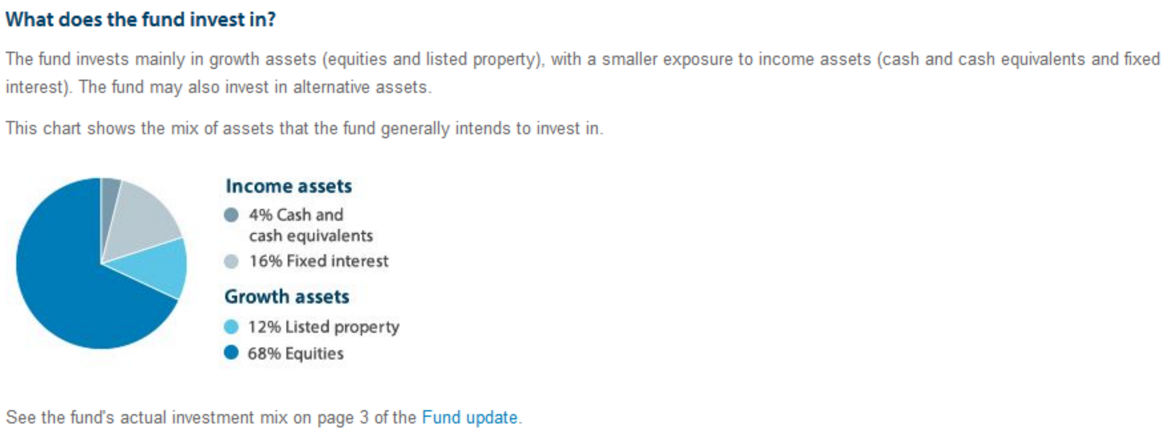

Figure 3: What does the fund invest in? (ANZ, 2019, futurewise.anz.co.nz)

If you then click on the link in the final sentence "See the fund's actual investment mix on page 3 of the Fund update" you are taken to a site with links for downloads of the quarterly updates, each of which provide the names of only the top 10 investments and no further indication of how information regarding the remaining investments can be obtained. This is not peculiar to ANZ. The link for a more detailed list of investors on the annual disclosure statements on the Kiwi Wealth website, at the time of writing, takes you back to Kiwi Wealth website's main page. While full portfolio holdings lists/ annual data files (the two most commonly found names used by providers for full investment lists) could be found in six of the nine default KiwiSaver providers, for a search undertaken in April of 2019, the most recent information available on two of the provider sites (BNZ and Fisher Funds) was for the 2016 financial year.

In a search for more accessible information, in the downloadable annual reports from the different providers the final pages of the reports universally have a section under a heading along the lines of “Further information” that indicates that further information is readily available from the Disclose register, which can be found at disclose-register.companiesoffice.govt.nz. For those searching full lists, this would seem a logical place to find full investments lists without too much effort. Indeed, upon following that link, readers are taken to the Disclose Register site where they are able pull up a variety of information, from annual reports to financial statements, submitted by the various KiwiSaver scheme providers; however, none of the information directly provides full investment lists.

Further complicating the search for information, and as discussed earlier, even if full lists were easy to obtain, an individual looking to ensure their funds were invested ethically would still have more digging to do, as company names do not often announce what that company does, let alone which other companies it provides goods or services for. However, even this is not the full extent of the problem; many of the investments are themselves in even further diversified funds provided by other investment companies (FMA, 2018). Finding where investments go for the likes of Vanguard, Platinum International Fund, or Magellan Global Fund – to name just three of the many investment funds used by KiwiSaver fund providers (FMA, 2018) – might simply require a visit to a website that provides a comprehensive list of the different holdings (under company names that might not mean anything), but it might also require knowing what type of fund the money has been placed in. From there, the information seeker might be able to obtain a quarterly report or an annual disclosure statement – documents that might only detail the top 10 investment holdings (some of which might be with other diversified fund providers). In light of this complicated, Lewis Caroll-ish information hole, tweets questioning whether KiwiSaver providers themselves (let alone individual KiwiSaver investors) knew where investments were going seem justifiable and claims that ethical investment on the part of the individual KiwiSaver investor simply requires people to ‘do their homework’ seem absurd.

That many of the investments made by KiwiSaver providers are themselves at times invested in other investment fund providers seems an oddity in itself. Those funds will have their own management fees, adding another layer of management that decreases investment returns. While funds investing in other funds that are themselves diversified appears to be a fast track to a more diversified portfolio, a fund doing this via another fund seems to defeat the diversification purpose (and be an exercise in ticket-clipping, especially if some of those funds are also themselves investing in other funds). Yes, the metaphorical eggs are still being placed in multiple baskets, but here, those baskets are all being carried by the same bunny. Indeed, in a possibly extreme example of an outlier case, the BNZ 2016 Annual Disclosure Report for its KiwiSaver Conservative fund (BNZ, n.d.) indicated that 100% of the funds for the year of disclosure were invested in just six places, five of the six themselves investment funds and four of those five connected to either Russell Global or Russell investments, parts of an umbrella company that provides investment services for defined contribution plans. This raises many questions, many of which are not within the remit of this research. However, if understanding of diversification is one of the 'big 3' measures of financial literacy touted by those promoting it (Lusardi & Mitchell, 2011), why is a default KiwiSaver provider – a company that presumably holds default status due to its expertise, experience and extra safeguards – outsourcing much of its investments in its Conservative fund to one umbrella entity? What is the financially literate individual to make of this (if they managed to obtain this information in the first place)?

When it comes to ensuring the individual KiwiSaver investor has access to relevant information when deciding which KiwiSaver provider to go with, the government's KiwiSaver (Periodic Disclosure) Regulations 2013 set out clear reporting guidelines. In particular, they state, "the annual disclosure statement's data file must include a complete list of individual assets of the KiwiSaver fund and related underlying funds" (KiwiSaver [Periodic Disclosure] Regulations 2013, cl 28), adding later that these disclosure statements "must be publicly available" (cl 42), defining 'publicly available' as

> … free of charge, --
>
> (a) on an Internet site maintained by, or on behalf of, the manager of the KiwiSaver scheme for the fund in a way that ensures –
>
> (i) that the disclosure statement or information, or a link to the disclosure statement or information, is prominently displayed on the site; and
>
> (j) that members of the public can easily access the statement or information via the site at all reasonable times. (cl 6)

Clearly those crafting these regulations determined that this level of information and availability is important for those making decisions about which KiwiSaver provider and fund to invest with, which makes it curious why some of this information is still so difficult to find and why finding it does not necessarily make the seeker any more informed.

The KiwiSaver munitions uproar and subsequent Twitter discussions shown here that touch on notions of responsibility and financial literacy work to highlight that the kind of financial education discussed by the OECD, the kind deemed as having the potential to act as a regulating force in financial markets (OECDe) also requires the investing public to have access to pertinent financial information. Without it, those who are financially literate are in the same position as those who are not, or, in standard literacy terms – whether you are able to read a book or analyse and make decisions based on the information in that book ultimately counts for nothing if there are no books. While the push for the type of financial literacy as framed by the OECD has gone hand in hand with the push for defined contribution plans, placing the focus on the individual and their responsibilities when providing for themselves post-retirement, the complexities surrounding financial literacy in relation to investment in the financial marketplace indicate that while the education might be focused on highlighting why it is deemed important for people to place their money in diversified funds like KiwiSaver, the asymmetry of the information available means there are limits to how much that education will enable the financially literate to do.

The Twitter exchanges of Simon @simonpnz, Graeme Edgeler @GraemeEdgeler and the like show that those involved are not so much rebuking or railing against the type of framing of the financially literate endorsed by the OECD documents, but rather, they are renouncing the level of responsibility assigned to the financially literate. Indeed, the revelations of and reactions to the KiwiSaver munitions discussion show that the type of framing of the financially literate individual's capabilities seen in the OECD documents is simplistic.

Some of the tweets discussing aspects of financial education mirror the seemingly contradictory claims seen in the OECD documents that the financial markets are complex and constantly innovating and, therefore, best left alone, while also being static and sufficiently predictable to be knowable enough to educate individuals in how best to navigate them. For example, in the following exchange AnneliseJoy @AnneliseJoy portrays the process of avoiding investment in munitions as a simple one: motivate self to research providers, and choose accordingly. As can be seen, she starts off the exchange with a very blunt tone, blaming those who are complaining about having KiwiSaver investments in munitions for not getting themselves educated enough to choose providers appropriately.

> AnneliseJoy @AnneliseJoy
>
> Maybe it's because I'm self-employed but I made my Kiwisaver choice carefully after research. Everyone should! No excuses. It's your money!
>
> 7:28 PM - 18 Aug 2016

Here, AnneliseJoy @ AnneliseJoy reveals a belief in the process as being straightforward and the preservation of money itself as sufficient motivation to undertake this research. The premise being presented seems to be that if you care about your money, you will research where you invest it. There is no mention of who provides the information researched or how easily accessible that information is. What follows that initial tweet is an exchange with Ngati Pakeha Kuia @ carol_stirling that tempers the tone of AnneliseJoy @AnneliseJoy's tweets:

> Ngati Pakeha Kuia @carol_stirling 18 Aug 2016
>
> Replying to @AnneliseJoy

I think most kiwis are not educated in how to invest. This kind of investment is relatively new to most of us.

AnneliseJoy @AnneliseJoy 18 Aug 2016

Yes, more education. I knew nothing & am self-employed, so had to start from scratch. Too many don't have time or literacy.

Ngati Pakeha Kuia @carol_stirling 18 Aug 2016

I haven't got a clue about stocks and shares. I think it's like a Giant Casino running on rumours and innuendo.

AnneliseJoy @AnneliseJoy 18 Aug 2016

Neither do I but I was privileged enough to have the time, resources and education to do some research before I chose a fund

By pointing out possible complexities AnneliseJoy @AnneliseJoy's initial tweet elide, Ngati Pakeha Kuia @carol_stirling elicits a change of tone. AnneliseJoy @AnneliseJoy shifts from saying there are no excuses for un-researched investments to acknowledging that lack of time or literacy may be an excuse -- that those who have "time, resources and education" are in a privileged position. This has gone from a position very firmly advocating personal responsibility in financial investments to one that is tempered and recognises complications. Interestingly, AnneliseJoy@AnneliseJoy's original position more closely aligns with much of the OECD documents' framing of financial literacy and its capabilities: something empowering that enables more successful navigation of the financial marketplace. Through this exchange, AnneliseJoy@AnneliseJoy, with very little prompting, reframes her position, acknowledging the role certain variables play in a person's ability to make informed decisions about KiwiSaver. Where some tweet clusters offer examples of individuals educating one another on various aspects of KiwiSaver and investments (providing the exception to the norm, as Murthy [2018] asserts that microblogs like tweets are used more for quick reflections and blogs are used to educate or provide knowledge), this one highlights how these types of interaction can also provide subtle encouragement to consider issues that might complicate the idea that informed financial decisions are the product of financial education. This is not a Twitter argument between the types of polarised individuals Garimella, Morales, Gionis and Mathioudakis (2018) discuss, even though the topic itself has proven particularly polarising in light of other of the tweets analysed. Rather, it is an exchange between two individuals who are open to considering each other's comments. The unsolicited position AnneliseJoy@AnneliseJoy arrives at by the end of this Twitter exchange is one that notes she was able to make an informed choice about her KiwiSaver investments not simply because she was educated (an earlier tweet shown in the example frames this education as financial), but because she also had the time and resources to research appropriate funds. For AnneliseJoy@AnneliseJoy in the last of her tweets here, she is acknowledging that making these decisions appropriately requires more than financial literacy; it requires the time and ability to attain the relevant information.

Education/ Knowledge

For others, however, financial literacy alone is seen as being all that is needed to enable understanding of the ways and places in which KiwiSaver providers invest. An example of this can be seen in the following tweet:

> Hamish McConnochie @mishviews
>
> The fact that people are surprised and shocked about investment allocations of NZ's KiwiSaver providers shows how poor financial literacy is

The reasoning in this tweet is very clear – if you are financially literate you will know where your KiwiSaver funds are invested. What is not clear from Hamish McConnochie @mishviews' tweet is whether he expects the financially literate individual to be educated to expect any KiwiSaver investment allocation to potentially be in unethical funds (because of their knowledge of the nature of the type of investment fund KiwiSaver providers have set up), or whether he expects that they have been educated to know how to find the pertinent information that tells them where their investments are allocated or some variation of this. Admittedly, in single tweets like this, the discussion cannot be complex; however, this type of generalisation and simplification of the effect of financial literacy is also seen in the significantly longer OECD documents. In many of the OECD documents analysed, but perhaps clearest in Yoong's (2011) OECD symposium article linking behavioural economics to financial literacy, this type of framing is evident, with claims that financial literacy will "increase demand for financial products, build competitiveness, promote market transparency and increase efficiency" (OECDi, 2011, p.67) amongst a list of many others, without further elaboration of how and what types of financial literacy might enable this varied range of results. More detail cannot really be expected in character-limited tweets; however, in the OECD documents at least, a precedent has been set for the term 'financial literacy' to serve as a catch-all for a wide range of financial knowledge and competencies.

When trying to advocate for any societal change, it is convenient to paint a simplistic picture that draws a straight line between two points (in this case financial literacy and more informed and therefore better decision making), but paradoxically, in this situation, those with higher levels of financial literacy are those who know enough of how many investment funds are set up to also recognise that the act of getting the necessary information to make timely, educated decisions can be faced with significant difficulties. To take an example used earlier, if even the smallest percentage of the investment fund is with an index fund, almost constant monitoring would be needed to ensure munitions manufacturers and the like are avoided. Indeed, this is a point made in different ways by Lane Hannah @hereandthere in the following single tweet and by GiovanniTisoVerified account @gtiso in the twitter exchange that follows:

> Lane Hannah @hereandthere
>
> Many kiwisaver providers just push money into index trackers. So by default they end up in some dubious shit...
>
> 10:25 PM - 18 Aug 2016

> Ross Marks @ross_marks 18 Aug 2016
>
> @EricCrampton All this involves 0.5% of funds. Firms are diversified, so this involves maybe 0.1% of funds max in dodgy areas #kiwisaver

> Giovanni TisoVerified account @gtiso
>
> This drongo thinks it's up to us to find out if a KiwiSaver provider holds stock in black listed companies. How, by phoning them every day?
>
> 6:48 PM - 18 Aug 2016

While these tweets pointedly refer to the difficulties associated with tracking investments in index funds, as Stock (2015, August 23) indicated in his original article about KiwiSaver funds and munitions investments, being able to identify whether a fund has ethical investments is rife with complexities that go far beyond the ebbs and flows of index trackers. Stock (2015, August 23) and these tweets highlight that these sophisticated financial tools and the complexities in the financial market itself make it difficult for even those who might be considered advanced in their financial education and literacy to access the types of information necessary to make informed decisions. In some ways, this is not the traditional idea of information asymmetry where the principal lacks the knowledge that the agent has; rather, it is a sort of asymmetry that might be expected to arise when market sophistication and complexity is nurtured and exalted, leaving both the principal and the agent on the wanting side of the information divide.

Another theme linked to knowledge and the sharing of information emerging from the collated tweets was a desire to have others within the Twittersphere provide advice and education. Some were non-specific in who they were asking for advice, like Give it up @olderhooligan63, who tweeted

> How can I get out of KiwiSaver ? I do not support these companies who are making profits out of war ! #SoAngry
>
> 2:05 PM - 18 Aug 2016 from Hastings District, New Zealand

Others, like Melanie D. @melulater, were more specific, but held off asking fund providers themselves, as can be seen in the following:

> Melanie D. @melulater 18 Aug 2016
>
> @KevinHague @VickyBriscoe2 how do we get a list of companies who are investing in cluster bombs and fossil fuels?

Still others appealed directly to their fund providers for information:

> Brooke No Nonsense @BrookeNoNonsens
>
> @KiwibankNZ hey kiwibank, concerned consumer would like to know what you're investing my KiwiSaver funds in.
>
> 2:26 PM - 18 Aug 2016

And in some cases, government officials stepped in to provide information:

> Felix Marwick @felixmarwick
>
> Finance Minister says onus is on consumers to determine how their KiwiSaver funds are invested
>
> 3:36 PM - 18 Aug 2016

> Felix Marwick @felixmarwick 18 Aug 2016
>
> Meanwhile Labour's @grantrobertson1 says law allows the minister to set terms & conditions for fund providers
>
> Grant Robertson @grantrobertson1 18 Aug 2016
>
> @felixmarwick section 132(2) of the Kiwisaver Act to be precise ;-)

Again, in a refutation of the idea that the types of microblogging service like Twitter serve primarily as a tool for quick reflections, these tweets reveal discourse centred around information seeking and sharing. Indeed, the types of information shared here even challenge Murthy's (2018) discussion regarding Twitter's inability to lend itself to in-depth understanding of issues. While the exchanges are certainly brief, they are presenting pertinent information concisely. An argument is put forward and then the other side is presented, with the person mentioned in that Tweet (in this case Grant Robertson @grantrobertson1) tweeting back relevant details to support his claims. What is played out here is the shifting dynamic Zappavigna (2012) discusses when noting the increasing importance placed on social bonds when seeking information. With the exception of Brooke No Nonsense @BrookeNoNonsens, those posing the questions in these tweets are looking to their social connections on Twitter to provide answers.

Brooke No Nonsense @BrookeNoNonsens' post, while superficially framed as a question, is not primarily intended to request information about where her specific KiwiSaver funds are invested. Although she has addressed her post directly to KiwiBank by using the KiwiBank username, the post is a public one that will go into the feed of those who follow her. To answer that question, the bank would need personal details that presumably Brooke No Nonsense @BrookeNoNonsens would be unwilling to share over such a public forum. This is not about getting those specific details and more about registering awareness and discontent. Here, the individual is using the public space to openly make demands of an entity that traditionally has more power. This is social action on an individual scale. While the tweet is ostensibly asking where funds are invested, the tone clearly indicates that Brooke No Nonsense @BrookeNoNonses does not see the potential of her funds being invested in munitions as any fault of her own. Financial literacy plays no role in this tweet. Brooke No Nonsense @BrookeNoNonsens is not asking where her funds are invested to make a better-informed financial decision; she has highlighted her role as a consumer, effectively neon-lighting that she sees this as a consumer rights issue. KiwiBank has provided her with a product that she is concerned may be faulty. In a different angle to an approach seen many times in various KiwiSaver munitions tweets, Brooke No Nonsense @BrookeNoNonsens' tweet and those of journalist Felix Marwick @felixmarwick and then opposition party member Grant Robertson @grantrobertson1 circumvent any discussion about what individual responsibilities as a financial subject might be, focusing instead on the responsibilities of the banks and government.

A similar circumvention of discussions regarding individual responsibility can be seen in two Twitter threads below, which focus instead on information sharing, stemming from the same question posed in a tweet by then Green party MP Julie Anne Genter.

Julie Anne Genter @JulieAnneGenter

If it's not Govt's responsibility to ensure default KiwiSaver finds are legally invested who's is it? @PaulGoldsmithMP can't tell us. #nzqt

Graeme Edgeler @GraemeEdgeler 18 Aug 2016

.@JulieAnneGenter @PaulGoldsmithMP the Police and the Courts, with the consent of the Attorney-General.

Julie Anne Genter @JulieAnneGenter 18 Aug 2016

@GraemeEdgeler @PaulGoldsmithMP yes but surely this is a compliance check that govt could easily do before nominating default providers

Graeme Edgeler @GraemeEdgeler 18 Aug 2016

@JulieAnneGenter @PaulGoldsmithMP crimes are usually prosecuted, not compliance-checked, but I see no reason why not.

And,

Julie Anne Genter @JulieAnneGenter 18 Aug 2016

If it's not Govt's responsibility to ensure default KiwiSaver finds are legally invested who's is it? @PaulGoldsmithMP can't tell us. #nzqt

korben dallas @sHr0oMaN 18 Aug 2016

@JulieAnneGenter @PaulGoldsmithMP @nzben Is that not perhaps the FInancial Markets Authority's job?

Phil Wheeler @Phil_Wheeler 18 Aug 2016

@sHr0oMaN @JulieAnneGenter @PaulGoldsmithMP @nzben No, because the Authority will only operate within the legal framework in place.

Julie Anne Genter @JulieAnneGenter 18 Aug 2016

@Phil_Wheeler @sHr0oMaN @PaulGoldsmithMP @nzben yes but in case of cluster munitions, it may actually also be illegal. As well as immoral.

korben dallas @sHr0oMaN 18 Aug 2016

@JulieAnneGenter @Phil_Wheeler If illegal then hit it with a stick, immoral is more an ethical decision best not left to the politicians

Julie Anne Genter @JulieAnneGenter

@sHr0oMaN @Phil_Wheeler NZ Superfund already had clear exclusions. Why not use same for default KiwiSaver providers?

4:29 PM - 18 Aug 2016

Perhaps an indication of the political leanings of those connected to the same Twitter networks as Genter, these tweets once again highlight, in their lack of discussion of any individual responsibilities and their focus on complexities inherent in ensuring legal and ethical investment, how for some the financially literate subject has no role to play in ensuring their KiwiSaver funds are invested ethically. Genter's original tweet sets the issue out as a legal one and both discussions follow that line of thinking. The lack of alternative viewpoint arguing that KiwiSaver munitions investments are not a legal matter might give these discussions the look of an echo chamber; however, these are not partisan viewpoints being vehemently defended, but searching queries eliciting further searching queries. The participants here are pointing out nuance in the legalities tied to KiwiSaver investments in munitions; they are looking beyond blanket claims of individual investors needing to do due diligence and highlighting complexities within the KiwiSaver regulatory framework.

An example of a discussion thread that politically veers the other way can be seen in the following connected posts by Ambassador Satan @AmbassadorSatan and the linked Twitter discussion after it.

Ambassador Satan @AmbassadorSatan

1) Apparently I need to change my Kiwisaver scheme to invest in weaponry. I expect pretty good profit margins there. #kiwisaver

4:35 PM - 18 Aug 2016

Ambassador Satan @AmbassadorSatan 18 Aug 2016

2) Although the government has made directions for the nature of investments made via Kiwisaver

Ambassador Satan @AmbassadorSatan 18 Aug 2016

3) (i.e. a certain percentage of funds must be invested in New Zealand) it's not its job to ensure or know what the investments are.

Ambassador Satan @AmbassadorSatan 18 Aug 2016

4) The job of policing the law around investments through New Zealand investment funds sits with the police and the courts.

Ambassador Satan @AmbassadorSatan 18 Aug 2016

5) Statistics on the number of funds acting in breach of the law are unlikely to be held w/out some form of legal/investigative action taken

Ambassador Satan @AmbassadorSatan 18 Aug 2016

6) In likelihood, only once funds were found to be in breach would there be accurate statistics.

Ambassador Satan @AmbassadorSatan 18 Aug 2016

7) And if they're not in breach of any law then who's business is it but the individual investor as to what they are investing in?

Ambassador Satan @AmbassadorSatan 18 Aug 2016

8) If the investor has a problem with their investment they should have checked before investing and they can move their investments anyway.

Matthew Proctor @mproctornz 24 Aug 2016

@AmbassadorSatan The particular shares held by your investment fund change regularly and without notice. Many would care but not know

Mitchell Heslip @Heslip1994 18 Aug 2016

@AmbassadorSatan there must be a boutique #Kiwisaver unethical investment fund lurking somewhere.

Ambassador Satan @AmbassadorSatan 18 Aug 2016

@Heslip1994 There's a list of unethical #Kiwisaver funds the government's hiding because that's how it works, right?

Mitchell Heslip @Heslip1994 18 Aug 2016

@AmbassadorSatan probably. It's kept in the Lair of Market forces where all diabolical acts, marginal evil > marginal good, r directed from

Here one person is making multiple linked tweets, presumably with the intention to better inform his or her followers; however, while the posts could feasibly be considered tongue-in-cheek – given the name of the tweeter and the final exchange with Mitchell Heslip @Heslip1994 – they advocate personal responsibility when deciding on a KiwiSaver provider. Yet this personal responsibility, even in this twitter thread that places value on profit over ethics, is framed as coming into play after the safeguard of the police and courts presumably monitoring the legality of KiwiSaver investments. For Ambassador Satan @AmbassadorSatan, if investors have concerns beyond legality, then they are responsible for following up on those concerns, but it is up to the police and courts to decide whether KiwiSaver investments are legal. Certainly, Ambassador Satan @AmbassadorSatan overlooks the points initially raised by Stock (2015, August 23) that some of the investments made by KiwiSaver fund providers are avoided by the Superfund because of the laws surrounding investments in munitions. However, what is more fundamental and missing from Ambassador Satan @AmbassadorSatan's thread of tweets is the notion of the individual with agency being involved in a democratic process that helps formulate those types of laws. For Ambassador Satan @AmbassadorSatan, the roles of each of the players are firmly in place; the markets make money; existing laws put parameters up for how that money can be made; the police and courts make sure the laws are adhered to; government sets the terms of operation for KiwiSaver, and the individual researches where their investment goes before they invest. The idea that the individual might demand stricter laws, greater levels of policing, or more regulation of KiwiSaver providers does not enter the conversation. For Ambassador Satan @AmbassadorSatan, the stage is set. The only part the individual is seen to have a role in is investigating which fund suits them best. This separation of the individual from the functioning of these entities is reminiscent of the OECD framing of the financial markets; while they might be nebulous in quality, they are a whole and they are separate from the individual. They exist to make money, and questions of regulation or alteration beyond existing frameworks are not entered into; individuals are responsible for themselves and their forays into the market.

Practical Issues with Being Financially Literate

If knowledge of where KiwiSaver funds are invested is a measure of financial literacy, many of these tweets indicate that the tweeters need further education; however, they also indicate a desire for this type of financial knowledge may be kairotic. Of the tweets collated in the year prior to the munitions uproar, none were requesting further information about how to find out if personal KiwiSaver fund managers had investments in munitions, or, indeed, requesting any further information from others, including KiwiSaver fund providers, about where funds were invested. Until a number of news outlets beyond the original *Herald* article raised it as something people should perhaps be concerned about, little to no concern was shown via tweets. Only once the story had been picked up by multiple news outlets did these types of questions start to be asked on Twitter. Whether this is a case of a bandwagon trundling by is not within the remit of this research; however, a number of those tweeting were clearly both unaware of where their KiwiSaver funds were invested and also unaware of where to get the information that would tell them.

As well as asking questions about whether providers were investing in these types of funds, and where to find this information, people were also turning to Twitter to discuss difficulties they faced when seeking the information out. These conversations tended to reveal that those working for KiwiSaver providers were depicted as either unable to pass on information, or without knowledge of where to find it. The examples of Twitter conversation chains below provide illustrations of this.

> ray clarke @raycaryl 18 Aug 2016
>
> @felixmarwick Frankly would many people know the details of where their Kiwi Saver is Invested?
>
> Felix Marwick @felixmarwick 18 Aug 2016
>
> @raycaryl in the default schemes being identified? probably not many
>
> ray clarke @raycaryl 18 Aug 2016
>
> @felixmarwick Thanks for that Felix.
>
> Ally Bell @altnamackin 18 Aug 2016
>
> @felixmarwick Except I rang @AMP_AU today and they pleaded total ignorance, including having no-one more senior available to help.

> Miss BetseyTrotwood @Suzyiam 18 Aug 2016
>
> #nzqt @PaulGoldsmithMP I have been trying all day to verify exactly what my Kiwisaver funds are invested in & NO ONE can/will tell me.
>
> Miss BetseyTrotwood @Suzyiam 18 Aug 2016
>
> @PaulGoldsmithMP HOw can we make a judgement call, when we cannot get the information abt second tier investments etc.

It is curious that those working for providers, who are by law (KiwiSaver Act, 2016) expected to provide a breakdown of where funds are allocated, might be described as ignorant or unable or unwilling to pass on this information; however, when the likes of index funds are factored in, it is easy to see how they might not have the precise allocations on hand at the time of these random individual queries. As noted earlier, the GiovaniTisoVerified account @gtiso tweet "This drongo thinks it's up to us to find out if a KiwiSaver provider holds stock in black listed companies. How, by phoning them every day?" (6:48PM – 18 Aug 2016) started a discussion that not only outlined the difficulties in even identifying a company that makes munitions, but pinpointed the inconsistencies in the expectation that people should be held responsible for where their KiwiSaver funds are invested while KiwiSaver providers are not regulated in the same way Superannuation funds are and therefore are able to invest in index funds that may, indeed, from time to time include investments in companies that deal in or manufacture munitions. Here is how that tweet chain unfolded:

> Giovanni TisoVerified account @gtiso 18 Aug 2016
>
> Actual people in my timeline reckoning the PM is right. So, we should all know what business all companies are in?
>
> Giovanni TisoVerified account @gtiso 18 Aug 2016
>
> What if a company in the land mine business is called something other than "Smithereens Corp."? What if they're called "Jones & Jones"?
>
> Frodo & Loki's mum @kazmil1
>
> Replying to @gtiso
>
> @LostArcNZ I agree we should all know what we r investing in BUT if it's a default #kiwisaver provider it should be legal & ethical 😟
>
> 7:47 PM - 18 Aug 2016
>
> Alderman Scott Milne @LostArcNZ 18 Aug 2016
>
> Replying to @kazmil1 @gtiso
>
> they potentially change daily too, so keeping up with what a fund invests in is not practical. Needs regulation.

Perhaps highlighting how insufficient a focus on the 'big three' (knowledge of compound interest, inflation, and risk diversification) is when gauging financial literacy – or, rather, how restrictive it is in relation to the varying factors that might affect financial decision making – this exchange shows individuals grappling with expectations of investors' financial knowledge and the availability of information needed to make informed ethical decisions.

Frodo & Loki's mum @kazmil1 believes investors should know where their investments are going, but in stating that default schemes should be legal and ethical, she appears to point to the need for government oversight or at least some sort of regulation to ensure the integrity and legality of those schemes. Here, almost mirroring Bradley's initial article on KiwiSaver investments in munitions, the argument appears to be that if the government makes people invest and has default investment providers set up, then it is responsible for ensuring those providers invest ethically and legally. For Frodo & Loki's mum @kazmil1, it is as if the government-endorsed default KiwiSaver schemes, by dint of being tested and approved, should be a sort of baseline legal and ethical worry-free investment. In this scenario, both the investor and government are active players in investment decision-making, with the government providing forms of investment ‘safe zones,’ so to speak. This depiction fits other representations of the financial marketplace as a kind of wilderness or entity devoid of moral and ethical guidance, a place that would need an external force to ensure the creation of these ‘safe zones,’ or at least a trustworthy entity that clearly demarks where the safe zones are.

Frodo & Loki’s mum @kazmil1 seems to imply a delineation in investment interest or capability between those who might normally invest and those who might not, her comment acting as an acknowledgement of sorts that she perceives default KiwiSaver schemes as made for those who might need a package deal that has removed some of the risks, a deal that has some baseline guarantees. She notes that people should know where their money is invested, but for those who are unfamiliar with investment decision-making, in it by default and therefore perhaps lacking the impetus or knowledge of other schemes and going for default providers, the baseline guarantees should include ethical and legal investments. Not only does this indicate that the interests of some KiwiSaver investors might not simply lie in returns, but in highlighting that ethical and legal funds should be considered the default standard it also draws into question financial literacy education that does not include this regard for ethics and morality. If the baseline – a safe default for the presumably financially illiterate or uninterested – should act as a guarantee of ethical and legal investments, then that implies financial education would include ethical and legal concerns, including the ability to find and decipher the necessary information to gauge how ethical or legal an investment is. However, in the documents reviewed that contain an outline of the content, capabilities, or extent of financial education, ethics play no role and legality is mentioned only in relation to existing or potential government regulation or framed as part of the benefits of having a financial advisor. Certainly, the reviewed documents are not an exhaustive look at all the financial literacy or education documents available, but they are a snapshot of those that appear to have played a role in informing the OECD and subsequently governments looking to put in place government-sanctioned financial education programmes. It should also be noted that there is a difference between the kind of financial literacy education and competencies it enables as discussed in the OECD documents analysed, which are very much focused on financial markets, and the types of financial literacy education provided on the ground through schools and budgeting services.

For the others tweeting in this thread, the difficulties in expecting the investor to take sole responsibility for knowing where their funds are invested are briefly outlined. This is ground covered by others in tweets analysed earlier. As Giovanni TisoVerified account @gtiso points out, this kind of knowledge would require investors to distinguish the business dealings of each entity their investment provider invested in – a difficult task even without taking into account the issue of portfolios that change daily, as pointed out by Alderman Scott Milne @LostArcNZ. Again, the tone of other tweets from this brief thread suggests there is something of a visible push-back against the responsibilisation of the KiwiSaver investor. In highlighting the complexities in financial market information-gathering and sorting, these tweeters are essentially asking how an investor can be held responsible for their investment decisions when the information needed to make those decisions changes regularly and requires detailed knowledge of what different named business entities do.

Indeed, the idea of responsibility and accountability arose from different angles in various tweets. In the following exchange, part of which has already been discussed in relation to what it reveals about the tweeters' views on the complexity of the financial markets, those conversing manage to add a new layer of questioning with each tweet despite Twitter's then 140-character limit, ending with a broader question about accountability.

> Simon @simonpnz
>
> I'm looking forward to the prosecution of the companies and individuals involved, because that will happen, right?
>
> 2:48 PM - 18 Aug 2016
>
> Graeme Edgeler @GraemeEdgeler 18 Aug 2016
>
> @simonpnz are you an individual involved? Where's your kiwisaver money at?
>
> Simon @simonpnz 18 Aug 2016
>
> @GraemeEdgeler ANZ, so not one of the three providers named in the article but I'll still be considering where I keep my money.
>
> Simon @simonpnz 18 Aug 2016
>
> @GraemeEdgeler I suspect you were more asking "are you in favour of prosecuting individual investors" and the answer is no, but someone at
>
> Simon @simonpnz 18 Aug 2016
>
> @GraemeEdgeler each of the companies was making investment decisions, and should have known the applicable laws.

> Graeme Edgeler @GraemeEdgeler 18 Aug 2016
>
> @simonpnz question is really: did they know what the company did. Maybe they didn't look particularly closely for that type of stuff.
>
> Simon @simonpnz 18 Aug 2016
>
> @GraemeEdgeler How far removed do you need to be before ignorance is an acceptable defense? I don't know.

While this discussion starts with Graeme Edgeler @GraemeEdgeler wryly pointing out that those who have KiwiSaver funds in munitions might also be categorised as one of the ‘individuals involved’, Simon @simonpnz’s response overlooks the cynicism, shifting the discussion into a more earnest, serious tone, which Graeme Edgeler @GraemeEdgeler then takes up. In this exchange, despite the cynicism and tongue-in-cheek moments, the tweeters are clearly working through some of the complexities of the KiwiSaver/munitions discussion: when investing on behalf of an individual, where does accountability end? How much should investment companies know about those they are investing in? How far should individual investors or investment companies go to get pertinent information? In a landscape where the dominant language is that of individual responsibility, these are important questions. Although this exchange is brief and ostensibly simple, its many questions on just one angle of the KiwiSaver munitions discussion point to how certain elements of neoliberal economic theory used to inform the shift to defined contribution plans and improved financial literacy do not work well together.

An important part of neoliberal economic theory is the responsibilisation of the individual (Thorsen & Lie, 2006). Part of the process of making the individual financially responsible is educating them both on their need for financial literacy and on the elements considered important for them to be deemed financially literate. It is no coincidence that New Zealand’s drive for the particular type of financial literacy focused on by the OECD coincided with the implementation of KiwiSaver, or that the government entity responsible for retirement is also responsible for financial literacy. To encourage its population to place its funds in the financial markets via a defined contribution fund while simultaneously divesting itself of responsibility for those funds, the government needs to establish the requirement for financial market investment. Again, fitting in with neoliberal economic theory (Harvey, 2011), rather than showing that financial market investment is the best way of accumulating wealth for retirement, the government has positioned it as the only way of doing this, prioritising the role of financial markets when it comes to ensuring the financial wellbeing of the population. To establish this requirement for financial market investment, the government also needs to ensure that individuals see themselves as responsible for meeting certain elements of their financial needs post-retirement. In New Zealand, this played out via KiwiSaver advertisements discussing quality of life after retirement, which also coincided with much discussion via news media about the increasing number of retirees and the decreasing workforce. Part of this is where financial education comes into play.

The first role of financial education is to point out the need for financial education. This in turn is tied to the idea of individual responsibility (we have to be sensible with our money so that we can better provide for ourselves in the future). The push for improved financial literacy is made easier by the ubiquity of personal responsibility rhetoric. A pressure point for financial literacy is when it is used to justify large-scale investment in financial markets. It is difficult to adhere to personal responsibility rhetoric and maintain neoliberal support for minimally regulated financial markets while compelling the working populace to invest in financial markets via KiwiSaver. As evidenced by the Twitter munitions uproar, not all individuals will accept personal responsibility for all aspects of their investment decisions if their involvement in the financial market has been impelled by the government and that market has a certain degree of opacity. If the market is not regulated and policed to ensure the individual is privy to all the information they need to make rational financial decisions, it is difficult to also frame that individual as wholly responsible for their financial choices.

In the previous Twitter exchange, Graeme Edgeler @GraemeEdgeler and Simon @simonpnz are pondering at which point in the investment process individual responsibility is divested. A key problem, as highlighted by many of the tweets discussed, is that the government's hand is seen in many parts of the KiwiSaver process and because of this, in cases like investments in munitions, it can feasibly be viewed as weakening the level of responsibility held by the individual. To get a large portion of the population involved in the defined contribution plan that is KiwiSaver, its blueprint had to be created and sanctioned by the government. Requiring the population to opt-out rather than opt-in to the scheme required certain safeguards to be put in place for those with no knowledge of or interest in KiwiSaver schemes, put in by default. Rules around what was needed for a KiwiSaver provider to be made a default provider were created by the government. In order for a government to encourage a population en masse to enter the financial market and also for that government to divest itself of responsibility for the funds the population is investing, that government also needs to put safeguards in place. Whether or not these investors are financially literate, the points they raise could be assumed to be an important part of the decision-making process when considering investment in KiwiSaver funds.

This thread of tweets and the previous one highlight how complex and complicated expectations surrounding financial knowledge are. It is easy to say that financially literate investors should know where their funds are invested, but obtaining that information might be difficult, even for those working within the system. In this instance, financially literate and illiterate alike are hampered by complex products that shift and change with very little human intervention.

Conclusion

In the OECD documents analysed, while growing concern for the financial burden countries with ageing populations may face in their retirement provisions has consistently served as the primary justification for increased focus on financial literacy levels, the 2008 global financial crisis appeared to mark a change in the rhetoric surrounding the urgency and capabilities of financial literacy. In light of this, the OECD writings that are focused on financial literacy have an unusually large focus on financial markets and issues pertinent to financial markets, rather than the types of financial literacy that might otherwise be deemed important to those without financial security – those facing difficulties meeting their day-to-day financial demands. Reflecting the growing global concern for ageing populations, tight linking of financial literacy to issues tied to retirement funding can also be seen beyond the OECD writings. Indeed, in 1993 an agreement – the Accord on Retirement Income Policies – was drawn up between New Zealand's then main political parties, leading to the development of the Office of the Retirement Commissioner (Preston, 1997). A key task for this Commissioner was "publicising the need for increased private retirement savings" (Preston, 1997, p.5). Over time, the idea of publicising a need for individuals to increase their retirement savings formed into a more cohesive push for improved financial literacy. This connection between the drive for financial literacy and retirement saving is signposted in the first name change the Retirement Commission underwent: a shift in 2011 from the Retirement Commission to the Commission for Financial Literacy and Retirement Income (McKenzie, 2019). Because of this symbiotic relationship between the development of government interest in financial literacy and shifts in retirement income (leading to the development of KiwiSaver), discussions centred around people's knowledge and understanding of KiwiSaver – from their decision to not opt out to their choice of provider and fund type – have been tied up in notions of financial literacy.

Yet the stories of KiwiSaver and the new push for financial literacy do not just share a similar timeline; they share a type of responsibilisation of the individual that marks an opportunity for government to shift back. A government encouraging and enabling a population to make better decisions with their personal finances has clear benefits to the population as a whole; however, when the impetus behind that encouragement is the desire for wholesale buy-in to a defined contribution plan that the government has implemented and structured in such a way that minimises its own levels of responsibility, it is prudent to look closely at the focus and claims made on behalf of that financial literacy. In the first paragraph of the financial literacy section of the 2013 Review of Retirement Income Policies, it states:

> … there is an international trend towards more responsibility for retirement income being passed on from states and corporations to individuals. Along with this increased responsibility comes increased risk for the individuals concerned. If those individuals refuse or are unable to accept new responsibilities, their risk of poor outcomes in retirement become even greater. (Commission for Financial Literacy and Retirement Income, 2013, p.84)

Yet these words are not describing an intangible future possibility, a trend that may or may not reach our shores. They are describing real issues inherent in the type of individual responsibilisation that exists in the defined contribution plan we currently have: a type of individual responsibilisation that can set people who “refuse or are unable to accept new responsibilities” (Commission for Financial Literacy and Retirement Income, 2013, p.84) up to fail. What the Twitter KiwiSaver munitions uproar has shown, however, is that some of those at-risk individuals might not be prepared to travel a direct path from the refusal of responsibility to poor outcome. Some might push back, questioning or even demanding that the state and corporations take on a portion of the burden of responsibility.

While the tweeting public identified and voiced a range of concerns surrounding KiwiSaver investment in munitions, overwhelmingly the response followed in the same vein as Bradley’s initial article, questioning the oversight of government, demanding more from the banks managing their funds, and repudiating the notion that responsibility to ensure investments were ethical sits with individual KiwiSaver investors. In the tweets can be seen more than a refusal to accept new responsibilities; questions are asked about where responsibility can feasibly lie, issues to do with limits of knowledge are raised and debated, and intricacies surrounding law, governance and investments are discussed. Within the maelstrom of varied voices is an overarching drive towards a process that does not prioritise profit, but instead looks to more civic ideas of responsibility. In a system that has framed the financially literate as those able to make the best financial decisions for themselves and their family, questions are being asked about why that cannot or should not also include decisions that best help society as a whole.

Chapter 8: Conclusion

This research set out to examine the discursive framing of the financially literate subject within contemporary New Zealand society. In seeking to understand the genesis of common themes associated with financial literacy, the analysis started with OECD documents that helped shape the rationale and approach of the New Zealand government's financial literacy initiatives and underscored the connection between the growing interest in financial literacy and the development of KiwiSaver. To obtain a more rounded picture of the framing of the financially literate subject, relevant discussions in government documents, print media, the financial sector and social media were also examined, and, via a case study, particular attention was paid to the public debate regarding KiwiSaver investments in munitions and what this revealed about the complex relationship between the dominant framing of the financially literate subject and that subject's expectations of self, government, and the financial sector.

The path taken to achieve these aims was in part shaped theoretically by the work of Foucault. Foucault's view of neoliberalism as having a focus on the construction of a policy of society was evident in the themes of individualisation and responsibilisation that were traced from the OECD publications through to the New Zealand documents. Where others equate neoliberalism with a rolling back of the state, what was seen in the research adhered more to Foucault's notion that the neoliberal government, rather than being rolled back and intervening less in the lives of those it governs, shifted the focus of its intervention to society itself, intervening on behalf of the market. This was evident in the rhetoric surrounding financial literacy and the development of financial literacy initiatives in conjunction with the rolling out of KiwiSaver. The intervention helps to embed financialisation and establish it as part of the regime of truth that informs discourse surrounding why financial literacy and KiwiSaver are important for society. Following Foucault's discussions of governmentality, the research highlights not only the influential role the OECD plays in shaping the policies and procedures related to KiwiSaver and financial literacy in New Zealand, but also how the "guidance of human conduct" (Lemke, 2013, p.48) understood as underscoring governmentality is, in relation to financial literacy and KiwiSaver, strongly informed by neoliberal economic theories. From the OECD writings to the sorted.org.nz website, this research reveals the strength and depth of the network in which these apparatuses of power reside, managing and proliferating the dominant discourse surrounding financial literacy.

As noted, discussions about financial literacy in the policy and institutional texts analysed show close ties between the current impetus for creating a financially literate population and the development and implementation of defined contribution plans like New Zealand's KiwiSaver. OECD advice regarding financial literacy indicated it was not borne from a view that it was necessary in itself, but, rather, it was seen as an important means to improving a population's buy-in to changes in retirement provisions from government to market-based. This was not financial education to enable the population to understand the pressures on government coffers caused by an ageing population, but financial education to help the population understand that they should be taking responsibility for their finances to achieve the post-retirement lifestyle they desire. Yet financial education within this framework does more than focus a population on their individual financial retirement risks and responsibilities; it represents financial market investments as commonplace savings tools. Indeed, market investments are framed as so foundational to financial literacy that knowledge about the importance of diversified investment is tested in one of the three core questions widely accepted for measuring financial literacy. What that financial education entails and how it is defined within the OECD documents, however, is consistently vague. Through these definitions and what can be gleaned from analysis of the texts themselves, the expected attributes and capabilities of the financially literate subject within these texts are far-reaching. Namely, that person is someone who is aware of their responsibilities to themselves, their future, and the market; someone who is aware of financial risks, but, due to the security offered by 'informed choices', continues to place funds within the financial market; and someone who uses their financial education to improve their financial well-being and provide a form of monitoring for the market. According to the OECD documents, without financial literacy, individuals are at risk of financial ruin, and should they enter the financial markets, they either will not hold the markets to suitably stringent consumer standards or are putting them at risk of collapse.

The central case study in this thesis, focusing on a controversy regarding KiwiSaver munitions investment that was played out through financial journalism and debate on Twitter, provided an opportunity to examine how the intended audience, or targets, of financial literacy discourse themselves view their role within the operation of financial markets. The Twitter KiwiSaver munitions uproar also revealed the potential role of social media to circumvent traditional, established nodes of power/knowledge (Dingo, 2008) and enable individuals more agency in the production, circulation, and consumption of discourse. While the form of agency being promoted within much of the institutional rhetoric surrounding the financially literate is that in service of neoliberal ideology, discussions on Twitter and in the traditional media articles analysed revealed much more varied ideas related to agency. As in Dingo's (2018) essay on the rhetoric surrounding the examined instances of girl empowerment, the form of agency being endorsed in more formal texts examined works to render important questions regarding structures of power and inequalities invisible; however, a shift could be seen in the case study. Initiated by news media and picked up by Twitter users, the uproar drew attention to how KiwiSaver funds are invested and discrepancies between investment realities and expectations. Those social media discussions had a direct and almost immediate impact on that one small space within the financial sector, with many banks pledging to review their funds and some implementing "ethical" KiwiSaver fund choices. With the particular affordances of journalism and Twitter as platforms, the case study provided a real-time snapshot of market actors' reactions and interactions, allowing observation of how power dynamics within that microcosm of the market were working. Through social media platforms like Twitter, we are given access to voices that had previously lacked the opportunity or means to be publicly included in such discussions. The case study revealed a certain level of resistance to financial literacy expectations and a push back against the idea that the financially literate shoulder the responsibility for their investments. In voicing their concerns, individuals put pressure on claims made on behalf of the financially literate, indicating a greater complexity to notions of responsibility and the realities of the types of power and levels of agency gained from being financially literate within the financial market. It drew attention to an aspect of the New Zealand psyche overlooked in the institutional texts that frame what is important for a financially literate population: concern for civic responsibility. In the Twitter KiwiSaver munitions uproar, Twitter became a node of power, enabling the voices of those that have been objectified in financial literacy discourse to take part and, due to the power of the collective uproar, have the attention of media, politicians, and KiwiSaver providers. There are still limitations, noted in chapter six, regarding access to digital capability and inclination to use it, so the opinions of those who tweeted are not representative of all New Zealand KiwiSaver investors; however, as an indication of a mindset belonging to a subset of the larger KiwiSaver investment group, the discussions remain useful.

In the analyses, the research followed a methodological mix informed by rhetorical and discourse-historical critical discourse analysis**.** A traditional rhetorical analysis approach, observing the use of language in relation to the rhetorical situation within each of the texts, provided important granular detail that was then considered in relation to the body of texts being analysed. When looking at the texts as a group, core considerations within critical discourse analysis were important, namely what the texts revealed regarding the production, transfer and function of knowledge and its relationship to power. From here, a shift away from rhetoric's focus on the rhetorical situation to Chaput's idea of rhetorical circulation (2010) was necessary to provide a more accurate picture of the 'situatedness' (Chaput, 2010) of the individual elements within financial literacy discourse and to understand the "network of discursive relations" at play (Jäger, 2001, p.38). As noted in chapter two, Foucault's view that power is also productive and hence allows for moments of discursive resistance further coheres the two approaches, enabling what Huckin et al. (2012) argue is an analytical combination that "move[s] beyond traditional analytic modes of interpretation and criticism into examining the impact that contexts, power dynamics and social interaction have on written texts and processes" (pp. 110-111). When looking at rhetorical circulation, the case study reflects the immediacy and fluidity of discourses within the realms of social media. With rhetorical circulation considered a conceptual building block within rhetoric studies, constitutive rather than passive in its role as a discourse vehicle (Gries, 2018), the slight schism between the more conventional protocological dissemination of institutional information and that of social media sites like Twitter – as seen in the case study – is perhaps reflective of what Smith and Brown (2018) posit is the increased importance of "values based on ethical assessment and distribution – mediatized actions that more fluidly inform a civil audience about the implications of the globalizing realities that shape the contemporary conditions of sovereignty" (p.221). As Smith and Brown note, networked life is complex and networked spaces "enable and constrain new rhetorical possibilities for civil actions" (p.221), with the roles of rhetor, audience and subject becoming intertwined, allowing all to take part in discourse production, curation, distribution and reception.

From the outset, I have had difficulties finding critical financial literacy research with a focus on New Zealand to tether my own research to. Even without limiting searches to rhetorical analysis or critical discourse analysis approaches, search upon search of article databases returned work discussing the need for improved financial literacy in relation to different spheres (primary education, secondary education, immigrant support, retirement savings, sustainability – the list goes on). Some discussed the efficacy of various approaches to financial literacy improvement, some methods of measurement, others policies for improved financial literacy and their resulting initiatives. Plenty was being said about why financial literacy was needed, analysing different methods and areas that worked to improve financial literacy. Indeed, even the literacy studies landscape is full of work discussing the more instrumental uses of financial literacy. What I could not find was work critically analysing the rise or framing of financial literacy within New Zealand – even in research arguing for the need for financial literacy. Extending searches to critical financial literacy work not solely focused within New Zealand's borders fared little better, with the voices of Arthur (2012) and Willis (2011, 2017) the only significant ones found; Arthur focused on financial literacy in Canada and Willis on the United States, neither undertaking in-depth textual analyses.

In using a combined rhetorical analysis and discourse-historical CDA approach, this study looks to help fill gaps in our understanding of financial literacy discourse by taking a granular look at the framing of financial literacy within New Zealand. Sharing varied amounts of terrain with rhetoric, critical discourse, and literacy studies, it is not comfortably situated within any one area. However, while there are a number of ways this research could be developed, I believe its strength lies in its multiple considerations.

In the field of rhetorical studies, my research joins others exploring the rhetorical operationalization of neoliberal ideology. As in Dingo's (2018) examination of the rhetorical construction of empowerment and third-world girl subjects and its connection to neoliberal ideology, this study is also concerned with the rhetorical framing of a specific group and the ways this framing is in service to neoliberalism. Similar to Dingo's study, this study also considers rhetorical construction by analysing a variety of sources, institutional to public. In Dingo's (2018) study, the sources included girl empowerment initiatives by global development agencies, a PSA jointly created by the UN and Nike, and media depictions of "third-world-Brown-girl figures" (p.233). And, as in Dingo's research, this study finds that the framing of the analysed subjects serves the interests of a neoliberalised economy. Certainly, the nuances of the findings differ. Dingo's article examines the rhetorical construction of an 'other', where their 'otherness' enables the furthering of neoliberal ideals to be seen as benevolent while eliding problems caused by those same ideals. In my research, the audience *is* ultimately the subject – the financially literate/illiterate – but the same modus operandi seems to be in play: the presentation of the subject as individually benefitting from taking part in a neoliberal economy while overlooking other perhaps more pressing issues that, if addressed, might not serve the interests of the neoliberal economy but might help those subjects collectively. Furthermore, the value placed on these collective interests in both

Dingo's study and my own is most clearly seen when looking at the utterances of those subjects.

As Dingo argued in her book *Networking arguments: Rhetoric, transnational feminism, and public policy writing* (2012), analysing discrete texts alone offers only an aspect of the rhetoric being examined. In order to obtain a more complete picture, those discrete texts must be examined in conjunction with consideration of "how rhetorics travel – how rhetorics might be picked up, how rhetorics might become networked with new and different arguments, and then how rhetorical meaning might shift and change as a result of these movements" (p.2). For the financially literate subject within New Zealand, a clear connection can be seen between the dominant international OECD institutional rhetoric and the national NZ government rhetoric. Yet, while there was relative unity in the rhetorical framing of the financially literate subject in the national institutional texts examined, those of the OECD had moments of disunity. Within the body of texts analysed, these were rare but served as indicators of tension that is perhaps not unsurprising given the OECD's range of interests and influence and the number of external researchers producing studies on its behalf. What was clear was that while some OECD texts acknowledged limitations in what could be claimed on behalf of the financially literate subject, the rhetoric of the more pervasive texts presented a more rigidly autonomous model of financial literacy – a model that better fits the interests of a neoliberal economy. This pervasive rhetoric was the rhetoric adopted by the institutional New Zealand texts. As the networking of the financial literacy discourse merged with the rhetoric surrounding KiwiSaver, linking to the media and social media networks via the Twitter munitions uproar and enabling voices from the wider public to take part, a shift could be seen to rhetoric supporting a more ideological view of financial literacy. In travelling from institutional to public network, the rhetorical construction of the financially literate subject was seen to broaden and become more nuanced, reflecting the broad and nuanced interests of the wider public.

Rhetorically examining a wide-ranging group of texts is unwieldy and requires the consideration of rhetorical circulation, rather than simply situation; however, as indicated in this research, analysis of rhetoric across different nodes within a network enables a better understanding of the dissemination of rhetorical constructions and the ideologies shaping them. When taken through to include utterances inclusive of the public voice, in the construction of the financially literate subject it reveals a rigidity in institutional transnational rhetoric that is maintained by national institutional rhetoric but loosened within more public networks inclusive of individual voices less inclined, interested or perhaps incentivised to further neoliberal ideology, morphing to reflect the varied interests of the varied authors.

That a certain level of rigidity could be seen in the framing of the financially literate subject as it shifted from transnational institutional texts to national institutional texts arguably reflects the centrality of the sources circulating those texts, or, more specifically, reflects a unified adherence to the neoliberal ideology shaping the framing of the financially literate subject in the transnational and national sources of those texts. As the circulation shifts to the realms of media and social media, catalysed by disquiet over KiwiSaver munitions investments, the rigidity in what is claimed on behalf of that financially literate subject begins to falter. While print and broadcast media tend to distribute their information from a centralized hub, much like that of institutional texts, their varied role as inquisitors or upholders of discourse and power/knowledge carries with it the potential to subvert rhetorical constructions. However, as the discourse shifts to the realms of social media, its digital capabilities blur the lines between audience, subject and author. Rhetorical practices become dynamically networked. Where print media once presented information to a relatively passive audience, ascribing moral worth and positioned as the adjudicator of reason, in distributed networks a multitude of actors driven by a multitude of exigencies can take part in information creation, collection, and dissemination (Smith & Brown, 2018). As seen in the case study and discussed by Smith and Brown (2018), traditional print and broadcast media still play a role in assigning ethical value to information it distributes in the social media realm.

Considering social circulation and the case study, the social space of Twitter can be seen to enable a sense of agency, authority, and active participation for some of the contributors. Their engagement in the space, be it in distributing links to a petition calling for change, informing others of or questioning others on what they deemed to be relevant points, or addressing stakeholders directly via their Twitter accounts, revealed a more dynamic and complex picture of how they saw themselves as financially il/literate subjects. Although Royster and Kirsch (2018) were discussing the social circulation within a group of women in a sewing circle when they noted that considerations of social circulation enabled them to notice “instantatiations of expertise, and instances when ideas and practices might travel to other groups, get taken up and modified, and become absorbed in social spaces as legacies of thought and action” (p.172), similar moments could be seen in the social media interactions of the case study in this thesis. Within this realm, participants are acutely aware of each other, not necessarily as distinct individuals, but as an alert and active audience. Their tweets and interactions also indicate a concern, for some, for the collective over the individual. Within this social space, the financially literate subject acquires a name, a background, and a life filled with experience and interests that have shaped their views and ways of responding to others. As Royster and Kirsch (2018) state, "as an analytical/interpretive lens, social circulation functions well in uncovering silhouetted networks of actors… and in bringing visibility to how social networks enable members to create and transmit knowledge" (p.184). What is clear from the Twitter munitions case study is that consideration of social circulation provides a space for diversity and lets the subjects represent themselves, highlighting the one-dimensionality of the framing of the financially literate subject in the institutional texts analysed.

From a literacy studies framework, as noted in the discussion about the networking of rhetoric, this research reveals that as in general literacy studies, discussions of financial literacy within institutional networks overwhelmingly tend toward Street's (cited in Bartlett, 2008) autonomous model of literacy. Financial literacy is positioned as an independent variable, something that once obtained enables people to participate successfully in financial tasks. Without it, people are deficient; with it, they have more opportunities and help create a better society and a well-functioning economy. However, when viewing the munitions uproar as a financial literacy event (that is an occasion in which expectations of the financially literate might be observed), distanced via the filter of media and social media from institutional financial literacy sponsors like the OECD, governmental institutions, and the financial sector itself, participants reveal a more nuanced, ideological approach to financial literacy where it is seen as a social practice with contextual considerations. In a discussion about local literacy events, Brandt and Clinton (cited in Reder & Davila, 2005) argue that social practices themselves do not necessarily shape a literacy's meaning, but are, rather, "the weary shock absorbers of its impositions" (pp.174-175). They add that in the wake of these literacy expectations, "people manage to absorb or mollify these demands in different ways…[showing] local ingenuity, diversity [and] agency" (Brandt & Clinton, cited in Reder & Davila, 2005, p.175). This idea is reflected in discussions observed in the case study, where participants' views of their own potential roles in relation to the munitions investment problem were varied and complex and dependent on more than their own levels of financial literacy.

Fitting firmly within the view of literacy as a social practice, the financial literacy practices reflected in the case study exchanges were collaborative. Regardless of whether participants in the exchanges were educated or informed by autonomous models of financial literacy, the exchanges indicated views that challenged the autonomous, drawing attention to and questioning power and knowledge inequalities that overshadowed any perceived abilities of financially literate individuals, revealing collective knowledge-building ideals that see the process of understanding and successfully navigating the financial system as complex and dependent on multiple variables. Via the Twitter exchanges, individuals were sharing not just financial knowledge, but knowledge of the structures informing and supporting financial investments. They were questioning, informing and challenging each other from a multitude of standpoints. Ideas of the illiterate being problematic were overshadowed by discussions of government and provider responsibility. Aligning with literacy studies research into literacy as social practice, what the case study makes clear is the schism between the autonomous claims of the institutes educating and calling for education and the ideological realities of financial literacy within literacy events. As financial literacy is transcoded from institutional network to public, it shows interarticulations – different meanings simultaneously held at once in different locations (Navickas, 2013) – in ideas of financial literacy capabilities changing in alignment with increased consideration of literacy as social practice. In addition to this, the research indicates how traditional ideas regarding the utility of literacy – as adaptation, power and state of grace (Scribner, 1984) – can be transcoded, not only from areas of general literacy to financial literacy but across various nodes of power within financial literacy discourse itself, as evident in the commonalities seen across institutional texts' framing of the financially literate subject.

As the case study revealed, via social media, the individual voices with their individual queries, concerns, and demands for change find common ground and get amplified, and usual nodes of power/knowledge are circumvented. Yet despite the public controversy regarding munitions investment in 2016, munitions investment in KiwiSaver remains at a high level. Mindful Money is a charity advocating responsible investment. As part of its service, it operates a website that checks where KiwiSaver and investment funds are placing their money. It also provides a tool that enables individuals to find funds that best suit their ethical concerns. In a report published in March 2021, Mindful Money announced that across the providers there are still 88 KiwiSaver investment products that are invested in companies involved in some aspect of the manufacture of weapons. This data is disappointing, yet unsurprising. Although the case study indicated a moment where civic agency democratised and brought about change (albeit small) in one part of the market, it was just one slight bump against a sector adept at using obfuscation as a tool, a sector in which there are multiple pathways to hiding where investments are going. While KiwiSaver providers are required to disclose to investors both their approach to responsible investment and their funds' asset allocations, some of those funds may themselves be invested in other managed funds (which may also have funds in other managed funds and so on ad infinitum). Other funds may be in something like an index fund, where the investments mirror those within the chosen index, changing as the index changes; and others may be in the stocks of named companies with the name providing no indication of that company's core business. Obfuscation aside, further problems arise when considering where the cut-off with regard to what is considered a munitions investment might be. Is a company that transports the o-rings used in artillery shells considered part of the munitions production chain?

The ongoing problem of munitions investment demonstrates the limitations of financial literacy per se to secure more ethical market structures or for consumers to act as the informal regulator of the markets. This point was more or less conceded by the outgoing Retirement Commissioner, Diana Crossan, in an interview with Gibson published on stuff.co.nz in 2012. In the interview, Crossan provides a strong indication of the complicated position the Commission is in. Published just days before she finished her tenure as Retirement Commissioner, Crossan's conversation with interviewer Eloise Gibson is frank (Gibson, 2012). After heading the Commission for 10 years and overseeing the development of financial literacy resources like the Sorted website and Money Week, in her role as Retirement Commissioner, Crossan had been particularly vocal in her support for raising the retirement eligibility age from 65 to 67 (Morrall, 2012). In none of the press releases, publications from the Commission or articles about the Commission I have read over the years have I come across any indication that either the Commissioner or the Commission view the financial sector with any significant degree of wariness or caution. This is not unexpected, given their role in promoting financial education and encouraging people to place their savings in KiwiSaver. Yet, in this interview – again, published just days before leaving the role – Crossan pulls few punches when discussing her views of the financial sector:

> Does she trust the financial sector more or less than she did 10 years ago? She pauses. "I'm probably more selective."

> In other words, she now knows who to trust.
>
> Our national savings ethic is not as appalling as the financial industry would have us believe, she says.
>
> The sector's push for compulsory KiwiSaver and higher personal contributions is "predicated on self-interest". (Gibson, Dec. 27 2012, n.p.).

Later, she adds, “financial literacy is only about one-eighth of what we need… after a diversified market, good regulation and a trusted and trustworthy financial sector” (Gibson, Dec. 27 2012, n.p.). These are strong words, particularly coming from the person heading the entity tasked with encouraging New Zealanders to save and invest in KiwiSaver. If the person who at the time was presumably the best informed about the importance of financial literacy within New Zealand placed it as necessary *after* “a diversified market, good regulation and a trusted and trustworthy financial sector”, implying that these things have not yet been achieved, where does this place the work of the Commission?

Crossan’s comments point to the complicated role played by the Commission for Financial Capability. As a government entity tasked with improving the financial literacy (now capability) levels and retirement outcomes of New Zealanders, the Commission is in an interesting position. It was set up to promote financial literacy, and while it provides the government with advice regarding retirement policies, including those specific to Superannuation, it is also a champion of KiwiSaver. To provide advice to government and resources to the public, it has to seek accurate and detailed information about the needs and wants of the public, as well as the efficacy of existing programmes and policies. If financial literacy had the capabilities it is depicted as having within the texts analysed in this research, the position held by the Commission would be relatively straight-forward, but as noted in the case analysis undertaken for this thesis, there are discrepancies between what is claimed on behalf of financial literacy and the realities of financial literacy.

The social media aspect of the munitions investment case study indicates a rich and developing area for future research, particularly in relation to its potential impact on the financial markets. There are increasing avenues for both investment and peer-to-peer investor networks online, via apps and dedicated social media groups and platforms. Direct investment in the market, bypassing established avenues for investment like brokers, enhances the democratisation and accessibility of the markets. Apps like Sharesies and Robin

Hood work to gamify individual investments, enabling people without a large amount of disposable income to make small-scale investments. They are easily downloadable onto a smartphone and facilitate direct investment in just a few swipes. These financial apps, social media groups and platforms are a mode of financialisation, opening up the process of investment to individuals who might understand laws pertaining to investment, but might not necessarily know or care about the “rules” of investment – like avoiding a short squeeze. This raises questions about to whom the law applies when we talk about “no insider trading,” or no colluding. Does it count when people talk on social media about their share trading decisions? How different are discussions on social media platforms from insider trading and networks among financial professionals?

A clear example of this democratisation of investment and peer network effects is the GME stock trading short squeeze that played out in the United States in the early months of 2021. Reddit users on the subreddit r/wallstreetbets, looking to coordinate increased interest in buying GME stocks (the stocks of video game retailer GameStop), improve the outlook of GME stocks, prevent short-selling of GME stocks, or manipulate GME’s stock price – depending on whose take of the events you are listening to – led to a surge in GME’s stock price and losses in the $US billions to GME short-sellers. This was a direct result of those r/wallstreetbets discussions. This furore led to closer scrutiny of short-selling and the differences in expectation and operational ability of professional institutional investors and amateur day traders using trading apps. Although this could arguably be seen as a group of opportunists looking to create a short-squeeze on GME stocks to make a quick profit, the numerous discussions on r/wallstreetbets about the perceived immorality of short-selling, the unrecognised value of GameStop, the importance of supporting those at the coal-face of companies like GameStop who are at risk of losing their jobs if low stock prices lead to bankruptcy (Tepper, 2021) indicates the impetus behind GME’s stock surge is complex, and social media’s ability to democratise the amplification of individual voices and collectivise the individual can have significant real-life implications. At a time where the likes of Q-Anon provide reason enough to be fearful of the impact social media can have on real-life, these events highlight the need for breadth of research into social media sites, their role as instruments of coercion, collectivisation and democratisation, and the agency they provide the individual in the production and consumption of discourse.

Surprisingly, given its now almost 14 years in operation and the extent to which it has diverted the savings of a great number of New Zealanders, there is also much still to learn about KiwiSaver in particular. In 2015, New Zealand's Inland Revenue Department published its first and last evaluation report on KiwiSaver, offering an indication of how successful KiwiSaver's policy objectives of improving savings habits, asset accumulation and financial well-being and independence were. The report found "based on evidence collected across the first seven years of KiwiSaver, and in particular the first 3.5 years the success of KiwiSaver in achieving these [policy objectives] is marginal at best" (p.4). It added,

> Further, much of the savings accrued through KiwiSaver are the result of substitution from other forms of savings and debt reduction. There is evidence to suggest that in the short term KiwiSaver has not had a positive effect on the accumulation of the net worth of its members when compared to non-members. (p.4)

Yet close to seven years on, despite no further evaluation reports, the rhetoric surrounding KiwiSaver, its benefits and its important role in helping people save for retirement remains unchanged. Why, in the face of the IRD's own findings that KiwiSaver as of 2015 had not met its policy objectives, have the push for KiwiSaver and the claims with regard to its efficacy remained consistent? Furthermore, the report found that "higher levels of knowledge regarding KiwiSaver and more planning around retirement income were associated with higher net worth… which suggests engagement is related to the value of savings and assets" (p.3). Note the emphasis here is on pre-existing net worth, rather than on financial knowledge, implying that higher levels of financial literacy follow higher net worth, rather than vice versa. Should this be the case, then seeking to improve financial outcomes by improving financial literacy equates to putting the cart before the horse and the current push for financial literacy must be re-evaluated.

As is evident, the approach taken in this research is one of many potential approaches, and a wider range of texts could have been included. If I had the time and space, the addition of an analysis of reports and investor materials from KiwiSaver providers and financial literacy education providers, including an examination of their production and reception taking into consideration technical communication scholarship, would have deepened my understanding of the framing of and expectations placed on the financially literate subject within New Zealand. I anticipate a closer focus on the financial education industry itself would also have provided useful insights, particularly given that many financial education providers have potentially problematic connections to the financial sector (Massey University's own Financial Education and Research Centre operates in a partnership with Westpac bank).

Given the claims made on behalf of the financially literate subject and the dangers the financially illiterate is presented as posing to society and the financial markets, in regard to potential future directions for this research, I think it would be useful to extend the analysis to include the framing of those deemed to have expert levels of financial proficiency. This could include the analysis of the framing of these experts before, during and after the collapse of the finance companies that began in New Zealand just before the global financial crisis. Another potential area is the framing of Pasifika people as economic agents within New Zealand. This might include tracing connections between the shift in New Zealand policy in the 1970s from encouraging Pacific Islanders to immigrate to New Zealand to fill a labour shortage, to implementing Dawn Raids to remove them, and the view of Pasifika people as – in Heather du Plessis-Allan's words – "leeches" (RNZ, 2019) within New Zealand. Finally, governmental entities like the Families Commission produce publications noting that Māori and Pasifika peoples in New Zealand are more vulnerable to debt and these publications then suggest the establishment of programmes geared towards improving Māori and Pasifika financial literacy. Given the increased numbers of financial budgeting advisors targeting Māori and Pasifika communities, the amount of government funding these advisors receive, and the over-representation of Māori and Pasifika people in statistics associated with lower socio-economic issues, another potentially rich and useful area for future research is the framing of the financial competency of these communities within New Zealand.

To conclude, I want to draw the discussion back to what is at stake in the construction of the financially literate subject, tracing a path back from the individual to financial institutions and governmentality. I am conscious that many of the issues discussed in my research are global: financial literacy, retirement funding, ageing populations, neoliberal economic theories. However, in discussions with family and friends who have been curious about what I have been doing all this time, I have found that my research is also very personal. Conversations about the complexities of the framing of the financially literate subject and its connection to KiwiSaver always invariably end with me being told whether that family member or friend has enrolled in KiwiSaver and being asked if it is the right thing to do. That people gloss over the discussions about financial literacy, individualisation and responsibilisation to focus on KiwiSaver is understandable. Indeed, it is a real-life example of how normalised financialisation and notions of individual risk and responsibility are. Questionable connections between the claims made on behalf of financial literacy and the realities of the financial marketplace make no clear, observable impact on an individual's life, but KiwiSaver does. On the surface of things, like the impact of budgeting, mortgages and savings in general, KiwiSaver provides tangible justification for obtaining financial literacy. KiwiSaver is a poster child of neoliberal, financialised, individualised risk and discourse surrounding financial literacy works to make individuals acutely aware of their responsibility to navigate the burden of choice within KiwiSaver and shoulder any associated risk.

Those of my family and friends who pay close attention to the reports put out by their KiwiSaver providers, those who regularly check their KiwiSaver balances, those I would consider clearly financially literate, are often the most anxious. They carefully weighed up and continue to weigh up the type of fund that best suits their income and age; they pore over the information they are provided. Despite being financially literate, their anxieties are not assuaged. They are financially literate enough to know that the ebb and flow of their KiwiSaver fund follows the ebbs and flows of the financial marketplace and they are financially literate enough to know that because of this, with regard to the health of their KiwiSaver fund, their financial literacy level is virtually irrelevant. In being financially literate, they are aware of the risk they are shouldering individually and they are aware of their responsibility to their future selves, but they are also aware of their lack of real power to guarantee security within the system they have been encouraged to invest in. Hence, despite my assertions that my research is focused on the framing of the financially literate subject and not how to invest wisely, they home in on the KiwiSaver connection; they detail the choices they have made, asking "is it the right thing to do?" Their focus is on the risk. They have been primed to see it as uniquely theirs, so why would it not be? There are now over three million KiwiSaver members in New Zealand (FMA, 2020) and those members have invested over NZ$77 billion as of December 2020 (Reserve Bank, n.d.). That is a significant amount of savings from a large percentage of the New Zealand population in the hands of the financial sector, a sector Crossan, after 10 years in her role as Retirement Commissioner, considered self-interested and only selectively trustworthy (Gibson, Dec. 27 2012).

For those within the financial sector, notwithstanding noted fraught assertions regarding the destructive powers of the financially illiterate, there is little at stake. Both the push for financial literacy and for increased investment in defined contribution plans like KiwiSaver work to legitimise the financial sector and affirm its primacy in modern society. The boon that KiwiSaver represents is clear. For example, although the 2019/2020 financial year had its early period of relative economic stability undermined by COVID-19, with “increased volatility in global markets” (FMA, 2020, p.5), the FMA KiwiSaver Annual Report 2020 stated that for that time period “combined fees revenue (administration and management) for KiwiSaver providers across all funds rose 12.3% to $539 million” (p.3). That is a 12.3% revenue increase in an economically difficult year where the numbers enrolled in KiwiSaver only went up around 4% (FMA, 2020). And that is just the revenue from fees. With roughly 11% of KiwiSaver funds invested in New Zealand shares and 30% in foreign shares (Hawes, 2020), KiwiSaver is also a boon to both the New Zealand and international share markets. In addition to this, because around three-fifths of the New Zealand population is enrolled in KiwiSaver and thus has a vested interest in maintaining a strong financial market, KiwiSaver has the potential to offer the financial market significant political support. Indeed, if faced with market reforms, those enrolled have a tangible reason to support policies that favour the market. It is an ever-giving gift.

KiwiSaver aside, in the push for financial literacy, the financial sector receives a more wide-reaching boost. The pervasive framing of financial literacy as a form of risk management and market protection provides that market with a ready-made narrative through which it might absolve itself of fault should issues arise. As seen through the 2007-2008 global financial crisis, the focus on the actions of those perceived as financially illiterate enabled blame to be shifted from those significantly more financially literate who allowed greater risk-taking via the likes of sub-prime mortgages, mortgage-backed securities and credit default swaps to those who, in large part, were the victims of the crisis. Granted, experts in the years since have identified a range of factors leading to the crisis, leaving out financial illiteracy and including a lack of appropriate regulation (Conaghan & Davies, 2018); however, as this research indicates, this has not prevented those with a focus on promoting financial literacy – like the OECD – from continuing to claim that a lack of literacy was a significant factor in the crisis or from claiming that financial literacy can help avoid future crises and regulate the market. The drive towards improved financial literacy and the imperative rhetoric surrounding it work to affirm the importance of the financial sector.

As with the financial sector, for the New Zealand government, there is little at stake and much to gain in maintaining the pervasive framing and promotion of financial literacy and KiwiSaver. Through the creation and set-up of KiwiSaver, the government has been able to avoid proposing tax increases to bolster the Superannuation coffers, it has been able to divest itself in large part of the responsibility and risks associated with providing or managing the

KiwiSaver funds, and it has been able to provide a sizeable and ongoing investment boost to the financial market. Although very rarely acknowledged, KiwiSaver also offers the government a possible ‘out’ should Superannuation no longer be able to appropriately provide for New Zealanders post-retirement, or should government consider Superannuation an unnecessary burden. In promoting financial literacy, the government further embeds the sense that we are individuals facing individual risks that we will need to take responsibility for and navigate through via appropriate financial education. Financial literacy is predicated on a belief that if you get appropriately educated, you are better able to overcome your financial problems and secure a comfortable retirement. It encourages us to see our journeys separate from each other, to focus on ourselves, to see our failures as ours rather than failures of the system we are in, and to see our successes as a result of our educated choices. Framing financial well-being as the result of financial literacy takes some pressure off the government to provide much more than financial education; however, if, as some argue, the reverse or an alternative combination of factors were true, for example, that financial literacy were the result of financial security (Willis, 2008; Alsemgeest, 2015), arguments for improved financial literacy would be tied to discussions about improved social welfare, the living wage, taxation and the like and the government’s role would be under scrutiny.

The financial marketplace is an environment with complex realities. It is an environment where instabilities and uncertainties can simultaneously lead to both feast and famine, a place where vast fortunes can be made from vast *mis*fortunes. It is an environment that has been protected by governments following neoliberal economic policies that embrace as truth stories of optimal efficiencies borne from minimal interventions. It is also an environment that viscerally bears out the truth of the notion that control of information and control of knowledge equates to power. If seasoned professionals with years of education and experience continue to fall foul of the inherent information asymmetry of the market, how can financial literacy initiatives aimed at the general public fare any better? The truth is they cannot.

Appendix 1: Atkinson & Messy OECD questionnaire

Atkinson and Messy questions in OECD questionnaire:

- Imagine that five brothers are given a gift of $1000. If the brothers have to share the money equally how much does each one get?
- Now imagine that the brothers have to wait for one year to get their share of the X. In one year's time will they be able to buy a) more, b) the same amount, or c) less than they could buy today?
- You lend X to a friend one evening and he gives you X back the next day. How much interest has he paid on this loan?
- Suppose you put $100 into a savings account with a guaranteed interest rate of 2% per year. You don't make any further payments into this account and you don't withdraw any money. How much would be in the account at the end of the first year, once the interest payment is made?
- And how much would be in the account at the end of five years? Would it be a) more than $110, b) exactly $110, c) less than $110, or d) it is impossible to tell from the information given
- An investment with a high return is likely to be high risk [True/False]
- High inflation means that the cost of living is increasing rapidly [True/False]
- It is usually possible to reduce the risk of investing in the stock market by buying a wide range of stocks and shares [True/False]

Appendix 2: Commission for Financial Literacy – Financial Literacy Competency Framework (‘Saving and Investing’ and ‘Creating and Protecting Assets and Wealth’ segments)

Capability	Foundation Knowledge	Advanced Knowledge	Expected action/ behavioural outcomes
Saving and investing	• Understands the advantages of delayed gratification • Understands and compares spending and saving options • Understands the nature and role of different financial institutions and their products including banks • Understands the importance and benefits of small but regular saving • Understands compound interest	• Understands the key features of KiwiSaver and other superannuation products • Understands the difference between various asset classes e.g. bond vs shares and the levels of risks involved with each class • Understands volatility and the risks involved in different investment options • Understands the changing role of individual risk and investment profile throughout life • Understands lack of correlation in historical performance of a financial product and its future performance • Has a good understanding of diverse portfolio when investing	• Evidence of regular saving habit • A realistic saving plan for short-term and long-term events in life is prepared and implemented i.e. retirement, child’s education • Investments appropriate to risk and investment profile are chosen • Appropriate questions are asked and information gathered from financial advisors is evaluated before making a decision to invest • Investigates different investment products to increase saving and evaluates them according to risk, return/ interest paid and access to funds • Compares the costs including fees, risks and benefits of financial products and services before investing
Creating and protecting	• Understands the need to increase income over life to	• Understands the role of insurance in reducing financial risks	• Plan to increase income over time is in place

assets and wealth	increase personal and household wealth • An ability to identify different types of financial risks to individuals, families and communities and how to manage these • Understands the need for having appropriate insurance • Understands the need for a will as a form of asset protection	• Understands that insurance needs change throughout life • Understands how to recognise scams through research and identify ways of avoiding them • Understands how local, national and global finances can influence personal and family finances • Understands importance of having emergency funds and power of attorney	• Appropriate insurance is in place and regularly reviewed to suit life stage and income level • A will is prepared and kept up-to-date, and placed in a safe, accessible place • An emergency fund or access to an emergency fund is established • An enduring power of attorney is in place

Appendix 3: Lusardi and Mitchell's 3 Questions for Measuring Financial Literacy

1) *Suppose you had $100 in a savings account and the interest rate was 2% per year. After 5 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

Refuse to answer

2) *Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account?*

More than today

Exactly the same

Less than today

Do not know

Refuse to answer

3) *Please tell me whether this statement is true or false. "Buying a single company's stock usually provides a safer return than a stock mutual fund."*

True

False

Do not know

Refuse to answer

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