Hedge fund regulation in Australia: mitigating fraud risk in an environment of mandated disclosure

Lagnesh Kumar

University of Wollongong

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HEDGE FUND REGULATION IN AUSTRALIA: MITIGATING FRAUD RISK IN AN ENVIRONMENT OF MANDATED DISCLOSURE

A thesis submitted in fulfillment of the requirements for the award of the degree

DOCTOR OF PHILOSOPHY

from

UNIVERSITY OF WOLLONGONG

by

LAGNESH KUMAR
BSc (Hons), MForAccy (Dist)

SCHOOL OF ACCOUNTING, ECONOMICS AND FINANCE

2013
DECLARATION

I, Lagnesh Kumar, declare that this thesis, submitted in fulfillment of the requirements for the award of Doctor of Philosophy, in the Department of Accounting, Economics and Finance, University of Wollongong, is wholly my work unless otherwise referenced or acknowledged. The document has not been submitted for qualifications at any other academic institution.

Lagnesh Kumar

15 November 2013
ABSTRACT

The mandate to regulate the hedge fund industry in Australia is motivated by the need to protect retail investors and the requirement to maintain market integrity while not impeding economic growth. As such, regulators have taken a light touch supervisory approach based on the premise that the hedge fund sector is not a large portion of the Australian funds management industry and hence, does not pose a risk to the financial system. This assumption is contingent to the theory that hedge fund investment activities are carried out with no link to the unregulated shadow banking system and the prevalence of dark pools, where transparency is limited and risks cannot be easily detected or appropriately quantified. However, a key issue which has been overlooked is the ability of hedge fund managers to conduct investing activities under the purview of regulators facilitated by the evolution of financial innovation which enables fraud risks posed by rouge hedge fund managers to evade detection.

This thesis examines the effectiveness of the regulatory framework governing the hedge fund industry in Australia and its ability to mitigate fraud. The collapse of Trio Capital Limited in 2009 identified gaps within this regulatory architecture which had failed to protect certain retail investors against huge financial losses. Further, a future mandate to increase disclosure of hedge fund activities to mitigate fraud may prove to be less than effective if the information provided is too complex to understand and articulate and will serve little purpose in mitigating the risks of fraudulent conduct pertaining to the operational activities within hedge funds. The findings of this thesis suggest that a positive way forward is to promote the employment of independent hedge fund administrators proficient in forensic accounting analytics based on the assertion that active asset management requires active due diligence in an environment where investing in illiquid assets and valuation mismatches are the norm.
ACKNOWLEDGEMENT

*Education Is the Most Powerful Weapon Which You Can Use To Change the World*

*Nelson Mandela 1918 - 2013*

There have been many people who have helped me through my research process and contributed to making the completion of this thesis possible. I am grateful to my supervisor, Professor Warwick Funnell, for his advice, confidence and support. His unrelenting guidance and encouragement in every endeavor I undertook. I will always be appreciative of his commitment.

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<td>ABCP</td>
<td>Asset-Backed Commercial Paper</td>
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<td>Investment Advisers Act of 1940</td>
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<td>Australian Financial Services</td>
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<td>Alternative Investment Fund</td>
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<td>Astarra Fund Management</td>
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<td>Australian Securities and Investment Commission</td>
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<td>Australian Securities and Investments Commission Act 2001</td>
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<td>AUM</td>
<td>Assets under Management</td>
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<td>Bear Stearns &amp; Co. Inc.</td>
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<td>Bank for International Settlements</td>
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<td>Bernard Madoff Investment Securities</td>
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<td>Bear Stearns Asset Management</td>
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<td>CAPM</td>
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<td>CFA</td>
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<td>Collective Investment Scheme</td>
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<td>Efficient Markets Hypothesis</td>
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<td>FCIC</td>
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<td>Financial Services Board</td>
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<td>Financial System Inquiry</td>
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<td>Financial Stability Oversight Council</td>
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<tr>
<td>G7</td>
<td>Group of Seven Nations</td>
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<td>G10</td>
<td>Group of Ten Nations</td>
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<td>G20</td>
<td>Group of Twenty Nations</td>
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<td>G30</td>
<td>Group of Thirty Nations</td>
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<tr>
<td>GAO</td>
<td>U.S. Government Accountability Office</td>
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<td>Global Client Services Limited</td>
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<td>GFC 2008</td>
<td>Global Financial Crisis of 2008</td>
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<td>HFWG</td>
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<td>High-Grade Structured Credit Strategies Fund</td>
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<td>High-Grade Structured Strategies Enhanced Leverage Fund</td>
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<td>HNWI</td>
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<td>ICMA</td>
<td>International Capital Markets Association</td>
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<td>IMF</td>
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<td>IOSCO</td>
<td>International Organisation of Securities Commission</td>
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<td>IRC</td>
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<td>Jones</td>
<td>Alfred Jones Winslow</td>
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<td>LIBOR</td>
<td>London Interbank Borrowing Rate</td>
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<td>LTCM</td>
<td>Long Term Capital Management</td>
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<td>Master Deferred Purchase Agreement</td>
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<td>NAV</td>
<td>Net Asset Value</td>
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<td>OECD</td>
<td>Organisation of Economic Development</td>
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<td>OMT</td>
<td>Outright Monetary Transactions</td>
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<td>Over-The-Counter</td>
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<td>PDS</td>
<td>Product Disclosure Statement</td>
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<td>PJC</td>
<td>Parliamentary Joint Committee on Corporations and Financial Services</td>
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<td>Presidents Working Group on Financial Markets</td>
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<td>QE</td>
<td>Quantitative Easing</td>
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<td>Trio Capital</td>
<td>Trio Capital Limited (Trio Capital)</td>
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UCITS  Undertaking for Collective Investment in Transferable Securities Directive
UK    United Kingdom
UN    United Nations
US    United States of America
U.S.CHFO  U.S. Hearing on Hedge Fund Operations before the Committee on Banking and Financial Services
VaR   Value-At-Risk (VaR)
WGAM  Wright Global Asset Management
WGI   Wright Global Investments

Currencies
AUD   Australia Dollar
EU    Eurodollar
GBP   Great Britain Pound (Sterling)
USD   United States Dollar
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CHAPTER 1
INTRODUCTION TO THE STUDY

“Like a trapeze artist, the financial system can perform miraculous tricks but experience a bone-shattering fall if allowed to perform without a net”


1.1 Introduction

This thesis identifies the weaknesses within the international financial market regulatory architecture which facilitates the riskier investing activities of the hedge fund industry. It unveils the level to which the systemic stability of the global financial system and the financial security of retail investors can be threatened by the risks of fraudulent conduct posed by rogue hedge fund managers. These risks which are inherent within the Australian financial system, and indeed globally, place retail investors at tremendous vulnerability to financial losses. This study finds that conduct-of-business and disclosure regulations serve little purpose in protecting retail investors against the risk of fraud and any future mandate for increased disclosures on hedge fund activities will not necessarily mean that they will be adhered to without adequate enforcement by regulatory authorities. Analysis of the collapse of Trio Capital Limited (Trio Capital) in 2009 reveals failure in multiple facets of the Australian financial market regulatory architecture. This thesis emphasizes the increasing and ever present risk of fraudulent and deceptive conduct such as misrepresentation and manipulation of information, particularly pertinent to valuation.

methodologies in hedge fund portfolios. The conclusion is therefore the need to
substantially promote the use of independent fund administrators who are proficient in
forensic accounting analytics of complex organisational structures and investment
strategies.

At the macro level, risks relate to hedge fund investment activities within the financial
system as a whole, known as systemic risks, and at the micro level the focus is the risk of
hedge fund operations which may contribute to fraudulent and deceptive conduct,
exposing retail investors to financial losses. The complexity of hedge fund investment
strategies requires advanced knowledge not necessarily available to retail investors which
means that with the increasing retailization of hedge funds, unsophisticated investors and
the unwary are increasingly exposed to hedge funds though their pension funds, invariably
exposing them to similar risks. Proposals for increasing risk transparency of hedge fund
investment strategies to investors are unlikely to offer complete protection for investors
who may not necessarily be able to understand or take the time to understand these
strategies. Central to this study is the non-financial risks that hedge funds activities present
to Australian investors which have resulted in financial losses due to fraud,
misrepresentation and misappropriation. The risk of fraud within hedge funds is not an
issue which has been widely researched despite the rising level of investment in hedge
funds worldwide and the massive losses which investors have incurred from hedge fund
failures. A comprehensive study by Capco\textsuperscript{2} in 2003 on the risks of hedge fund investments

\textsuperscript{2} Capco (2003), “Understanding and Mitigating Operational Risks in Hedge Fund Investments: A Capco White
Paper, The Capital Markets Company Limited, p.5,
found that 50 percent of hedge fund failure was due to operational risks attributed to fraud. In the United States (US) alone, hedge funds were responsible for over an estimated USD$100 billion\(^3\) in losses as a result of fraud and operational failure in 2009. Indeed, the hedge fund industry itself has been elusive in nature, structured as unregulated investment vehicles which traded in the shadows of financial systems globally but with a level of financial capacity that could destabilize markets and be a cause of systemic risks. The Global Financial Crisis of 2008 (GFC 2008) brought the hedge fund industry to the attention of regulators and investors as one by one numerous hedge funds collapsed due to fraud, misconduct and failure resulting in trillions of dollars of investment losses which also jeopardizes natural economies. The events in the aftermath of the GFC 2008 highlighted extreme vulnerabilities in the regulatory architecture of financial systems around the world and failed to protect investors against the financial catastrophes which ensued. These financial losses required governments to intervene and resort to monetary easing, protectionist economic policies and to take a hardline approach to the enactment of new financial market regulations in an attempt to regain investor confidence and restore financial stability.

The contagion impact of the financial crisis was presented to the world as the largest financial debacle to face modern day finance and numerous comparisons of the GFC 2008 were made with the Great Depression of 1929 depicting similar causal effects (Reinhart

and Rogoff, 2008, pp.3-10). While a major reason for the Great Depression was a ‘run on the banks’ by households who had lost confidence in the US financial system, the GFC 2008 was a result of failure within the financial system itself. Five years on, its impact has not abated and there does not seem to be any resolution in sight. The European Union (EU) in 2013 is still experiencing economic instability while Japan, in a decade long recession, has introduced extreme measures to boost its ailing economy and China, the only major economy which was able to maintain consistent growth, is bracing for a slowdown and on the fringe of a possible real estate debt bubble (Guan, 2013, p.2030; Roll, 2011, pp.12-13; Kawalec and Pytlarcyzk, 2013, p.32).

1.2 Financial Liberalisation

An important principal of financial market regulation adapted globally is the maintenance of a safe and stable economic environment where investor protection regulation promotes confidence in the soundness and efficiency of the financial system. However, financial liberalization and the deregulation of financial systems impeded the effectiveness of these protections as the pursuit of growth superseded the enforcement of safety and soundness. The regulatory changes initiated after the Great Depression of 1929 in the US led to heavy regulation of all financial systems globally and notably the separation of commercial and investment banking activities

thirty years has been a period of enormous transformation in financial services and the manner in which financial intermediation has been carried out. The complex web of interconnectedness between financial markets of today and the technological infrastructure which links all financial exchanges around the globe has progressed at such an accelerated pace that financial market regulators have been unable to keep up with, let alone supervise and regulate, these developments effectively. The swiftness with which the GFC 2008 spread from the US to Europe and the rest of the world proves that these linkages do not see any boundaries between jurisdictions, industries or individuals. The risks of future financial crisis will only increase more because of this interconnectedness, especially if regulators do not respond to this harmonization unanimously.

The safety and stability of the international financial system is vulnerable, insecure and protection from future crises is limited to the amount of supervisory control regulators exercise and enforce. The evolution of innovative financial practices such as advances in financial theory, information technology, the rise of the shadow banking sector and globalization has also limited the ability of regulators to react effectively without international cooperation. An article by Kevin Rudd (2009), the former Prime Minister of Australia, sums up the current state of the global economy, though dire and confronting, stated that:

5 Pozzar et al (2012) define shadow banking as financial activities carried out by non-bank institutions that create leverage and/or engage in credit intermediation such as maturity and liquidity transformation without access to public sources of liquidity such as government guarantees. A more detailed discussion of the definition of the shadow banking sector is presented in Chapter Two.

This is a crisis spreading across a broad front: it is a financial crisis which has become a general economic crisis; which is becoming an employment crisis; and which has in many countries produced a social crisis and in turn, a political crisis. It is a crisis which is simultaneously individual, national and global. It is a crisis of both the developed and the developing world. It is a crisis which is at once institutional, intellectual and ideological. It has called into question the prevailing neo-liberal economic orthodoxy of the past 30 years, the orthodoxy that has underpinned the national and global regulatory frameworks that have so spectacularly failed to prevent the economic mayhem which has now been visited upon us.

The GFC 2008 established its prominence in mid-2007 when the global credit markets came to an abrupt standstill as the US housing market began to collapse due to a lack of confidence. There are three important variables which contributed to the crisis: a deregulation of financial markets in the US and the UK which began in the 1980s; extremely low interest rates that facilitated access to cheap credit which trickled down throughout the financial system resulting in excess liquidity and, lastly, an interconnected financial system with the unregulated shadow banking sector participating as counterparties in the construction of complex financial instruments which saw risk spread throughout the global financial system (Davis, 2011, p.4). This lethal combination led to unsustainable growth over a thirty year period before the GFC 2008 where investors participated with the attitude that the availability of credit was infinite and demand for financial assets would continue to rise. Amongst the numerous causes of the GFC 2008 identified is that the collapse was a result of a valuation failure within the credit intermediation processes which securitized and sold complex financial instruments such as Mortgage-Backed Securities (MBS) and Collateralised Debt Obligations (CDO). More importantly, the securitization of these financial assets facilitated the shifting of risks to the broader, global financial system and into the unregulated shadow banking sector where leveraged
investment funds participated in its growth, to further inflate valuations to unsustainable levels. The financial crisis quickly spread across the world and brought into question the benefits of international linkages and the contagion impact of future crises.

Cross-border capital flows, lax counterparty credit risk management and leverage were facilitated by the use of off-balance sheet transactions and special purpose vehicles that enabled financial institutions to accumulate and hide losses. Kalemil-Ozcan et al (2012, p.285) found that large banks in the US, and to a lesser extent in Europe, raising funds in short-term markets were able to increase their leverage before the GFC 2008 and avoid maintaining regulatory capital requirements by using off-balance sheet investment vehicles, thus hiding the real value of their liabilities from counterparties. As the losses accumulated a crisis of confidence was experienced within the financial system, inter-bank lending came to a standstill and the structured credit market simply vanished. The liquidity problem spread across borders, leveraged financial intermediaries faced solvency problems as valuations dislocated and market quoted prices were deemed unrealistic, triggering margin calls and further dislocation. This spiral eventuated into a full blown global crisis which was still being experienced in late 2013.

Assets bubbles are formed because of maturity mismatches, enabled by financial exuberance and precipitated by investors with a high appetite for risk in pursuit of larger returns. It was this huge gap in valuation which was a predominant cause of the financial crisis. Valuation gaps are a result of information asymmetries within financial sectors which have always existed, whereby crucial information in relation to the true value of a
security is protected based on the rhetoric of competitive advantage. There is no argument that the need to remain competitive is crucial for the viability of financial intermediaries but when it results in a lack of transparency and an inability of market regulators to adequately supervise and monitor, the risks of fraudulent conduct, manipulation and misrepresentation are elevated.

The internalized nature of the GFC 2008 meant that manipulation and misrepresentation were effectively controlled by the same agents who packaged and sold the securities. Taking into consideration that investing is a zero sum game, a possible explanation is that the accounting mismatches of derivative contracts between counterparties lead to defaults and bankruptcies which resulted in write downs (Edwards, 1999, pp.190-192; Stevenson, 2012, p.17). Like every asset bubble which is inflated over a period of time, the issue of sustainability was disregarded.

The deregulation of capital markets and the globalization of finance has facilitated the ease of international capital flows for profitable investments and enabled risk diversification across borders while also increasing systemic risks as financial systems contract financial commitments through the use of derivative financial instruments. Unlike individuals, who would be pursued by lawmakers for default and prosecuted, the financial market actors who were responsible for these problems were bailed out by governments, given more money to assist further growth, to the position now where they have become ‘too big to fail’. Although the vast amounts provided by governments were meant to address the mounting threats, there are two questions which have been left unanswered. Firstly, if we
are still experiencing the financial crisis, where did all the bail-out money go? Secondly, if this financial crisis was caused from within the financial system, did the financial market actors commit a fraud from within? Without substantiating evidence, these questions will remain unanswered.

The influence of hedge funds in exacerbating the GFC 2008 has been aggressively debated since the beginning of the crisis on both sides of the Atlantic. However, most studies on the financial crisis have exposed banks and not hedge funds as the main perpetrators and hedge fund managers themselves have averted blame by hiding behind the defense of ignorance. A paper by Prof. Photis Lysandrou published in the Journal of Keynesian Economics, entitled “The Primacy of Hedge Funds in The Financial Crisis” (2012), refuted this claim with substantial data confirming the direct participation of hedge funds in the CDO market. Lysandrou further stated in an article in the Financial Times, UK7, that:

Had it not been for hedge funds’ intermediary position between the investors seeking yield on the one hand and the banks that created the high yielding securities on the other, the supply of these securities, known as collateralised debt obligations (CDO), would never have reached the proportions that were critical in precipitating the near collapse of the whole financial system. Wealthy individuals did not have the requisite expertise to participate in the CDO market while liquidity and risk control considerations prevented institutional asset managers from having more than a limited participation. In both cases, one of the preferred solutions to the yield problem, which was becoming increasingly acute from about 2002, was to pour money into hedge funds that in turn diverted substantial amounts of this money into the subprime-backed securities.

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This statement, although a convincing argument which directly blames hedge funds as a root cause of the financial crisis, also includes evaluative gaps which have been the focus of the debate. An important argument against the role of hedge funds for the GFC 2008 was that, collectively, the hedge fund industry represented only a small proportion of the global assets under management (AUM) and did not have the financial capacity to move markets so abruptly. However, it is not clear whether the data in relation to the financial holdings of hedge funds included leveraged facilities provided by banking and other financial intermediaries or hidden in off-balance sheet transactions, which would invariably increase the total worth identified. Therefore, isolating the hedge fund industry alone as a cause would be unsubstantiated without considering the contributions of the regulated banking sector as leverage providers and facilitators of financial exuberance. It is this lack of information which has significantly contributed to so much confusion.

The fallout of the GFC 2008 has highlighted several of the weaknesses of a host of previously unchallenged examples of ‘financial innovation’, calling into question the wisdom of the gradual deregulation of the financial services sector and a review of contemporary financial market regulation so as to fill perceived regulatory gaps and, through that, restore confidence in financial markets. While the ongoing crisis has shown some regulatory changes to be apposite, mainly in order to rein in the activities of unregulated and significant financial market players such as hedge funds, the unregulated hedge fund industry and its impact on financial markets is not a new phenomenon but shows a lack of understanding of the intricacies within the shadow banking industry, the unregulated part of a financial sector, and linkages to the broader financial system which
will never be totally resolved. The following section theorizes the position of this thesis by conceptualizing the public interest theory of regulation to explain the need for regulatory intervention by governments to act in circumventing the risks of hedge fund activities and upholding the investor protection mandate of financial market regulation. It begins with explaining the contextual dynamics of regulatory theory and subsequently extends the argument to the public interest theory of regulation which is enforced by the theory of market failure and the need for regulatory intervention in protecting investors against financial losses as a result of market misconduct, fraud and systemic failure.

1.3 Regulatory Theory

Regulatory theory is defined as a set of propositions or hypotheses about why and how regulation emerges, which actors contribute to that emergence and typical patterns of interaction between regulatory actors. It often contains a mixture of explanatory and prescriptive elements to justify the goal or goals which regulation should pursue (Morgan and Yeung, 2007, pp.16-18). Regulation is a concept that is difficult to define with precision. Ogus (1994, p.1) in his book entitled Regulation: Legal Form and Economic Theory states that “regulation is not a term of art, and unfortunately has acquired a bewildering variety of meanings”. In its most general sense, regulation may be said to include “all acts of controlling, directing or governing according to a rule, principle or system”. This broad notion of regulation as systematic control embraces rules restricting behavior, together with targeted rules or specific sets of commands accompanied by mechanisms for monitoring and promoting compliance and includes forms of state intervention such as subsidies and taxation, policy instruments entailing control by standards, licensing, and
inspection (Prosser, 1997; Baldwin et al., 1998; Baldwin and Cave, 1999; Vincent-Jones, 2002, pp.611-628). A functional approach to regulation, often referred to a cybernetics perspective recognizes that:

Any control system in art or nature must by definition contain a minimum of the three components. There must be some capacity for standard-setting to allow a distinction to be made between more or less preferred states of the system. There must also be some capacity for information-gathering or monitoring to produce knowledge about current or changing states of the system. On top of that there must be some capacity for behavior-modification to change the state of the system (Hood et al., 2001, p.23; Morgan and Yeung, 2007, p.3).

Thus, at its most general level, the concept of regulation refers to the means by which any activity, person or institution is guided to behave in a particular fashion, or according to rule (Picciotto, 2002, p.1). Regulation is a politico-economic concept and, as such, can best be understood by reference to different systems of economic organization and the legal forms which maintain them (Majone, 1990, pp.1-2). In all developed societies there is a tension between two systems of economic organizations. Under the first, the market system, individuals and groups are left free, subject only to certain basic restraints, to pursue their own welfare goals. The legal system underpins these arrangements predominantly through instruments of private law; regulation has no significant role. The second is the liberal democratic state where the state seeks to direct or encourage behavior which is assumed would not occur without such intervention. The aim is to correct perceived deficiencies in the market system in meeting collective or public interest goals (Ogus, 1994, pp.1-2).
The term ‘regulation’ is sometimes used in a broad sense to denote governing, the ways in which public purposes are decided on and implemented. However regulation has taken on a more specific meaning as achieving public goals using rules or standards of behavior backed up by the sanctions or rewards of the state (James, 2000, p.327). In this sense, regulation is normally thought of in terms of government regulation of the private sector, particularly in business (Wilson, 1980; Majone, 1994; Ogus, 1994; Doern and Wilks, 1998; James, 2000, p.327). Regulation is also explained as efforts to correct market distortions or ‘market failures’ which prevent markets from operating in the public interest and is seen as a desirable activity in these circumstances (Noll, 1989; Ogus, 1994; James, 2000, p.330).

Thus, the term ‘regulation’ is used to denote the enforcement of the rule of law but there is a distinction which needs to be made from the functions of ‘regulation’ and that of ‘the law’.

Ingram (2006, p.1) states that unlike bullying commands, laws are meant to be morally justified and reasonable. For example, laws prohibiting fraud and deception appear to express reasonable moral commands. In some cases, however, a law may command us to do something that we think is morally wrong and unreasonable. Other laws may command us to do things that are reasonable but not morally obligatory. Furthermore, some laws, such as those granting permission to obtain a financial services license, do not command us to do anything. Instead, they authorize acts, or lay down procedures for performing acts, that we might choose or not choose to do. Finally, there are laws that do not appear to command or authorize anything, but instead express judgments. They cannot be said definitely to command or authorize anything here and now because they are about particular actions that happened in the past. Whether a judgment prohibits or permits a
present action depends on the resemblance between that action and the past action (Ingram, 2006, p.1). In contrast, Ogus (1994, p.2) explains that regulation contains the idea of control by a superior and has a directive function. To achieve the desired ends, individuals are compelled by a superior authority, the state, to behave in particular ways with the threat of sanctions if they do not comply. It is public law in the sense that it is for the state or its agents to enforce the obligations which cannot be overreached by private agreement between the parties concerned and because the state plays a fundamental role in the formulation as well as the enforcement of the law (Ogus, 1994, p.2).

In the context of socio-legal studies, the concept of regulation has two main advantages. First, it leaves a useful ambiguity over the extent to which regular behavior is generated internally or entails external intervention. Secondly, it embraces all kinds of rules, not only formal state law (Picciotto, 2002, p.1). This context of regulation and enforcement is elaborated in Chapter Two which discusses the approaches to financial market regulation and the related tools of enforcement which are available to regulators. The distinction between private law and public regulation is an important one in relation to the hedge fund industry where a crucial strategy contributing to the success of hedge funds has been to seek exemptions from registration requirements through financial services authorities due to provisions available within legislation attributed to privately managed investment vehicles. These issues are discussed in detail in Chapter Four and Chapter Six which analyse the regulation of hedge funds in the US, UK and Australia.
The importance of understanding the collective interaction of law, economics and finance has grown to be an area of substantive importance and the relevance of regulating actors within financial systems has been pronounced, especially after the GFC 2008. Not only has the financial crisis helped to expose economics to the important implications of the evolving legal environment but it has also brought to the forefront the fact that legal decisions often have important economic implications that can be uncovered with the application of economic theory (Oppenheimer and Mercuro, 2005, p.3). Law and economics rely on the standard economic assumption that individuals are rational utility maximizers, and studies of the role of law as a means for changing individual actions is based on the approach that a change in the rule of law will have an effect or alter behaviour (Parisi 2004, p.262). Wealth maximization, serving as a paradigm for the analysis of law, can thus be promoted or constrained by legal rules (Posner and Parisi, 1997, p.xi; Parisi 2004, p.262). Thus, regulation is a mechanism to insist that public purposes be respected by businesses and other non-governmental institutions in their operations (Aikin, 2009, p.26).

Public interest theory can be explained as concerned with achieving the best possible allocation of scarce resources which promotes the best interest of the public. In western economies the allocation of resources is coordinated by the market mechanism. In theory, it can even be demonstrated that, under certain circumstances, the allocation of resources by means of the market mechanism is optimal. However, these conditions are not frequently met in practice; the allocation of resources is not optimal, markets are not efficient and a demand for methods for improving the allocation arises (Arrow, 1985; den Hertog, 1999, p.225). A solution for maintaining the optimal allocation of resources is by
government intervention and regulation, especially when market failures are present and private law does not offer a remedy. A market failure is a situation where scarce resources are not put to their highest valued uses. In a market setting, these values are reflected in the prices of goods and services. A market failure thus implies a discrepancy between the price or value of an additional unit of a particular good or service and its marginal cost or resource cost (den Hertog, 2010, p.5; Ogus, 1994; Adler, 2010, p.595). Baldwin and Cave (1999, pp.9-13) state that regulation in cases of market failure is argued to be justified because the uncontrolled market place will for some reason fail to produce behavior or results in accordance with the public interest, for example in instances of fraud and prevalence of informational asymmetries. The precise nature of a market breakdown will dictate what is best suited to either restore the market or to compensate for its absence (Fellmeth, 1985, p.4; Li, 2008, pp.526-529).

In summary, government intervention and regulatory actions during a market failure can be interpreted as an efficient instrument to correct imperfect competition, unbalanced market operations and undesirable market results. Government intervention due to market failure in a crisis scenario can be justified as being in the interest of the public and upholds the investor protection mandate which expounds intervention as a requirement to maintain investor confidence, market stability and promote economic efficiency. The “Public Interest Theory of Regulation” was theorized to justify this claim, that when the public interest is to be protected governments should intervene.
1.3.1 Public Interest Theory

Public interest theories of regulation attribute to legislators and others responsible for the design, intervention and implementation of regulation, a desire to pursue collective goals with the aim of promoting the general welfare of the community. This can be further subdivided into those that articulate regulatory goals in terms of economic efficiency and those which include other political goals (Morgan and Yeung, 2007, pp.17-18). The concept of public interest is as old as the political philosophy of government intervention. Indeed, this concept appears in the works of political philosophers such as Plato, Aristotle, Hobbes, and Rousseau. Government intervention and public interest coexist in the political, philosophical, economic and legal spheres of society (Hantke-Domas, 2003, p.166).

The prevailing public interest theory of regulation until the early 1960s was what Joskow and Noll (1981) have called the “normative analysis as a positive theory” (Peltzman, 1989, p.4). This theory regarded market failure as the motivating reason for government intervention in enacting regulation. Once established, regulatory bodies were meant to lessen or eliminate the inefficiencies engendered by market failure (Peltzman, 1989, p.4). In these earlier developments of the public interest theory of regulation, it was assumed that a market failure was a sufficient condition to explain government intervention. However, the theory was criticized as a ‘Nirvana Fallacy’, implying that it assumed theoretically efficient institutions could be seen to efficiently replace or correct inefficient real world institutions. The term ‘nirvana fallacy’ was popularized by Harold Demsetz (Demsetz, 1969; Kirzner, 1978, p.231) who stated:
The view that now pervades much public policy economics implicitly presents the relevant choice as between an ideal and an existing ‘imperfect’ institutional arrangement. This ‘nirvana’ approach differs considerably from a ‘comparative institution’ approach in which the relevant choice is between alternative real world intuitional arrangements (Demsetz, 1969, p.1).

The neo-classical school of economics is divided over the relative merits of the market and the state in achieving the objectives of efficient allocation of resources, for example to strengthen the financial sector, to reverse the downturn of the economy and to ensure high economic growth. Proponents of the free-market system argue that without government intervention the dynamics of demand and supply will help the economy adjust to recession and automatically correct its imbalances, by purging inefficiencies within the system, and then move toward equilibrium and the strengthening of the overall economy (Aikins, 2009, p.24). Bushman and Landman (2010, pp.261-263) explain that this critique of public interest theory proceeds in three basic steps. First, competition in the market and private orderings or the coming together of non-governmental parties in voluntary arrangements, significantly mitigate market failures, obviating most of the need for government intervention. Next, where competition and private orderings do not adequately address market failures, contracts supported by impartial courts and the enforcement of tort rules resolves remaining market failure issues. In the absence of unresolved market failures, regulation is undesirable. However, these arguments rely on courts being motivated, unbiased, informed, and incorruptible (Bushman and Landman, 2010, pp.261-263).

The ‘Nirvana Fallacy’ of refuting public interest theory is further supported by arguments based on capture theory which questions public interest theory’s main assumptions that governments are benevolent and competent (Stigler, 1971; Posner, 1974). This theory
contends that regulators are often captured by those whom they are charged to regulate, and even if the regulator is independent and wants to ‘do good’ by acting in the public interest, they are generally incompetent and likely to fail. Capture theory often models regulators as self-interested agents that seek to maximize their own welfare with their primary concern being their own wealth and power (Peltzman, 1976). Thus, even if a market failure exists, capture theory is skeptical that government intervention is the solution. To avoid the ‘Nirvana Fallacy’, a case has to be made that regulation would in fact achieve better outcomes than the status quo or a market-based solution (Bushman and Landman, 2010, pp.7-9). These criticisms led to the development of a more serious public interest theory of regulation by what has been referred to as the ‘New Haven’ or ‘Progressive School’ of Law and Economics based on the concept that regulation seeks to protect and benefit the public at large and defines it as a system of ideas which proposes that when markets fail economic regulation should be imposed in order to maximize social welfare (Demsetz, 1968; den Hertog, 2010, p.5; Stigler, 1971; Posner, 1974; Hantke-Domas, 2003, p.166).

Richard Posner (1974), a fellow of the Chicago School, was the first academic to substantively attribute the traditional rationale for regulation based on the concept of public interest. He recognized two arguments commonly used to support regulation namely, that financial markets are prone to fail and that regulation was costless or had ‘zero transaction costs’ (Hantke-Domas, 2003, p.165). Ensuing authors (Josjow and Noll, 1981; Viscusi et al, 1995 and den Hertog 2000) extended this assumption and identified public interest theory as part of welfare economics (Hantke-Domas, 2003, p.165).
Fundamental to the public interest theories are market failures and efficient government intervention to maximise social welfare (den Hertog, 2010, p.2). In simple terms, it suggests that regulation is a response to imperfections in the market, correction of market failures measures, the community's general welfare and is thus in the public interest. Correlatively, those who press for regulation and in response to market failures are agents of the public interest (Orgus, 1994, p.18). Although market failure was recognized by Posner as part of the public interest theory of regulation, the idea of market failure is the premise of welfare economics advocated by A.C. Pigou, W.J. Baumol and F.M. Bator (Hantke-Domas, 2003, p.181).

1.3.2 Market Failure

The theory of market failure is concerned with the establishment of conditions where competitive market allocation of resources will be inefficient. The theory suggests that under certain conditions, the production and distribution of a good or service through a competitive market in which all the relevant agents are pursuing their own self-interest will result in an allocation that is socially inefficient and may result in market failure (Lehne, 2006; Aikins, 2009, p.26). In essence, welfare economics is employed to prescribe legal and institutional changes when market failure occurs. The more prominent examples of market failure cited in public interest theory studies involve the presence within an economy of natural monopoly, information asymmetry and externalities (Vicusi et al, 1995; Hantke-Domas, 2003; Aikins, 2009; Lehne, 2006; Ogus, 1994).
A natural monopoly exists in circumstances when there is room for only one corporation to operate efficiently, usually because of economies of scale limiting the number of firms that can function in a market, restricting competition and allowing monopolists to force up prices and limit output, which results in allocative inefficiency (James, 2000, p.330; Fellmeth, 1985, p.7). To generate allocative efficiency, there needs to be enough firms so that competition would drive price down to marginal cost (Vicusi et al, 1995, pp.323-324; Hantke-Domas, 2003, p.184). Thus, competition is a crucial assumption of overcoming this ‘natural monopoly’ market model and where it is seriously impaired by monopolies and anti-competitive practices there is market failure and regulatory intervention is necessary (Ogus, 2004; Morgan and Yeung, 2007, p.19). Informational asymmetries are situations where market participants do not have or are not able to attain adequate information about a product or service being exchanged. Consumer choice lies at the heart of the economic notion of allocative efficiency (Morgan and Yeung, 2007, p.24). In a fair and efficient market, consumers have sufficient information to make informed decisions and hence, are given choices. To aim at a state in which resources move to their most highly valued use implies that choices between sets of alternatives may be exercised. Individuals prefer some commodities to others and such preferences are reflected in demand (Morgan and Yeung, 2007, p.24). The market system of allocation is fuelled by an infinite number of expressions of these preferences (Ogus, 1994, p.38). This assertion depends on the assumption that consumers have the required information to process and evaluate their decisions in a rational manner so as to maximise expected utility. A significant failure of this assumption may set up a prima facie case for regulatory intervention (Ogus, 1994, p.38; Beales et al, 1981, pp.501-513). Hence, legislators and regulators are essentially
benevolent, designing and operating regulatory systems to correct these failures and bringing about improvements to general well-being in the public interest (James, 2000, p.330).

Externalities are the effect of decisions or actions by individuals or organisations on others who do not have a choice or are not equal participants in the decision making processes which invariably affect them. The theory was developed by British economist A.C. Pigou and examines cases where some of the costs or benefits of activities ‘spill over’ onto third parties. When it is a cost that is imposed on third parties it is known as a negative externality and when third parties benefit from an activity in which they are not directly involved, the benefit is considered a positive externality. The impact of externalities in the context of public interest theory focuses on negative externalities as a result of commercial activities. An often cited textbook example concerns the discharge of waste material by a factory such that downstream drinking water companies must incur costs of water purification (den Hertog, 2010, pp.15-16). The rationale for regulation here is to eliminate this waste and to protect society or third parties suffering from externalities, by compelling the internalization of spillover costs onto the polluter (Baldwin and Cave, 1999, p.12). In all such cases, the market failure is accompanied by a private law failure and regulation may be the more efficient solution if the costs of regulatory intervention are lower than the benefits in terms of welfare loss control (Gruenspecht and Lave, 1989, pp.1510-1525; den Hertog, 2010, pp.15-16).

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1.3.3 Regulatory Intervention

The forms which regulation takes based on the public interest theory can be described as non-economic and economic regulation to overcome market failure, best presented by Funnell (2001, p.166) in Figure 1.1 below. The aim of regulation is either to control service delivery according to approved rules designed to ensure equity and high-quality service, or as one of the means available to implement government policy (Funnell, 2001, pp.166-167). Regulatory intervention to prevent market failure in the public interest can include attempts to control prices and stop monopolists exploiting their position, placing restrictions on behaviours and requirements to market information about product quality and risks made available to consumers (Noll, 1989; Ogus 1994; James, 2000, p.330). Non-economic form of regulation centres on the instances of regulating information asymmetry and externalities while economic regulation applies to industries with monopolistic tendencies which are generally regarded as undesirable and prohibited under competition law (Ogus, 1994, p.5).

Figure 1.1 Forms of Regulation

![Diagram showing forms of regulation]

Source: Funnell (2001, p.166)
To deal with these problems, policy-makers can choose from a range of regulatory instruments, classifiable according to the degree of state intervention required. Administrative and judicial law will be considered as adequate in periods where economic efficiency is maximized and there is less risk of market failure as a non-economic form of regulation. However, should the economic environment change and tendencies towards market failure move towards the higher end of the table shown in Figure 1.1, intervention can take the form of imposing standards and strict criterion on service, safety and product quality. The non-economic forms of regulation are aimed at enhancing public interest where the failure of ‘private’ regulation advocates intervention. Ogus (1994, p.5) states that the principal function of economic regulation is to provide a substitute for competition in relation to natural monopolies. Broadly speaking, there are three alternatives. The firm can be publicly owned, the expectation being that the mechanics of political direction and accountability will be sufficient to meet public interest goals. Firms desiring to obtain a monopoly right may be forced to compete for it. As part of their competitive bid, they may be required to stipulate proposed conditions to supply, relating especially to prices and quality, and those conditions then become terms of the license or franchise under which they exercise their monopoly right. Alternately, the firm may remain in, or be transferred to, private ownership but be subjected to external constraints in the form of price and quality regulation (Ogus, 1994, p.5).

The purpose of identifying the contributors to market failure is to substantiate the need for government intervention in safeguarding the interests of the public. Dodd (2002, pp.2-4) finds that imperfections, incompleteness or inefficiencies in financial markets are
detrimental to the investor protection mandate and inconsistent with public interest theory. Regulatory intervention by government enables proposal policies to remedy these faults. He states that the existence of negative externalities in financial markets contributes to social costs, for example contagion from credit losses and relying on market equilibrium theories will not provide the optimal level of production and consumption. The presence of imperfect markets means to recognize that financial market exchanges, whether for stocks or derivatives, are natural monopolies whose control of trading rules and contract design in which there is a public interest, is not disciplined by perfect competition. Furthermore, Dodd states that the existence of imperfect markets facilitates in the costly effect of fraud and manipulation, this behavior should be prohibited and policed. The systemic failure of a financial crisis as a result of these imperfections will contribute to broad social costs whereby government cannot avoid intervention if they are interested in maintaining a well-functioning and efficient marketplace (Dodd, 2002, pp.2-4).

The GFC 2008 elevated the importance of regulating the hedge fund industry as investors lost billions of investment income due to the risky investing activities which has long been a contributory factor to their ability to generate absolute returns. Advocates of regulatory intervention argue that the current recession and financial crisis constitute a manifestation of market failure and that the role of government is to mitigate the undesirable consequences of market activity through regulation and appropriate fiscal policy instruments without losing the benefits of a competitive economy, while protecting the public interest (Aikins, 2009, p.25). It is important to emphasise that any regulatory intervention has to bear in mind the evolution of 21st century financial systems and include
oversight of the shadow banking system. The next section presents the research problem of
the thesis which develops the motivations of the research and this is subsequently
elaborated in section 1.5 which presents the key themes.

1.4 Research Problem

The need to regulate the hedge fund industry, which has been regularly debated in the US
and the United Kingdom (UK) over the past twenty years, is much more evident after an
episode of a financial turmoil. For example, the Asian Financial Crisis 1997 and the
subsequent collapse of Long Term Capital Management (LTCM) in 1998 resulted in
extensive inquiries and investigations by regulatory agencies which focused on the
systemic risks posed by hedge funds, in particular the increasing exposure which hedge
fund investing activities had for counterparties in the regulated banking sector. However,
the resultant inquiries which recommended registration requirements and increased
disclosure of hedge fund activities never led to any substantive regulatory actions. The
general consensus by market regulators was that the hedge fund industry was a small,
privately funded sector of the overall financial system and hence did not have a significant
impact to warrant regulatory actions\(^9\). Political pressure dissipated amidst industry
advocacy which promoted a self-regulatory approach to supervising the hedge fund
industry, an aspect which is addressed in more detail in Chapter Three. It was only after the

Internal Market) Consultation Paper on Hedge Funds” p.5 stating; Hedge funds have not traditionally
been considered to be of systemic relevance. Losses incurred by hedge funds and the risk of their
failure are borne directly by investors and their immediate counterparties. For this reason, capital reserves
are not part of the regulatory ‘tool-box’ for hedge funds, or indeed other investment vehicles.
24 Nov 2012.
GFC of 2008 that the risks of hedge fund activities as systemic contributors to financial market turmoil came to be recognized as a political and regulatory concern which needed attention in a unified manner at an international level.

The GFC 2008 has had the most widespread impact on financial market turbulence compared with previous similar crises. The risks of a lack of political action initiated an overhaul of the global financial market regulatory architecture as governments sought solutions to appease the investing public and regain market confidence with much of the regulatory actions directed to the use of financial derivatives and the shadow banking sector, in particular hedge funds. These changes meant that investors will be provided with increased regulatory protection against misconduct and fraudulent activities, while at the same time dictating strict responsibilities for agents within the financial services industry with expanded disclosure requirements. However, repeated crises over the past three decades indicate that financial market regulators have not effectively upheld the investor protection mandate profusely advocated in market regulations. Increased disclosure of hedge fund activities will not be effective if the information disclosed is not understood by the agents in charge of supervision and enforced proactively. Indeed, it is the complexities of these very investing activities which lead to valuation mismatches and the consequent asset bubble in the first place.

The difference between ‘regulatory content’, the specific statutes and administrative rules governing financial markets, and ‘regulatory strategy’, or techniques employed by the regulatory system to achieve its goal, is central to understanding the functions of financial
market regulation globally and determining its future path. The dichotomy between
desirable and achievable regulatory goals is reliant on successful execution. Thus the
complexity of regulatory initiatives developed over time to rectify deficiencies in the law is
very much shaped by the practical constraints placed on enforcement agencies. As shown
in Chapter Two, the global financial regulatory architecture we face today reflects a
complex division where authority is segregated across various regulatory agencies
mandated by supervisory responsibilities dependent on variables such as an agency’s
charter, organisational structure and limitations on the services it provides. As a
consequence, this fragmented approach separates different financial intermediaries from
administration across agencies, even though their overall functions and actions may be
effectively similar in a connected financial system. This is further exacerbated by the
adaptive shift in attitudes towards regulation within agencies as a result of changes in
personnel and political pressures. Implementing regulation requires a lot more than just
policing violations and includes the development of techniques for long-term monitoring
and control of the regulated industry. For example, the regulatory approaches previously
established in the US and the UK had failed to adequately protect investors against fraud
and failure of hedge fund activities during the period leading up to the financial crisis based
on two prominent reasons. Firstly, hedge fund activities are so complex and flexible that
they span many different sectors and the use of off-balance sheet transactions and special-
purpose vehicles meant that regulators were eluded or unable to identify the true nature of
risky activities. Secondly, the principles which motivated these regulatory approaches
offered hedge funds the opportunity to seek registration exemptions from direct
supervision. The reasons for this failure vary but two things are clear about pre-GFC 2008
international regulatory arrangements: their over-reliance on private sector input and lack of even rudimentary institutional infrastructure to handle cross-border crises were contributing factors both in building up the conditions that led to the GFC 2008 and in exacerbating its consequences. These observations do not tell the full story (Avgouleas, 2012, p.3).

The unavailability of information pertaining to hedge funds has been one of the most important reasons why research in this area has been limited. Regulatory exemptions available to hedge funds and the need to protect proprietary investment strategies to maintain competitiveness has enabled hedge funds to hide behind a veil of secrecy since the industry gained prominence in the early 1980s. However, this lack of transparency and risk disclosure has made effective supervision impossible and contributed to the collapse of thousands of hedge funds, more so during the first five years of the GFC 2008. Chapter Five will show that information obtained by a few specialist organizations which conducted commercial research on the operational risks within hedge funds has identified non-financial risks as a salient cause of hedge fund failures, in particular misappropriation of assets, misrepresentation of information and misleading investors, all fraudulent activities related to having the ability to manipulate a hedge funds’ Net Asset Value (NAV). Misunderstanding a major knowledge revolution, as recent financial innovations should be held to be, is nothing new. Avgouleas (2012, p.4) suggests that:
Not only do communities of experts tend to be confused about the actual epistemological properties of new knowledge or technology, but they have also traditionally under-estimated its value. Therefore, the possibility of financial innovation (perceived here as a knowledge revolution) being used as a benevolent force to achieve global welfare objectives should not be discarded. On the contrary, proper research and knowledge structures with a global reach should be built to help policy-makers and possibly the markets to gain a better understanding of the properties and risks of financial innovation and of the financial revolution in general in order to manage them in a way that would not endanger financial stability and would even facilitate the achievement of other global welfare systems.

As strong as this statement may sound, the potential future risks will be multiplied should adequate action not be taken. More importantly, changes within the financial intermediation process and regulatory structure have resulted in an increase in the flow of funds into the hedge fund industry. As identified earlier, hedge funds indeed did play a role in the financial crisis and, although the entire industry is not solely to be blamed, the various ways in which hedge funds contributed to the financial crisis cannot be overlooked. As discussed in Chapter Four, the lack of specific regulation and registration requirements governing hedge fund activities in the US and the UK could be still viewed as much more progressive when compared to the non-existent rules in Australia.

This study is significant because, to date, there has been little research conducted on the manner in which hedge funds are regulated in Australia or the risks which they pose to retail investors. Indeed, regulatory approaches have been ambiguous and hidden behind a veil of complex Corporations Act 2001 (As Amended) requirements which have enabled hedge funds to voluntarily structure themselves in ways which would be most financially beneficial to them. The problem was avoided when the hedge fund industry exclusively served institutional investors who are knowledgeable partners in investment philosophies,
identified in regulation as 'sophisticated investors'. However, it is a completely different situation when retail investors begin to directly participate in hedge fund investments without a thorough understanding of the risks they are undertaking. There is a very good reason why investor protection and disclosure requirements mandates are placed on market participants through regulation and supervisory initiatives. The proviso within the sophisticated investor rules across these jurisdictions acknowledges a sophisticated investor as a knowledgeable participant who understands investment philosophies and the risks they are undertaking and, hence, do not require the protection afforded to retail investors. Thus, sophisticated investors are willing and knowledgeable participants in the risk and acceptance of losses on default. This problem is further intensified with the participation of superannuation funds which invest in hedge funds and, hence, indirectly expose unknowledgeable retail investors to the higher risk profiles which hedge funds undertake. The collapse of Trio Capital in Australia in 2009 is a prominent example, which is analysed in Chapter Six, where retail investors lost billions of investment income, retirement savings and most were not protected by the Australian Superannuation Industry (Supervision) Act 1993, by making their investment decisions trusting the financial advice they were given. The reason for this research is not to make a claim that these risks are exclusive to the hedge fund industry nor does it make a claim that all hedge fund managers act in a fraudulent and deceptive manner. Rather, the focus is that part of the hedge fund industry in Australia which has subjected investors to fraudulent conduct, deception and misappropriation. Should a large enough hedge fund fail, the possible systemic effects are usually immeasurable and counterparty exposure could invariably have a contagion impact as seen in the GFC 2008. This warrants research on hedge fund regulation in Australia.
1.5 The Study's Central Themes: Definitions and Explanations

1.5.1 Risk

The manner by which hedge funds are regulated in the US and the UK before and after the GFC 2008 has enabled the researcher to gain an appreciation of the various strategies that have availed hedge funds to be left largely unregulated in two of the biggest financial markets globally. More importantly, the research enabled a comparative analysis to benchmark regulatory actions which could be undertaken in Australia proactively. A crucial theme of this thesis is the investor protection mandate, motivated by large financial losses of investors in the aftermath of the collapse of Trio Capital in which one of its related funds, Astarra Strategic Fund, had defrauded retail investors of their life savings.

The GFC 2008 has shown varying reasons why the risk of hedge fund activities has come into the spotlight of regulatory spheres and the broader society. A particular emphasis is on the need to restore confidence in the aftermath of the mismanaged GFC 2008 and to improve the manner in which hedge fund investment strategies and their related risks are being communicated to their investors. Techno-scientific approaches to risk management, emerging from statistics, actuarial sciences and, indeed, finance, bring together the notion of danger or hazard with calculations of probability and consequences in magnitude and severity of an adverse event (Bradbury, 1989, p.382). Debates over risk in these fields tend to revolve around issues of how well a risk has been identified or calculated, the level of seriousness of a risk in terms of its possible effects, how accurate is the ‘science’ that has been used to measure and calculate risk and how inclusive are the causal or predictive models that have been constructed to understand why risks occur and why people respond
to them in certain ways (Lupton, 1999, p.19). Accordingly, risk is viewed as a controllable, intricate part of investing where knowledge of scientific measurement enables its quantification and mitigation. There is a contrary view by political scientists which suggest that the adoption of the language and practices of risk reflects a deeper, more complex process, that of ‘political isomorphism’ (Gray and Hamilton, 2006, p.5). According to this view, risk becomes accepted and embedded in one organisation or institution such that it requires recognition within other organisations and institutions even though different institutions utilise risk management variedly (Ojo, 2009, p.1). One possible explanation suggests that late modern society has created a culture of control, accountability and responsibility as a means to emphasise the centrality of risk (Rothstein et al, 2006, p.92).

There are two prominent theoretical views which approach these issues, namely, risk society theory by Ulrich Beck and governmentality theory, drawn from the works of Foucault.

Risk-society theorists focus their analysis on macro-structural factors influencing what they see to be an intensified concern in late modern societies about risks which is “manufactured”, that is, generated by humans as part of economic progress and technological change, for example the collapse of a financial institution, rather than a natural catastrophe (Harvard, 2008, p.116; Lupton, 1999b, pp.3-4; Chang, 2011, p.2). They argue that risks produced under the conditions of late modernity have increased in magnitude and become globalized and, therefore, are more difficult than in the past to calculate and, therefore, manage or avoid (Chang, 2011.p.3; Lupton, 1999b). A central theme of this theory is the concept of ‘reflexive modernity’. The concept holds that a
modern, well-educated society emerged from the ashes of the industrial age where information availability and confidence within the educated created an individualistic bias towards corporate institutions and structures of the 20th century (Aiken, 2000, p.5). The reflexive modernity has to solve human constructed problems which arise from the development of industrial society; to tackle how risks produced as a consequence of modernity can be prevented, minimised and cancelled (Aiken, 2000, p.5). Among these risks they identify a loss of faith in institutions and authorities and a greater awareness of the limits and uncertainties associated with science and technology (Gray and Hamilton, 2006, p.6). Risk society theory suggests that the preoccupation with risk in government and regulatory circles is a response to a general recognition that there are limits to the ability to know or to control the uncertainties associated with late modernity, and to a public wanting to hold public decision-makers to account. Risk is now viewed as a political rather than a metaphysical phenomenon (Gray and Hamilton, 2006, p.6).

An alternative view to explain the growing emphasis of risk in investment management is governmentality theory. At the ‘risk’ of oversimplifying these extremely influential perspectives, the term ‘governmentality’ is akin to the words ‘governing mentality’. Foucault posits that the government uses different tools to govern the mentality of its citizenry (Lemke, 2002, p.50). For example, the term of risk management can be used to encapsulate investors’ acceptance of the risk of a loss in investing activities without directly affecting market confidence. The view that ‘actions are in place’ in mitigating the risk which an unsuspecting financial calamity could pose to investors’ income is central to the motivations within the responsibilities of financial market regulators and prudential
supervisory bodies. In Foucault’s terms, governmentality refers to a distinctive modality for exercising power, one which is not reducible to the state. Governmentality is understood to work ‘at a distance’ by seeking to shape ‘the conduct of conduct’ (Barnett, 2010, pp.280-283). The theorists do not focus on the quantification of risks in society nor its effects on the economy as a whole but rather how the concept is used as a ‘tool of governance’ to shape behaviours through which to exercise control over its citizens (Hodgson, 2002, pp.320-322).

It has been suggested that the proliferation of risk rationalities and reliance on the prudent individual means that authorities of all sorts, including governments, have found a way of governing without governing society (Lupton, 1999b, pp.150-151). Hence, risk is conceptualised and its management is shifted away from the government onto individual investors who have to take responsibility for managing their own investment risks. This theory refutes the responsibility of governmental authorities for the financial system, for example in ensuring a safe and efficient financial market where investors are protected through various regulatory structures against fraud and manipulation and eventual loss of income. The GFC 2008 has also shown the ease with which private losses can be converted to public debt which thus invariably shifts the risks related to imprudent investing activities to the public but privatising the gains as was the case in the US with government bailouts of ‘too big to fail’ financial institutions at the height of the crisis in 2008. More importantly, the risks which reckless hedge fund activities pose to a financial system and individual investors has been highlighted as a recurrent theme as an effect of the fallout from the GFC 2008. This study will approach these risks at the macro and micro levels.
At the macro level, hedge fund activities have been identified as posing a risk to the system or systemic risks. Studies in the area have identified effects of systemic risks to counterparties within the banking and non-banking system. At the micro, institutional level, the collapse of a hedge fund poses the risk of financial loss to individual investors who have historically not been protected by investor protection regulation because of sophisticated investor exemptions. This exemption is built on the caveat that sophisticated investors, which included institutional and high net worth individuals (HNWI), who chose to invest in hedge funds, are knowledgeable participants who have adequate financial literacy to understand the risks they are committing to. The prevalence of fraud risk within hedge fund activities whereby non-financial risks or the loss of investments due to the fraudulent conduct of fiduciaries has added a new paradigm into risk management is a prominent focus of this thesis, highlighted throughout the study within the cases analysed.

1.5.2 Regulation of Hedge Funds

The second theme of the thesis is the approach to regulating hedge funds in the US, the UK and Australia before and after the GFC 2008. In particular, the exemptions provided to registration requirements especially after the proposals under the Dodd-Frank Wall Street Reform and Consumer Protection Act 2010 (Dodd-Frank Act) in the US and changes in the regulatory structures in the UK following the introduction of the Alternative Investment Fund Managers Directive (AIFMD). Gaps are identified which cannot be solely addressed with regulation in protecting investors against fraud and misconduct by fiduciaries. These relate to the reasons for and the manner in which hedge funds have been able to largely
carry out their business ‘under the radar’, privately in an unsupervised nature notably. The largely unregulated nature of hedge funds and the problems in valuing hedge fund portfolios have directly impacted investors, exposing them to fraud, manipulation, misconduct, misappropriation and misrepresentation.

Hedge funds as private investment vehicles have been left unregulated for reasons which evolved over the decades from regulatory initiatives to promote flexibility in investment activities after the Great Depression of 1929. The most prominent reason for not extending regulation to hedge funds was recognition of the ‘sophisticated investor rule’ which enabled hedge funds to seek exemptions from registration requirements as financial advisers or investment professionals and thus provided them with the flexibility in making investments through their various investment strategies which were not available to regulated funds. Chapter Four identifies the recognition of sophisticated investors is widespread in financial market regulation and uniformly mandated in all three jurisdictions researched in this thesis, the US, UK and Australia. The decisions to seek exemptions from registration requirements is a very important proviso or strategy in the success of hedge funds as it has been a contributory driver in their growth and their continued existence. The absence of any disclosure requirements in relation to the investment mandate of hedge funds has enabled them to refrain from revealing proprietary information of investment strategies. This has been a critical success factor for hedge funds which seek absolute returns by betting against the market. In addition, the non-restrictive approach to hedge fund activities has meant that the only real information provided is
within their investor prospectus which does not have any substantive deterrence impact and is largely ineffective with problems revealed only after a crisis, fraud or failure.

The debate revolving around the regulation of hedge funds has in itself been very conflicting with notable scholars arguing that hedge funds are not regulated largely because of the ability to incorporate their structures in tax havens while trading in regulated financial markets and, hence, the need for regulation. Others state that the regulatory structures are in place but the availability of exemptions has enabled hedge funds to escape direct regulatory oversight. As will be shown in Chapter Four, this study notes that there has always been regulation available in all the jurisdictions analysed but hedge funds have been able to take advantage of exemptions to escape registration requirements and hence direct regulatory oversight. The exemptions available within financial market regulation have enabled hedge funds to seek exemptions from regulation which were originally enacted to cater to a wide range of investors and, in this case, knowledgeable private investors who are considered able to withstand the risks they are taking. This ‘light-touch’ approach has largely been mistaken for a lack of regulation which has certainly not been the case. It has also been stated that there is a need for increased regulatory disclosure requirements and transparency in valuation practices. Such varieties of disclosure requirements have also been in existence for a long time in various forms catering to the regulated part of the asset management industry and, due to registration flexibilities, have enabled hedge funds to generally not disclose information.
The valuation issues pertaining to hedge funds investing generally relate to the manner in which the portfolio of a hedge fund is managed, in particular if the fund invests predominantly in illiquid assets where ‘marked-to-model’ instead of ‘marked-to-market’ methodologies is chosen. Valuation determines the manner in which hedge fund managers are compensated and directly reflects on the performance of a manager through which forecasted investment decisions are made by investors. Research conducted on hedge fund failure and attrition suggests that there is generally no direct relationship between the net worth of hedge fund positions and their realizable value at any time. There has been dispute over the pricing models which hedge funds use and that this flexibility has meant that investors are kept in the dark in regards to the true performance of the fund and the value of their investments. The lack of specific procedures and reliance on economic models which are not necessarily accurate points to the need for more direct regulatory oversight to be enforced within the hedge fund industry. Chapter Five analyses these issues in greater detail and in particular the valuation of illiquid financial assets which is a major source of operational risks within hedge fund and an area where the risks of manipulation and misrepresentation is prevalent.

1.5.3 Protection of Retail Investors

The third theme of this thesis is the protection of retail investors from the risks through the regulation of hedge funds. Retail investors are much less able and likely to seek adequate information or adequate protection from hedge funds. Financial market regulators in the
US have expressed concern\textsuperscript{10} at the increasing retailization of hedge funds and the ability of unsophisticated investors to be exposed to hedge fund investments (Edwards, 2006). The wealth thresholds that restrict investor access to hedge funds in accordance with the accredited investor standard have been eroded by a general rise in income and wealth levels. In the US, the UK and Australia, the accredited investor definition is not linked to inflation and has not been adjusted to reflect changes in income levels. This means that many more, potentially millions, of individuals now qualify and thus a far larger segment of the investing public are now able to meet the accredited investor standard necessary to access hedge funds as compared to when the standard was established in the respective jurisdictions.

The proportion of investments in hedge funds by pension fund investors has increased greatly. For example, the global investment in hedge funds by pension funds increased from a 5 percent share of capital to a 15 percent share between 1996 and 2004 (Edwards, 2006). Presumably mutual and pension fund managers are not ‘unsophisticated’, but the beneficiaries of the funds they manage will often be and they are the people who are ultimately taking on the risk of the investments (Horsfield-Bradbury, 2008). It has also become much easier for individual investors to invest in entities which replicate hedge fund strategies or incorporated solely to invest in hedge funds known as funds of hedge funds. In both the US and the UK funds of hedge funds are treated differently from hedge funds; they have lower buy-ins and are available to less-well accredited investors even

though there is no significant difference between funds of hedge funds and hedge funds (Bollen and Pool, 2008). Funds of hedge funds, consisting of investments in two or more hedge funds which does not necessarily reduce risk and increases fees, have grown recently, now accounting for over 20 percent of the global investment in individual hedge funds (Edwards, 2006).

Another method of individual investment is via indexes that ‘clone’ hedge fund strategies, a practice used successfully by Merrill Lynch, Goldman Sachs and Deutsche Bank (Kat, 2007). They benefit from not having the exorbitant performance fees, but can suffer from the same lack of transparency as hedge funds. Goldman Sachs, the first bank to launch such a replication index, keeps its ‘Absolute Return Tracker’ proprietary; investors know little of the strategy that they are investing in. These developments have led some commentators to suggest that hedge funds must be regulated more closely as the ‘sophisticated investor’ justification no longer holds firm (Pekarek, 2007). The secretive nature of hedge funds means they do not have to disclose information regarding their holdings. As such, they can diverge from stated investment strategies without investor knowledge, or simply engage in fraud.

1.6 Hedge FundFailures

This thesis will incorporate several prominent and controversial cases of hedge fund fraud and failure to develop themes which will detail the risks certain hedge fund activities may

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pose to investors and financial systems globally. The cases include LTCM and Bear Stearns Hedge Funds\textsuperscript{12}, Bernard Madoff Investment Securities LLC and Trio Capital. Baxter and Jack (2008, p.544) state that “incorporating case analysis in research facilitates the exploration of a phenomenon within its context by using a variety of data sources which ensures that the issue is not explored through one lens but rather a variety of lenses and allows for multiple facets of a phenomenon to be revealed and understood”. The motivation of utilizing these cases is in congruence with this theory. The primary data sources used in this study were derived from case law, submissions and reports by financial market regulators and governmental agencies in the US, UK and Australia as well as international governing bodies which are identified in the Figure 1.2 below. This is complemented by an extensive literature review, submissions from industry bodies and research agencies, newspaper articles and internet searches. Reference to numerous internet sites has been an especially important source of information, in particular those provided by regulatory agencies. In the dynamic, ever changing financial environment which increasingly characterizes world financial markets in an age of technological exuberance, reliance must be increasingly placed on sources where information arises from immediate and ephemeral events and which may find its way into more enduring media.

\textsuperscript{12} The Bear Stearns Hedge Funds analysed were the High-Grade Structured Credit Strategies Fund (HGCF) which was incorporated in 2003 and the High-Grade Structured Strategies Enhanced Leverage Fund (HGLF) created in 2006.
### Figure 1.2 Regulatory Agencies

<table>
<thead>
<tr>
<th>United States</th>
<th>United Kingdom</th>
<th>Australia</th>
<th>International Regulatory Agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Securities and Exchange Commission (SEC)</td>
<td>Financial Services Authority (FSA)</td>
<td>Australian Prudential Regulatory Authority (APRA)</td>
<td>International Monetary Fund (IMF)</td>
</tr>
<tr>
<td>Commodity Futures Trading Commission (CFTC)</td>
<td>Prudential Regulation Authority (PRA)</td>
<td>Reserve Bank Of Australia (RBA)</td>
<td>International Organisation of Securities Commission (IOSCO)</td>
</tr>
<tr>
<td>Federal Reserve System (Fed)</td>
<td></td>
<td>The Australian Treasury</td>
<td>Bank of International Settlements (BIS)</td>
</tr>
<tr>
<td>Federal Deposit Insurance Corporation (FDIC)</td>
<td></td>
<td>Parliament Of Australia – Senate Committee/Hansard</td>
<td>European Central Bank (ECB)</td>
</tr>
<tr>
<td>Office of the Comptroller of the Currency (OCC)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Consumer Financial Protection Bureau (CFPB)</td>
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</tbody>
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The use of several prominent examples of hedge fund fraud and failure allows a multi-perspective analysis, a form of triangulation (Feagin and Orum, 1991; Tellis, 1997). Triangulation has been generally considered as a process of using multiple perceptions to clarify meaning, verifying the repeatability of an observation or interpretation but acknowledging that no observations or interpretations are perfectly repeatable. Triangulation serves to clarify meaning by identifying different ways the phenomenon is being seen (Denzin and Lincoln, 2000, p.444). Denzin (1984) identifies four types of triangulation: data source triangulations, when a researcher is looking for a way the data
will remain the same in different context; investigator triangulation, a situation where several researchers are conducting researches into the same subjects; theory triangulation which is a situation where researchers with different viewpoints interpret the same results; and methodology triangulation where one approach is followed by another, to increase confidence in understanding (George, 2011, p.142; Baxter and Jack, 2008, p.556).

Case research can involve single and multiple examples. A single example may form the basis of research on typical, critical or deviant cases while multiple examples may be used to compare and contrast different cases (Schell, 1992). The problem of single cases is limitations in generalizability and several information-processing biases (Meyer, 2001, p.333). Leonard-Barton (1990, p.250) identifies one response to these biases as use of a number of prominent examples provides the means to augment external validity. The use of multiple cases provides a more rigorous and complete approach than a single case analysed due to the triangulation of evidence (Christie et al, 2000, p.15). By looking at a range of similar and contrasting cases it is possible to understand a single case finding, grounding it by specifying how, where and why it behaves as it does. Using multiple examples is useful for investigation, description, and explanation of complex social phenomena and the triangulation of multiple cases analysed provide results that are more robust than single case design because of the diversified perspectives available (Yin, 1994). More importantly, the focus on variety in the type of cases provides for superior analysis (Jensen and Jankowski, 1991, p.88). Given the limitations of using a single case in emphasizing the impact of the risks within hedge fund operational activities and
substantiating appropriate regulatory initiatives in this research, a multiple-case approach is more applicable.

A key analytic method used in analysis of multiple cases is replication. The primary focus of the analysis is on the overall pattern of results and the extent to which the observed pattern of variables matches a predicted one. The researcher examines a single example for the pattern and, if it is found, then looks to see if it is found in subsequent cases (Kohn, 1997, p.6). Yin (2003, p.47) states that multiple case analysis can be used to either predict similar results identified as literal replication or predict contrasting results but for predictable reasons or theoretical replication. In analyzing multiple cases, replication can be achieved within the types or ‘families’ of cases, with predicted variation observed across groups (Kohn, 1997, p.6). Although this type of design has its benefits and short comings, Baxter and Jack (2008, p.550) state that such a study is considered robust and reliable, although time consuming and expensive to conduct. The use of purposefully selected, multiple cases was considered critical to this study as it allowed a broader view to be undertaken to understand prevalent risks across the hedge fund industry. This approach enabled the researcher to achieve a level of saturation that ultimately revealed common issues and themes pertaining to the risks within the industry in general. Thus, the use of multiple cases enabled the researcher to obtain comprehensive evidence to substantiate facts relevant to the motivations of this study. It was also crucial in explaining the impact of inadequate regulations in upholding investor protection mandate and the systemic risk threats posed by hedge funds, which substantiated the constructs specified in the research issues used to guide the study.
Chapter Three analyses the collapse of LTCM in 1998 which was the first high profile hedge fund failure that posed a risk to the global financial system. Investigations by regulatory authorities highlighted operational risk deficiencies which included conflicts of interest and misrepresentation of valuation information as a cause of the collapse. The resultant proposals recommended increased transparency through a self-regulatory approach to hedge fund supervision meant to solve the problem and prevent further crises. However, ten years later, the collapse of Bear Stearns Hedge Funds which effectively triggered the GFC 2008 showed that this was ineffective. Hence, the motivation for analyzing the collapse of Bear Stearns Hedge Funds in Chapter Three is to identify this failure. More importantly, the analysis also highlights a common theme in both collapses, that both hedge funds had manipulated valuations and misrepresented themselves to investors and counterparties. In Chapter Five the Bernard Madoff Investment Securities LLC hedge fund fraud which was uncovered in December 2008 is examined. This case was selected primarily to emphasise the importance of the need for increased transparency in the hedge fund industry. The Madoff fraud was one of the largest hedge fund fraud case costing investors approximately USD$50 billion in losses, executed through a simple Ponzi scheme which was perpetrated over a period of twenty years. The length of time over which Madoff was able to elude investors and carry out these fraudulent activities is presented as testimony to the need for increased transparency within the hedge fund industry. The manner in which the fraud was committed resonates with similar circumstances as those identified within LTCM and Bear Stearns and is extended to the analysis of the collapse of Trio Capital in Chapter Six. The collapse of Trio Capital in Australia and its ensuing fraud seeks to detail weaknesses within its regulatory framework in adequately protecting retail investors and is the motivation
behind this research. The Australian financial market regulatory framework is shown to have failed to keep up with the changes and growth within its financial system which has surpassed traditional financial intermediation processes and contributed to the rise of the shadow banking industry. Although this problem is not isolated to Australia, the level of direct participation of its citizenry in the investment management industry is cause for concern. Indeed, the financial loss sustained by investors in Trio Capital, especially self-managed superannuation fund investors, is testament to this fact.

The objective of selecting the cases mentioned was to demonstrate the risks that fraudulent activities within hedge fund operations pose to investors and the global financial system. The research issues that prompted a need for investigating the fundamental risks which hedge funds pose to the Australian financial system due to lack of regulatory oversight or transparency requirements have still not been adequately addressed within the financial market regulatory framework, by financial market regulators nor industry participants. Indeed, this problem is not exclusive to the Australian context as identified in the case studies which reveal that the unregulated investing activities of hedge funds have exposed investors and the global financial system to tremendous risks, especially after revelations of fraud, abuse and misconduct after the global financial crisis.

1.7 Structure of the Thesis

This section explains the structure of the research which is divided into seven Chapters, as shown in Figure 1.3. Chapter Two explains the financial intermediation process and
CHAPTER ONE
INTRODUCTION

CHAPTER TWO
FINANCIAL INTERMEDIATION AND REGULATORY ARCHITECTURE

CHAPTER THREE
HEDGE FUNDS: THEORY AND PRACTICE

CHAPTER FOUR
HEDGE FUND REGULATORY FRAMEWORK: US AND UK

CHAPTER FIVE
HEDGE FUND RISK TRANSPARENCY

CHAPTER SIX
HEDGE FUND REGULATION IN AUSTRALIA

CHAPTER SEVEN
CONCLUSION

Figure 1.3: Thesis Structure
strategies for regulatory supervision undertaken by prudential and conduct-of-business market regulators. More importantly, the chapter seeks to emphasize the growth of the unregulated shadow banking sector within financial systems globally and show its interconnectedness with the regulated banking sector through the credit intermediation process. The most obvious hazard of this interconnectedness is the systematic threat posed to a financial system should a major party within the intermediation chain collapse. The purpose is to present inconsistencies in the approach to financial market supervision by understanding the actions taken in defining a regulatory framework for financial markets, intermediaries and evaluating the evolutionary dynamics in the innovation of financial instruments. This evaluation prescribes the need for strategically formulated regulatory policies pertaining to oversight of systemically important financial intermediaries, namely hedge funds, and the tremendous risks posed to retail investors, not only in Australia but in any financial system where the vulnerabilities of lax regulatory oversight can provide loopholes for fraudulent activities.

Chapter Three is an introduction to the hedge fund industry in theory and practice. It is important to fully appreciate the dynamics of the hedge fund industry in order to understand and effectively analyze the regulatory framework governing hedge funds in the US, UK and Australia which will be presented in Chapter Four and Chapter Six. The function and related risks to the financial system associated with their investment strategies encapsulates the dichotomy which presents its systemic importance. However, this is not restricted to their trading strategies. Hence, operational risks related to fraudulent conduct are also analyzed in two case studies, LTCM and Bear Stearns Hedge
Funds. The vulnerabilities of hedge funds to fraud risk are subsequently expanded in Chapter Five which considers risk transparency within a hedge fund's operations, including valuation risks.

Chapter Four provides a comparative analysis of the approaches of hedge fund regulation in the US and the UK before and after the GFC 2008. This chapter has relied on standards benchmarking procedures in its analysis of the respective hedge fund regulatory approaches which was also applied in identifying best practice initiatives applicable to hedge fund risk transparency in Chapter Five. The approach is to learn from the difference in policy objectives and specific regulatory language in each jurisdiction and also focus on the quality of the regulatory environment in terms of actual practices, from the point of view of the hedge fund industry. The evaluation presented the researcher with valuable insight into the direction of regulatory initiatives undertaken by financial market regulators in two of the largest financial markets globally. An understanding of these approaches was fundamental in analyzing the regulatory framework governing hedge funds in Australia under the Managed Investment Scheme Act 1998 and in identifying possible areas of weaknesses, presented in Chapter Six.

Chapter Five details the central theme of the thesis from the micro perspective: risk transparency and informational disclosure to investors. Risk management is about mitigating the ‘unknown unknowns’ within the multi-faceted risk profiles of hedge funds. Information in this area is limited and hence knowledge is drawn from submissions by public organisations such as the International Monetary Fund (IMF), the Presidents
Working Group on Financial Markets (PWG), European Central Bank (ECB) and relevant industry organisations. The focus is on promoting transparent hedge fund informational procedures, the success of which has been slow in growing. A new dynamic approach to supervising hedge funds is proposed where there is information transparency with emphasis through disclosure requirements and effective due diligence by suitably qualified and knowledgeable professionals. The chapter is extended to evaluate the operational risks of hedge funds by analyzing hedge fund failures and subsequently the risks inherent in net asset valuation procedures. It begins with an introduction to the available research statistics of hedge fund failures. This is followed by an analysis of the notion of ‘operational risks’ within hedge funds. Although an area of limited academic research, the fallout from the GFC 2008 has brought to light the need of investors to focus on this area of knowledge and hence increase awareness, especially in the NAV of hedge funds, which is addressed. The collapse of Bernard Madoff Investment Securities LLC, one of the largest hedge fund fraud in financial history, has been chosen as a basis of analysis as the fraud itself was uniquely different and defies the feasibility of current regulatory and disclosure capacity of hedge funds in, ultimately, protecting investors.

Chapter Six provides, examines and evaluates the manner in which hedge funds are regulated in Australia, in particular the effectiveness of the ‘twin peaks’ model of financial market supervision carried out within the jurisdiction and the success of the conduct and disclosure rules under the Managed Investment Scheme Act 1998 in establishing a safe investing environment for retail investors in Australia. An important aspect of conducting this research is the collapse of Trio Capital and complexities in which the fraud was carried.
out. The chapter concludes with a detailed analysis of this case in substantiating argument of regulatory failure as opposed to a failure of government in preventing what has been described as the largest hedge fund fraud in Australia’s history.

The final chapter, Chapter Seven, summarizes the findings of this research and the lessons learnt pertaining to the hedge fund industry. Analysis of the future regulatory agenda in the US and the UK presents a case of increased disclosure and conduct-of-business rules which would be considered as mere rhetoric if not enforced effectively. Indeed, more importantly, a similar perception will be encountered in Australia should adequate actions not be taken as the superannuation fund industry grows and its collective funds under management exceeds expectations. Following the issues identified in Chapter Five, a definitive solution is to extenuate the fraud risks which certain hedge fund activities pose. As the industry evolves, new fraud risks will emerge and this chapter extends the discussions while addressing its relevance for future research in this discipline of study.
CHAPTER 2
FINANCIAL INTERMEDIATION AND REGULATORY ARCHITECTURE

"Is finance a game, or is it much more important than that? It should be something else entirely. Finance ought to provide an economy with an efficient means of allocating capital. It should provide a means of price discovery of assets, whether real or financial. It should provide a safe and reliable payments system. Financial innovations are worthwhile if, and only if, they help in those areas. All too often, players see financial innovation as providing ways to manipulate the system and make money off less savvy traders"  

- Floyd Norris, New York Times, August 25, 20111

2.1 Introduction

This chapter is a detailed analysis of the evolving complexities within financial intermediation processes of the 21st century which have advanced at a faster pace than the related financial market regulatory architecture has been able to keep up with. The aim is to establish the necessary linkages which will enable an understanding of the intricacies involved in regulating the hedge fund industry. Drawing upon an article published on the World Bank2 website, this section provides an introduction to the current debt crisis to emphasise the gravity of the ongoing risks within the global financial system.

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The aftermath of the Great Depression of 1929 led to changes in the regulatory architecture of financial markets in the US, and today we are seeing similar actions after the GFC 2008 but on a global scale. The approaches to financial market regulation to date have been based on the premise of the traditional form of business categories with little reflection of the changes in the manner financial intermediation has been transformed over the last thirty years. Chief among the changes has been convergence in the financial products and services offered by traditional intermediaries and new market entrants, as well as a shift in capital raising and risk-bearing methodologies from the traditional financial intermediaries to the capital markets and extending into the shadow banking sector. This market-based intermediation has enable transactional exchange to evolve and change the manner in which business is conducted (Whitehead, 2010, pp.2-4).

The growth of the ‘originate-to-distribute’ model meant that banks no longer held the loans they originated on their balance sheet, but sold them off into the unregulated or shadow banking sector of the financial system (Bord and Santos, 2012, p.25). The segmentation of the US banking industry, a legacy of earlier banking laws that persisted through the deregulation movement between the 1970s to the 2000s, also contributed to the development of equity and bond markets in the United States, which are now the main source of finance for non-financial organizations in the US and an extension of this practice into the UK through the interconnectedness of both financial centres. Significant advancements in financial innovation over the last decades have resulted in a shift of financial resources into the shadow banking sector, facilitated by credit intermediation strategies which are not entirely within the control of current regulatory approaches.
These risk transformation processes has also increased the demand for more innovative financial practices and the use of special purpose vehicles which facilitate transactions. The rise of the hedge fund industry over the past 30 years has been fuelled by this demand, the hunger for higher yield and returns. Statutory limitations placed on bank financial intermediaries have always been an issue widely debated as impeding financial innovation and efficiency which encouraged the rise of the shadow banking industry (Gorton and Metrick, 2010; Poschmann, 2012; Poszar et al 2010; Adrian and Shin, 2009; Farhi and Cintra, 2009; Poszar 2008). The emergence is a result of arbitrage opportunities stemming from the imposition of regulations and the inevitable tendency of firms and market participants to minimize the impact of regulations and their concomitant cost (IIF, 2012, p.5). The unregulated nature of such investment vehicles has been enabled by regulatory frameworks which prescribe innovation and growth, some might say, at all cost.

This chapter provides a primer of the nexus between regulatory approaches taken by governments and financial market regulators and the financial intermediation processes which have evolved into a globally interconnected financial system to include the shadow banking sector. This evolution prescribes the need for strategically formulated regulatory policies pertaining to oversight of systemically important financial institutions, namely hedge funds, and lays the foundations for analysis of subsequent chapters in particular the tremendous risks posed to retail investors in Australia. The purpose of financial market regulation is identified in section 2.2 to explain the current supervisory approaches promoted by regulatory agencies globally. This substantiates the inapplicability of such supervisory approaches and regulatory tools within the modern financial system, one
which is not segmented to specific functions or forms of financial intermediaries. The analysis of market regulators is extended to the tools used in enacting regulation, consistent with the principles-based versus rules-based regulatory philosophy and analysed in terms of costs and benefits. The supervisory approaches and regulatory tools used subsequently will be applied to distinguish their respective validity for modern financial intermediation processes, in theory and practice. In particular, an analysis of the functions of financial intermediation is conducted and the relationship between the regulated financial sector and the extension of activities into the unregulated shadow financial system is conceptualised in section 2.3. This is elaborated by firstly establishing and explaining the traditional financial intermediation process as an integral part of financial markets by analyzing its functions. The argument is extended to include the shadow banking sector through credit intermediation processes to gain an understanding of the transformation of financial intermediation into its modern interconnected form globally substantiating that hedge funds are key players. The sections of the chapter are illustrated in Figure 2.2 below.
2.2 Regulation, the Financial System and the Economy

A stable and efficient financial system has a potentially powerful influence on a country's economic development by having an impact on the level of capital formation, the efficiency with which capital is allocated and the confidence that investors have in the integrity of the financial system (Llewellyn, 2006, p.5). Developed financial systems ease the exchange of
goods and services by providing payment services, help mobilize and pool savings from a large number of investors, acquire and process information and thus allocate society's savings to its most productive use (Braasch, 2010, p.98). Financial intermediaries have the necessary resources and developed systems to enable the monitoring of enterprises and analyzing possible investment projects, exerting corporate governance, and help in diversifying and reducing risks through financial markets (Levine, 1997 and 2005). According to Merton and Bodie (1995, p.2 and pp.15-21), a financial system performs six basic functions. It provides facilities for the clearing and settlement of securities through which financial resources are pooled and portfolio risk diversification is achieved. Risk diversification is enhanced through efficient risk management services which provide price information to help coordinate decentralized decision making in the various sectors of the economy. It intermediates the transfer of economic resources across sectors and jurisdictions and provide ways of dealing with the incentive problems created by information asymmetry. However, measures that assure greater financial robustness may also make financial intermediation less efficient or innovative. For example, efforts to promote financial innovation may erode transparency, safety and soundness (Walter and Cooley, 2010, p.35).

For more than four decades, financial markets and the development of the regulations that govern them were largely underpinned by a theory known as the efficient markets hypothesis (EMH). First expounded by the economist Eugene Fama in 1965, the theory

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holds that investors respond rationally to publicly available information, that market prices for assets fully reflect all the publicly known information about a security and that when prices are too high, given expected returns, rational investors sell (Ball, 1989, p.4). The validity of this theory in modern day finance has been argued consistently, especially in light of the volatile asset price movements during the periods after the GFC 2008. At a conference at Princeton University, US Federal Reserve Bank Chairman, Ben Bernanke, made a speech entitled “The Implications of the Financial Crisis for Economists” where he stated that:

Economic principles and research have been central to understanding and reacting to the crisis. That said, the crisis and its lead up also challenged some important economic principles and research agenda. Most economic researchers continue to work within the classical paradigm that assumes rational, self-interested behavior and the maximization of ‘expected utility’, a framework based on a formal description of risky situations and a theory of individual choice that has been very useful through its integration of economics, statistics, and decision theory. However, during the worst phase of the financial crisis, many economic actors, including investors, employers, and consumers metaphorically threw up their hands and admitted that, given the extreme and, in some ways, unprecedented nature of the crisis, they did not know what they did not know.

It is undeniable that these theoretical philosophies contributed more to the growth of an asset bubble rather than acting as an effective mechanism of price discovery as over-reliance on the principles of demand and supply refute the need for a higher-standard of care in regulating financial markets, a point of view which greatly motivated the financial market deregulatory strategies of the US and the UK in the 1980s. In encouraging

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deregulation, politicians effectively disregarded the benefits which a well-structured regulatory regime has in promoting the efficiency and stability of financial systems.

There are four pillars of effective regulatory architecture that are common across all financial systems. Good architecture should encourage innovation and efficiency, provide transparency, ensure safety and soundness and promote competitiveness in global markets (Acharya *et al*, 2010, p.33). A central issue therefore is whether the institutional structure of financial regulation and supervision has any bearing on the efficiency of financial regulation and supervision itself and its impact on the wider financial risks (Llewellyn, 2006, p.5).

Globalization resulted in interconnected financial markets and increases in their risk correlation but market regulators have continued to maintain a myopic focus on their supervisory responsibility, restricted by jurisdictions. Caprio *et al* (2008, p.43) showed that the main reason behind the recent GFC 2008 and financial instability was a failure of regulators and supervisors to protect investors in various countries where contradictory political and bureaucratic incentives undermined their capacity for effective financial regulation and supervision and not the actions of greedy individuals or the unexpected weakening of major institutions in various countries (Moshirian, 2011 p.3). Indeed, the GFC 2008 has shown that lightly regulated financial markets are inherently unstable and, more importantly, regulators are increasingly faced with the difficult task of trying to balance the immeasurable against the unknowable. Therefore, the theoretical foundations
underpinning public intervention in financial markets, which are based on the need to correct market imperfections, protect market actors against fraud, regulatory failure and to ensure that true and fair information is disseminated to attain stability and the efficient use and distribution of resources has to consider the very imperfections which bind its existence.

A chief objective of regulating financial markets and services is to protect investors by creating a stable environment which is functionally transparent while promoting competition, innovation and growth. This has to be achieved through sustainable controls of financial intermediaries without curtailing financial liberalization (Arner and Buckley, 2010, pp.11-15). The measures pertaining to the stability of financial intermediaries to date can be subdivided into two categories; general rules on the stability of all business enterprises and entrepreneurial activities, for example the legally required amount of capital, borrowing limits and integrity requirements, and more specific rules which have to

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9 Financial liberalization and liquidity constraints are not the same thing. Liquidity constraints arise when consumers who would like to borrow are not able to. Liberalization, in its broadest context, represents the situation where financial institutions make more credit available to consumers and firms. Thus, although financial liberalization can affect the probability that a consumer be liquidity constrained, the opposite is not true: i.e. liquidity constraints are endogenous, whereas financial liberalization is taken to be exogenous. Fernandez-Corugedo and Price (2002), "Financial Liberalization and Consumer Expenditure: “FLIB” Re-examined", Bank of England, UK, Working papers, 2002, p.9, footnote 1, [http://www.bankofengland.co.uk/publications/Documents/workingpapers/wp157.pdf](http://www.bankofengland.co.uk/publications/Documents/workingpapers/wp157.pdf), Accessed 7 July 2013.
be introduced due to the special nature of financial intermediaries, such as limits to portfolio investments and the regulation of off-balance sheet activities (Di Giorgio et al, 2000, p.6). However, these objectives have been enacted to specifically apply to the regulated sector of a financial system where information is accessible and transparency is mandated. Investing activities which involve considerable risks are usually carried out in the unregulated or shadow banking sector where transparency is secondary to profitability. Thus it is important for financial market regulators to consider the risk impact of the shadow banking system in its investor protection mandate (Schwarcz, 2013, pp.6-9). This can be carried out by laying the foundations of rational supervision, quick intervention and spreading financial awareness among the public while promoting increased transparency. Transparency rules within financial systems facilitate equitable conduct and reduce information asymmetry, protectionism and collusion amongst market participants (Cseres, 2008, pp.81-83). Such rules also enhance market efficiency through the price discovery process developing trust in the system, and the eventual enhancement of the competitiveness in financial services. Another objective of financial market regulation, linked with the general objective of efficiency, is the safeguarding of promotion of competition in financial intermediation (Di Gorgio, 2000, p.8).

Financial markets have undergone rapid transformation brought about by financial liberalization, technological innovation and by globalization leading to greater interconnectedness, for example, through the assets and liability management\textsuperscript{10} strategies

\textsuperscript{10} Asset Liability Management (ALM) can be defined as a mechanism to address the risk faced by a bank due to a mismatch between assets and liabilities either due to liquidity or changes in interest rates. Liquidity is an institution’s ability to meet its liabilities either by borrowing or converting assets. Apart from liquidity, a
of sovereigns, financial institutions and corporations (IMF, 2010, pp.6-11). Financial liberalization, in turn, has unleashed competitive forces in financial intermediation, first within the regulated banking systems and subsequently within shadow banking, leading to a blurring of boundaries among previously delineated subsectors such as banking, securities markets and insurance (Quintyn, 2012, p.1). Financial globalization has made cross border capital flows highly mobile while also enabling riskier, toxic assets to move from one financial centre to another instantaneously (Moshirian, 2011, p.509). This has also led to increases in vulnerabilities to systemic failure and contagion, which in turn, has become more evident because of financial liberalization (Stiglitz, 2010, pp.1-5).

Fundamental changes in the nature of financial intermediation have exposed the shortcomings of financial market supervisory approaches which have not been updated to react to changes in business structures (G30, 2008, p.12). The increasing need for effective financial governance will require response to these changes by building regulatory capacity. This includes rules for control over the structure of competition in the markets and regulations in the matter of concentrations, cartels and abuse of dominant position. Specific controls over financial intermediation are justified by the forms that competition can assume in that field. They relate to the promotion of competition as well as to limiting possible destabilizing excesses generated by competition itself (Di Giorgio, 2000, p.7-8).

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bank may also have a mismatch due to changes in interest rates as banks typically tend to borrow short term (fixed or floating) and lend long term (fixed or floating). Oracle Financial Services, (Undated), "Asset Liability Management: An Overview", http://www.oracle.com/us/industries/financial-services/045581.pdf, Accessed 3 January 2012
Hence, in order to improve the investor protection mandate of financial market regulators, an understanding of the systemic significance of the shadow banking industry should focus on addressing the extent to which a failure could cause disruption to key financial markets and loss of confidence. Specifically, entities such as hedge funds, which engage in financial activities on a leveraged basis, should be regulated regardless of the legal status of the institution in order to capture all entities that contribute to systemic risk on a significant scale (Carvajal et al, 2009, p.8). An appreciation of the financial market supervisory models is a crucial element in developing appropriate contingencies against future systemic failures of hedge funds. Effective regulatory policies must focus on the principal problems that financial regulation is intended to address relating to financial stability and risk-taking. Doing so, however, requires a prospective assessment of the markets as a whole and a review of the supervisory tools available to regulators, in order to formulate proactive rather than the reactive procedures that characterize much of financial regulation today. In enacting hedge fund regulation objectively, legislators have to balance the regulatory tools available and facilitate effective enforcement through credible supervisory models, a task which has been difficult to implement because of the elusiveness of the industry. The following sections will discuss approaches to financial market regulation and present an analysis of the available tools.

2.3 Financial Market Supervisory Models

The GFC 2008 has shown that regulators are faced with a difficult task of keeping up with the constant changes in the evolution of financial services, the different incorporated structures and innovative financial instruments available. Few would argue that the failure
of regulation or supervisory approaches was partly to be blamed for the crisis (Jickling and Murphy, 2010, p.1). In February 2009, US Treasury Secretary Timothy Geithner summed up two key problems stating that the US financial system operated with large gaps in meaningful oversight and without sufficient constrains to limit risk. Even institutions that were overseen by complicated, overlapping systems of multiple regulators were faced with difficulties in managing the extreme risk events, the failures which helped lay the foundation for the worst economic crisis in generations\textsuperscript{11}. It is more evident now than ever that changes need to be made in the manner in which financial market regulatory supervision is conducted to prevent a continual reoccurrence of asset bubbles and consequent financial crises. There are four main approaches to financial market supervision applied by regulators worldwide namely, the Institutional Approach, the Functional Approach, the Integrated Approach and finally, the Twin Peaks approach. The following provides a detailed analysis of these distinct methods.

The Institutional Approach is one of the classical forms of financial regulatory oversight based on the legal-entity concept. A financial intermediary’s legal status, for example, an entity registered as a bank, a broker-dealer or an insurance company, essentially determines which regulator is tasked with overseeing its activity both from a safety and soundness and business conduct perspective (van Grinsven, 2010, p.19; G30, 2008, p.24). This legal status also determines the scope of the entity’s permissible business activities

Therefore, supervision of each financial intermediary is based on the concept that there is one supervisory authority as a counterpart with the requisite specialist knowledge about that segment and, hence results in effective realization of controls with the intention of avoiding duplication and reducing costs of regulation (Fein, 1995, pp.90-91; Kumulachew, 2011, p.38). This model is effective as long as coordination among agencies is achieved and maintained when business models of financial intermediaries are uniform and there is strict separation of responsibilities between financial intermediaries within the financial system (Llewellyn, 2005, pp.339-342). However, financial liberalization has led to suboptimal oversight by regulatory agencies resulting in inefficiencies of enforcement as regulators are restricted by form rather than function of the financial intermediaries in carrying out their responsibilities, even though the operational capacities of such firms have continued to remain similar (Thakor, 2012, p.143). Regulatory unevenness and inconsistency will result, leading to unfair treatment if financially identical products are treated differently depending on the traditionally defined sector of the institutions that have produced them. Regulatory arbitrage may therefore occur from the institutional approach to supervision, for example financial products offered under the banking regime are often treated differently than if they were offered as an insurance product, although intrinsically they may be largely identical (Wymeersch, 2007, pp.253-255). There is also the risk that financial intermediaries may choose a specific jurisdiction to incorporate their legal form in order to escape regulatory oversight, enabled by the interconnectedness of financial markets (Butler and Macey, 1988, p.681; Scott, 1977).
The Functional Approach\textsuperscript{12} of market supervision is where supervisory oversight is determined by the business that is transacted, without regard to its legal status, and each type of business will have its own functional regulator (Cunningham and Zaring, 2009, p.64; G20, 2008, p.34). The concept of a functional approach was developed based on theories by Nobel Laureate Robert C Merton (1995)\textsuperscript{13} which viewed the supervision of financial functions as more stable than financial institutions as functions change less over time and vary less across borders (Merton, 1995, pp.23-41). The functional perspective views financial innovation as driving the financial system towards its goal of economic efficiency\textsuperscript{14}. This is particularly relevant as competition within financial systems has enabled institutions to evolve into new and more efficient forms and hence developing a supervisory structure which focuses on the functions of financial intermediaries may lead to more effective oversight. Within the functional supervisory model, regulators are delegated authority in their areas of functional specialization.

According to the Functional Approach, the legal form of the organization is not as relevant as the services it provides. For example, an organization incorporated as a bank may provide many services which would include deposit taking, insurance and engage in proprietary trading. Regulators are segmented according to these specific functions and are meant to provide uniform oversight (Di Giorgio \textit{et al}, 2000, pp.6-7). The advantage of this is


\textsuperscript{14} Theories of financial innovation that are consistent with this view are: Allen and Gale (1988, 1990, 1994), Benston and Smith (1976), Diamond (1984), Fama (1980).
that rules and policies initiated would be non-discriminatory, provide assurance to financial intermediaries of consistency in supervision and hence confidence in regulators. One of the drawbacks of this approach is that there would be an over reliance on a complicated model of financial regulatory agencies with the risk of excessive division of competencies. Furthermore, the functional approach does not take into account that fraud and failure within a financial intermediary may not be because of individual activities but rather the institution as a whole. For example, the ‘London Whale’ debacle within investment bank JP Morgan saw investor losses of approximately USD$6.2 billion and was identified as a “widespread failure of risk management within the firm\textsuperscript{15}” as opposed to a rogue trader, as was initially identified.

The Integrated Approach to financial supervision is based on the premise that all supervision for financial services and intermediaries comes under one regulator (G30, 2008, p.24). The impetus for the integrated approach has been the recognition of the rise of the financial services conglomerate model and centres around the ‘principles of good regulation’ which focuses on efficiency and economy, the role of management, proportionality, innovation, the international character of financial services and competition\textsuperscript{16}. The Financial Services Authority (FSA) of the UK was established as a single regulator that conducted both safety and soundness oversight and conduct-of-business regulation for all sectors of the financial services business. One of the advantages of such an


approach is that one regulator confronts all types of financial intermediaries and synergies in the execution of supervision which can be exploited by combining different supervisory activities within the one institution, which might also generate efficiency gains by combining support services for different supervisory tasks (Kremers et al, 2003, p.234). These synergies enable swift and decisive action to be taken in the event of a crisis situation. Crisis management usually requires key decisions to be taken within hours, rather than days, hence combining both conduct-of-business and prudential supervision within a single institution ensures that relevant information is available at short notice and that a speedy decision to act can be taken if necessary (Schoenmaker, 2003, pp.45–46). The synergy between prudential and conduct-of-business supervision enables a regulator to confront all types of financial institutions with a uniform approach or strategy (Arner and Buckley, 2010, pp.50-51). This might also generate efficiency gains by combining support services for different supervisory tasks (Masciandaro, 2005, pp.436-437). However, there are trade-offs to such an approach which may arise due to the different nature of supervisory objectives. Conflicts of supervisory interest may evolve, for example the prudential supervisor will be interested in the soundness of financial institutions, including their profitability, while the conduct-of-business supervisor will focus on the interests of clients (de la Torre and Ize, 2009). Mixing up the responsibilities of financial stability and conduct-of-business could create incentives for the supervisor to give preference to one objective over the other (Kremers et al, 2003, pp.234-236). Furthermore, preserving public confidence and stability will require discretion and confidentiality which may be counterproductive to the transparency objective of regulated financial systems (Padoa-Schioppa, 2003; Kremers et al, 2003, p.236).
Finally, the Twin Peaks Approach, a model which is not uniformly applied internationally, was developed on principles to overcome deficiencies within the three other approaches. It is based on the principle that financial services supervision should evolve according to a theory that there should be two regulators, one responsible for prudential regulation of financial intermediaries and one responsible for market conduct-of-disclosure regulation of financial products being offered to retail and institutional investors (G30, 2008, p.188). Under this approach, there is generally a split between the wholesale and retail activity and oversight of retail activity by the conduct-of-business regulator and does not take into consideration or discriminate against the legal form or the functions of the intermediaries (GAO, 2009, pp.11–13). This enables functional efficiency in a complex market microstructure environment where financial conglomerates and specialist financial intermediaries exist coherently, extending to various business sectors (Masciandro, 2004, pp.161-164). The duplication of supervision is aimed to be avoided as respective regulators focus on specific functions within business units and consistency in regulatory enforcement is achieved. However, this approach could invariably lead to a duplication of supervisory efforts and possibly even lax regulatory enforcement, if effective coordination and communication between authorities is not established (Masciandaro and Quintyn, 2007, pp.348–349). In practice, prudential and conduct-of-business regulation requires the examination of very similar issues and, therefore, there would be significant overlap between both regulatory agencies (Taylor, 2009, p.80). Briault (1999, p.25) explains that this overlap is also inherent within financial intermediaries where conduct-of-business and prudential controls are managed directly by designated compliance committees.
responsible for ensuring that management responsibilities are properly allocated with essential internal control systems in place.

In short, prudential and conduct-of-business regulation essentially focuses on the same fundamental issues. It is important to appreciate that the effectiveness of supervisory strategies assumed by legislators is inherently reliant on the regulatory approaches available. The following section discusses two of the more prominent regulatory approaches and aims to clarify specific vulnerabilities and possibly obstacles faced by financial market regulators in efficiently supervising financial intermediaries of the 21st century.

2.4 Regulatory Approaches: Principles v. Rules Based Regulation

The debate over the best regulatory approach to be taken in the surveillance of financial markets has gained increasing attention as the global financial crisis deepens and regulators respond to tighten controls and tackle the problem of ineffective regulation which was inherent within fragmented regulatory structures which were unable to cope with new financial products and circumstances in a changing world (Brunnermeier et al, 2009, p.74). Effective regulatory design should reflect an appropriately granulated understanding of the complexities which have evolved within financial intermediation processes and the adaptive nature of financial intermediaries which extends into the shadow banking sector of financial systems globally (Ford, 2010, p.261). The primary objective of any regulatory regime is to achieve legislative congruence, namely, to induce industry actions that are in compliance with statutory requirements and the choice
between rules and principles based regulation has to be reactive to changing circumstances

Principles-based regulation is focused on the application of a broad set of standards which
aim at certain specific outcomes\(^\text{17}\). It places greater reliance on principles and is outcome-
focused with high level directives as a means to drive at regulatory aims and relies less on
prescriptive rules\(^\text{18}\). To be effective, there needs to be close engagement between the
regulators and the regulated, based on mutual trust. Firms would need to go beyond
minimal compliance with regulatory requirements, outcomes and goals have to be clearly
communicated by the regulator, the enforcement regime has to be predictable and the
culture of litigation has to be restrained (Black, 2008, p.427). According to Black \(\textit{et al}\)
(2007, p.192) principle-based regulation has the following features. It is written in a broad
manner so it is appropriate for flexible use. The purpose of each article within a regulation
contains qualitative terms and not quantitative terms and is applicable to the whole spectre
of activities. It contains behavioral standards such as experience, integrity, care and
violation of standards which should be based on guilt; sanctions are civil but under the
administrative or criminal law. In the context of statutory drafting, principles-based
regulation means legislation that contains more directives that are cast at a higher level of
generality. A principles-based system looks to principles first and uses them, instead of


Rules-based regulation, as the name implies, is based on detailed, definitive requirements or rules. As defined by Sunstein (1995, p.961), rules-based regulations are approaches to law that try to make most, or nearly all, legal judgments under the governing legal provision in advance of actual cases. Rules situate actors in the same condition and state a determinate result that follows from one or more triggering facts (Sullivan, 1992, p.58). Thus, a rule generally entails an advance determination of what conduct is permissible, leaving only factual issues to be determined by the frontline regulator or decision maker (Ford, 2008, p.7). In turn, rules-based statutory drafting relates to legislation that contains more directives with specific details. There are more concrete factors and definite details required for compliance than general principles of conduct (Shao, 2010, p.45).

A number of scholars have used the relatively straightforward rules-principles dichotomy as a vehicle for evaluating the structural and analytical choices that go into lawmaking (Kaplow, 1985, Kennedy, 1976, Schlag, 1985, Sunstein, 1995). Arguments about, and definitions of, rules and principles-based regulation commonly emphasize the distinction between whether the law is given content *ex ante* or *ex post* (Kaplow, 1992, p.951). For example, a rule may entail an advance determination of what conduct is permissible, leaving only factual issues for the adjudicator while principles may result in leaving both specification of what conduct is permissible and factual issues for the adjudicator (Kaplow, 1992, p.590). In the context of securities regulation, rules tend to implement technical regulatory policy while principles reflect a wider array of values (Park, 2012, p.119). Thus, it can be implied that the only real distinction between rules and principles is within the
content of the law which gives force to regulatory action before or after the act of a possible breach or misconduct. Accordingly, the debate for and against rules and principles are set forth based on three distinct arguments: deterrence, cost and enforcement.

Legislation is designed and promulgated based on the need to prevent the occurrence of a particular conduct or activity which may be detrimental to the wellbeing of societal norms. It is thus possible that both rules and principles when applied in an appropriate manner will best serve this cause. The application of principles instead of strict rules as a deterrent to unacceptable conduct through evaluative terms allows individuals to make judgments about the gravity of their action. Principles-based regulation enables flexibility in interpretation and because the distinction between permissible and impermissible conduct is not fixed, but is case specific, individuals will be deterred from engaging in borderline conduct and encouraged to substitute less offensive types of conduct (Black et al, 2007, p.195; Sclag, 1985, p.3). However, if uncertainty over the interpretation of the principle prevails, the supervised entity or individual may cautiously interpret the principle as a rule (Di Lorenzo, 2006, p.268; Park, 2012, p.130). The vagueness of principle-based regulations in detailing permissible and impermissible conduct may also discourage risk averse individuals from engaging in permissible activities and motivate those who are receptive to risk to push the boundaries (Nelson, 2003, pp.99-100). Adjudicators are also placed in a dilemma as the unavailability of detailed guidelines for inappropriate conduct creates confusion and produces inconsistent judgments.
Rules draw a distinct line between forbidden and permissible conduct, allowing persons subject to the rule to determine whether their actual or contemplated conduct lies on one side of the law or the other (Schlag, 1985, p.2). Individuals who are thus aware of the details of any prohibited conduct will take the necessary actions to refrain from participating (Sunstein, 1995, p.961). Rules also provide detailed information about acceptable actions enabling individuals to carry out their actions with confidence. Alternatively, the details set out in rules-based regulation do not provide flexibility in actions and extend the risk taking capacity of individuals up to the point of permissible conduct (Burgemeestre et al, 2009). Hence, the application of uniform regulatory actions against illegal activity regardless of the gravity of the act fails to distinguish between offenses as opposed to a technical violation. This will enable individuals and organizations to take advantage of prescribed boundaries within the law and the deterrent potential of said rules may be rendered fruitless.

Comparative analysis of principles versus rules-based regulation in legal academe seldom extends to the cost effectiveness of such regulatory approaches. It is understandable to accept that the provision of regulation is a social good as it deters illegal conduct and hence should not be quantified by value, that is, the costs involved. In reality, enforcement and judicial action carries with it substantial costs where agencies are limited in their reach and hence value is an important consideration. In his seminal paper “Rules Versus Standards: An Economic Analysis”, Louis Kaplow (1992) conducted a detailed analysis of the extent to which legal commands should be promulgated as rules or principles. His findings state that rules are more costly to promulgate than principles because rules involve advance
determination of the law’s content, whereas principles are more costly for legal advisors to predict or enforcement authorities to apply because they require determinations of the law’s context. To illustrate this analysis in a financial system, consider the complexities of regulating derivatives. For derivatives which are used frequently in settings with common characteristics, such as options, forwards and futures contracts, a rule will tend to be desirable. If there will be many enforcement actions against a particular financial product or strategy, the added cost from having resolved the problem uniformly at the promulgation stage will be outweighed by the benefit of having avoided additional costs repeatedly incurred in giving content through principles-based regulation by initiating individual enforcement actions (Kaplow, 1992 p. 563; Gavison, 1991, p.750).

A rule will better serve an industry stakeholder group which is affected by regulatory actions because learning about a rule will be cheaper as the law’s content is readily ascertained and those affected may be better guided by the set rules. In contrast, for complex financial instruments such as Credit Default Swaps (CDS) or financial instruments created over-the-counter (OTC), which are not transacted as frequently and in settings which vary substantially, enforcement actions based on prescriptive rules would not be effective and end up being a waste of resources. In such circumstances, it would be logical for regulators to resort to establishing general principles for example, added disclosure requirements and consistent monitoring for riskier financial products. Therefore, for products which are transacted with lower frequency, a principles-based regulatory approach would be more effective. It should be noted in this regard that a law may still govern much behavior even though adjudications, which receive more emphasis in legal
commentary, are rare whether because most legislation do not give rise to a lawsuit or because most cases are settled out of court (Kaplow, 1992, pp.563–564).

Financial intermediaries’ decisions on acquiring legal advice before they act is dependent on whether they are confronted by rules or principles-based regulations and ultimately the associated costs (Diver, 1983, pp.67–68). If the benefits of learning the law’s content are substantial and the cost, whether of hiring legal experts or learning more on one’s own, is not too great, individuals’ behavior under both rules and standards will tend to conform to the law’s commands (Kaplow, 1992, p.627). The costs of learning the law are comparatively reduced under rules-based regulation. If however, the costs of predicting principles are high, financial intermediaries will not choose to become as well informed about how principles would apply to their behavior (Sunstein, 1995, p.978; Kaplow, 1992, p.627). The advantage of rules over principles in this case would be improved legal compliance. Thus, even if an enforcement authority were to give the same content to a principle as might have been included in a rule, the rule might induce behavior that is more in congruence with legislative goals (Schlag, 1986, pp.383–389).

The success of any regulatory framework lies in its effective enforcement. Principles and rules-based regulation are rendered ineffective if they are not enforced substantively to deter unacceptable behavior. In order for enforcement to be effective under a principles-based regulatory structure, the regulators have to be in a position where they are responsive not only to the attitude but also the operating and cognitive frameworks of firms, the institutional environment and performance of the regulatory regime, the
different logic of regulatory tools and strategies and to changes in each of these elements (Baldwin and Black, 2008, pp.60-61). Principles-based regulation is ideally suited for such a structure because of its non-prescriptive approach but it can only be effective if there is adequate communication about acceptable conduct and actions between the financial intermediaries and the regulator (Ford, 2008; Black et al, 2007, p.191). The collapse of Bernard Madoff’s hedge fund, which will be analysed in detail in Chapter Five, is a prime example of failure to enforce anti-fraud legislation which eventually led to approximately USD$60 billion in investment losses. Sophisticated investors were defrauded based on a Ponzi scheme which lasted more than twenty years because the SEC\textsuperscript{19} never enforced their powers even though regulatory provisions were available.

One important benefit of principles-based regulation is the freedom this approach avails firms in carrying out their functions advocating a culture of compliance. Enforcement responses need to be carefully calibrated to encourage firms to develop effective internal control frameworks adhering to the principles, perform due diligence and thus create a relationship of trust rather than control (Black et al, 2007, p.202). The flexibility invariably encourages innovation and eventually economic growth. The motivation behind this theory is admirable, but is not without its conflicts. Industry participants may feel that principles-based regulation is uncertain and difficult to comply with, leaving gaps for increasing chances of abuse (Brummer, 2011, p.290). There will also be the possibility of inconsistent enforcement by regulators as decision making on fault is based on arguable variables of

which there are no specific guidelines to follow. Walsh (2010, p.385) states that this uncertainty will also work against the regulator, making it difficult for the regulator to enforce and punish on the basis of principles that can be interpreted in so many different ways.

Enforcement in a rules-based regulatory approach is less complicated where boundaries are fixed and all agents are aware of acceptable conduct through detailed directives. Regulators are given a fixed paradigm to work with and penalties for illegal conduct are strictly enforceable without recourse. This approach, however, inhibits entrepreneurship and freedom to innovate within the financial system (Park, 2012, pp.137-138; Ehrlich and Posner, 1974, p.217). An argument would be that transparency creates consistency and hence those regulated can carry out their core business activities while regulators can focus their attention on supervising misconduct, an efficient use of resources, a clear ‘black and white’ regulatory approach. In reality, this is seldom the case in financial markets and should such a regulatory approach be implemented there is a risk of concentrated efforts by regulators placed on past methods of fault without attention given to new, innovative methods of circumventing rules.

2.4.1 An Optimum Model?

Regulatory approaches in the modern financial market system require an appreciation and, indeed, the acceptance by market regulators that financial transactions extend into the shadow banking sector. An important mandate of financial market regulation is the protection of investors against fraud, manipulation and misconduct. Conduct-of-business
rules dictate practices aimed at promoting fair and transparent market processes, assisted by the enforcement of prudential regulation. To date, however, this has only been directly applied to the regulated sphere of a financial system. Further, making a choice between a rules-based or principles-based regulatory approach fails to address the dynamism in financial systems of the 21st Century. Financial markets are too fast-moving and complex to be regulated in a command-and-control manner with prescriptive rules and, alternatively, principles-based regulation which is based on the premise that enforced self-regulation leads to opportunism by market actors based on self-interest in the absence of meaningful regulatory oversight and engagement (Ford, 2010, p.261).

The experience of the GFC 2008 is a lesson about what happens when regulators fail to participate actively and skeptically in this interpretive community (Ford, 2010, p.262). While the choice between principles or rules suggests a unified approach to regulation in either case, the reality is that financial market regulation in common law regimes are comprised of both principles and rules (Anand, 2009, p.112). The complexity of financial systems also means that rules or guidelines are needed to support principles to evidence the operational effectiveness of regulations. The task of the regulator and supervisor is not to predict market developments, but rather to create an infrastructure that is robust to different kinds of development, such as the bundling or unbundling of financial activities (Kremers et al, 2003, p.227). Regulators should approach market regulation through efficient monitoring, keeping abreast of new and innovative market developments and tactful in their response while managing their ultimate objectives of protecting investors and maintaining efficiency. Thus, ideally, an overall objective of financial market regulation
should emphasize a flexible, network integrated supervisory approach which enables regulators to react effectively in a constantly evolving environment rather than creating strict supervisory approaches which might steer market developments in a certain direction. Over the past decades, continuous pressure for efficiency has led to an interconnected and innovative financial system with the developments in the financial intermediation process to enable the growth of the shadow banking sector. Disintermediation and the disappearance of traditional sectoral boundaries between banking, securities, and insurance can be seen as particular forms of organizational evolution, just as is the unbundling of different kinds of financial activity within a group (Kremers et al, 2003, p.227). An important aspect of financial market regulation is for regulators to understand and appreciate the functional dynamics of financial intermediation and the funds-flow process without neglecting the shadow banking industry. The next section seeks to illustrate this evolutionary dynamic. In particular, it emphasizes that the globalized and interconnected nature of modern day finance has increased the systemic importance of the hedge fund industry and the need for substantial regulatory oversight.

2.5 Financial Intermediation; Theory and Practice

The growth and development of financial intermediation over the past 70 years has been a reaction to the changes in consumer demand for financial products and services, competition as well as in response to developments in regulatory approaches in financial systems globally. The GFC 2008 has its roots in the financial sector and manifested itself first through disruptions within the channel of financial intermediation where financial
intermediaries have borne a large share of the losses, particularly from securitized subprime mortgages, even though securitization was intended to parcel out and disperse credit risk to investors who were able to better absorb losses (Adrian and Shin, 2010, p.1; Cetorelli et al, 2012). Thus, contrary to beliefs, financial intermediaries are far from passive but rather are the engine which drives boom-bust cycles even though adequate attention has not been given to the intermediation process or the interconnectedness of financial systems.

The evolution of academic research in the area of financial intermediation can be segmented into two main categories: the institutional framework or theoretical approach and a functional approach of financial intermediation (Philippon, 2012, p.2). The purpose of this section is to explain both approaches, which are interrelated, and is aimed at extending this study to explain the evolution of the linkages into the shadow banking industry through credit intermediation processes.

The modern theory of financial intermediation examines the main functions of financial intermediation and is based on the concept that the financial system is a bridge which links buyers and sellers whereby, a well-developed, smoothly functioning financial system enables the efficient allocation of household consumption to its most productive use in an uncertain environment (Merton and Bodie, 1995, p.14; Andries, 2009, p.254). In its simplest form, financial intermediaries enable this link facilitated by bank and non-bank financial institutions which pool assets to create investment opportunities (IMF, 2005, pp.171-172). This model of pooling of assets to create investment income from
opportunities which may not necessarily arise without collective support is the premise of any financial system and has become more prevalent within the funds management industry. Traditional research on the theory of financial intermediation has focused on a combination of efficiencies which financial intermediaries provide, particularly the informational asymmetry argument. This can be of an *ex ante* nature generating adverse selection, they can be interim, generating moral hazard and they can be an *ex post* nature, resulting in auditing or costly state verification and enforcement (Scholtens and van Wensveen, 2003, p.15). The argument states that financial intermediaries have comparative advantages over individual investors in attaining crucial information for investment decisions, especially because of active monitoring. These efficiencies subsequently extend to cost advantages where the theory of transaction costs and incentive alignments enable resource allocation and growth (Benston and Smith, 1976; Leland and Pyle, 1977; Diamond and Dybvig, 1983; Allen, 1990; Allen and Gale, 2004; Gorton and Winton, 2002).

Over the past twenty years, the concept of financial intermediaries as facilitators of risk management and mitigation has been increasingly accepted as a contributing factor in understanding its institutional framework. The theory was introduced by Scholtens and van Wensveen (2003) as part of a growing group of academics contributing to the development of the modern theories\(^2\) which would encapsulate a dynamic market engaged in financial product innovation. Financial intermediaries manage and mitigate risks within the financial system through risk and reward transformation and focus on

efficient value creation where the originate-to-distribute model was developed as a risk management and income producing methodology (Scholtens and van Wensween, 2003). Historically, banks originated loans and kept them on their balance sheets until maturity. However, this changed over time with financial innovation and they began to distribute the loans they originated, resulting in an increase in the growth of non-bank financial intermediaries as banks managed their balance sheets and credit risks through loan syndication (Boyd and Santos, 2012, p.21). This risk management concept has also contributed to the evolution of the shadow banking industry and subsequently changed the functional roles of banks as managers and distributors of risks, information and facilitators of capital market growth. Thus, financial intermediaries and capital markets together with the regulatory arrangements to govern their activities constitute the institutional structure of the financial system and the dynamic process by which this institutional structure changes is called financial innovation (Merton, 1993, p.22). Financial innovation and the growth of the shadow banking sector has led to change in the functions of financial intermediaries even though their form has substantially remained the same. It is through these functions that systemic risks are created and invariably, can be avoided. Subsequent sections below analyse the functions of financial intermediation and is extended into explaining the dynamics of financial intermediation in order to explain clearly the linkages between the regulated banking sector and the shadow banking industry.

### 2.5.1 Functions of Financial Intermediation

An understanding of the functional attributes of financial intermediation provides insight into information which can enable regulators to direct supervisory efforts in isolating risk
profiles of financial intermediaries for effective regulation. Financial intermediaries perform a number of functions including maturity transformation, monitoring and information processing and liquidity transformation. An appreciation of the process through which savings are channeled into productive activities will enable an appreciation of a crucial issue in the operation of financial systems, that is, the way in which information is gathered, distributed and used (ECB, 2012a, pp.59-60; Allen and Carletti, 2008). Information will hence empower regulators to efficiently isolate the riskier activities within financial intermediaries which may require more direct supervision.

Financial intermediaries provide services to overcome market imperfection due to information asymmetries because they have superior information and the capabilities, skills and invested infrastructure to produce information about investment opportunities which would be too costly for the individual investor to venture into herself, particularly if information about investment opportunities requires specialist knowledge (Burnside et al, 2009; Das, 2005; Bernanke et al, 1999; Glosten and Milgrom, 1985). The traditional view of financial intermediation where banks would predominantly be facilitators of savings and loan activities was that they were able to offer information-intensive loans at a lower cost, thus reducing information asymmetries between lenders and borrowers (Diamond, 1984; Fama, 1985). But the desire to maintain competitive advantage meant that this process also contributed to a rise in informational asymmetries between banks and their less well informed competitors (Breton, 2002). These competitive pressures contributed to conflicts of interest in the provision of true and fair information and gave rise to the problem attributed to the risks of reliability in the information generated (Hirshleifer, 1971).
Ramakrishnan and Thakor (1984) found that even if financial intermediation was shown to improve welfare within an economy, if informational asymmetries were present there are also situations where the information generated to overcome these asymmetries can generally be unreliable. Leyland and Pyle (1977) suggest a solution to overcome this problem by the intermediary credibly producing information, investing its wealth in assets about which it claims to have produced valuable information. However, this can create a conflict of interest as identified by Palazzo and Rethel (2007, pp.194-201) who state that if an intermediary is involved directly in the security it is producing information about, be it through in-house research, underwriting or advisory services, when the issuer trades with the investor, market breakdown occurs. The inability of a financial intermediary to ethically balance its reputational risk while continuing in its profit motive has been a widely contested problem over the past decade. This reliability issue was particularly prevalent in the recent London Interbank Borrowing Rate (LIBOR) scandal, considered the biggest interest rate manipulation scam in history worth approximately USD$350 trillion\textsuperscript{21}. Between January 2005 and May 2009, the banks involved in the scandal submitted false information which hid the true nature of credit and risk profiles within these intermediaries, information which was used by counterparties to make investment decisions\textsuperscript{22}. The investigations pertaining to the scandal were still ongoing in 2013 but the gravity of this situation has called for an overhaul of the rate determination process and increased regulation and transparency. The debacle and ongoing investigations by the US

Permanent Sub-Committee on Investigations\textsuperscript{23} has brought to light the dishonest and fraudulent conduct within JP Morgan, increased its reputational risks within the finance industry and indeed has led to calls for more intensive operational risks controls.

Further, theories on financial (dis)intermediation have put forward the notion that in the ‘digital-age’ informational services performed by financial intermediaries were no longer feasible with advancements in information technology where information is now freely available, enabling investors to deal directly in open markets (French and Leyson, 2004). This function of information technology has promoted the exchange of tradable, uniform information and leads to the commoditizing of financial assets but also provokes effect, namely the customizing of financial products and services, the risks of which are difficult to ascertain. Information is attracting a pivotal role in the intermediation function because it is mostly the intermediaries, not the ultimate investors, that develop these new products and services (Scholtens and van Wensveen, 2003, p.27). The function of information in this process differs from the traditional model of alleviating asymmetric information by offering proprietary information to stakeholders as an essential component of their financial service where disclosure to competitors can reduce the private value of such information. Thus, although innovation in the analysis and dissemination of information has increased competition between financial intermediaries, it has also improved efficiency and assisted in the progressive development, growth of economies and in certain instances, reduced transactional costs tremendously.

Financial intermediaries have to be compensated for providing services and the income received measures the cost of financial intermediation (Philippon, 2012). The comparative advantage of intermediaries’ lies in their ability to internalize costs due to economies of scale and scope and to enable a cost efficient means of attaining information about potential investments (Levine, 1997, p.694). Benston and Smith (1976, pp.223-225) view the role of financial intermediaries as creators of specialized financial commodities which are availed whenever there is a demand and, more importantly, at prices which would be expected to cover all direct and opportunity costs of production. Financial intermediaries are able to extend services to customers at a lower transaction cost and hence the raison d’etre of their continual existence even with changing business models. Economies of scale enable intermediaries to further develop expertise in the evaluation of investment projects, incentives in gathering information and firm monitoring (Salehi, 2008, p.100). Transaction costs in this case are interpreted as costs of research, evaluation and monitoring amongst others (Hasman et al, 2009, p. 3). Hasman et al (2009) extends this argument further by analyzing unavoidable ‘shoe leather costs\(^\text{24}\)’ and found that efficient intermediaries enjoy economies on transaction costs that can also occur through asset rebalancing. Research by Nalukenge (2003, p.iii) on the impact of lending relationships on transaction costs incurred by financial intermediaries finds that the costs incurred by intermediaries in a financial exchange with smaller sized businesses positively respond to exchange hazards associated with credit risks in the form of collateral requirements, uncertainty, investment in specific

\(^{24}\) One general class of inflationary consequences is sometimes referred to as the ‘shoe-leather’ costs of inflation: To avoid the erosion of their purchasing power due to inflation, people have to spend more time and effort protecting the value of their nominal assets—wearing out their shoes on the way back and forth to the bank, Pakko (1998), “On the Shoe-Leather Costs of Inflation”, Federal Reserve Bank of St Louis, http://www.stlouisfed.org/publications/cb/articles/?id=1565, Accessed 1 July 2012.
assets and difficulty in measuring the performance of manpower employed for monitoring small loans.

It is important to note that these traditional theories of financial intermediation based on transaction costs and asymmetric information were designed to account for institutions which take deposits or issue insurance policies and channel funds to firms in its simplest form (Allen and Santomero, 1998, pp.1464-1465). On the other hand, there have been noteworthy vicissitudes where costs of transactions and informational gathering have declined but intermediation has increased as deregulation and globalization reduce inefficiencies. This has led to a shift in the focus that financial intermediaries play to that of facilitators of risk transfer in dealing with the increasingly complex maze of financial instruments and markets (Allen and Santomero, 1998, p.1462). Risk management has become a key area of intermediary activity as financial intermediaries evolve, allocate decision power and risk management effectively and the financial market grows, extending into the shadow banking sector and harmonizing the globalized financial system (Allen and Santomero, 2001, p.284).

A condition of the commoditization of money is a need for trading and managing financial risk (Clark, 1976, pp.12-13). The notion of risk to a financial intermediary can be a consequence of financial distress and the existence of capital market imperfections, both of which relate to information asymmetry, competition and deficiencies within the financial system (Allen and Santomero, 1998, p. 1475). Whitehead (2010, p.10) states that financial intermediaries and institutions in the business of managing money are more likely than
other businesses to expose customers to fraud, self-dealing and other misconduct. These institutions are also in a unique position and incentivized as delegated monitors with the ability to perform risk management functions in a cost effective and efficient manner (Diamond, 1984). The standard diversification argument in modern portfolio theory encourages individuals to exchange assets so that each investor holds a relatively small amount of any one risk (Allen and Santomero, 2001, p.286). For example, the extension of loans to borrowers brings with it the risk of fraud, default and substantial financial loss. Lending institutions are incentivized to manage risk, monitor and protect their diversified loan portfolio for which they provide finance, thus seeking to obtain the information necessary for an efficient allocation of resources (Allen and Carletti, 2008, p.4). The basis of this qualitative asset transformation is risk transformation (Entrop, 2012, p.1; Mayr, 2007, p.8; Scholtens and van Wensveen, 2003, p.17). By transforming risk, through on or off-balance sheet obligations, the intermediary transforms assets offered following their risk preferences into assets usable by entrepreneurial investors. Thus, the benefits of intermediary activity in risk transformation is taken advantage of where supply and demand of capital cannot be fully met according to the risk preferences of market parties in the public market (Scholtens and van Wensveen, 2003, pp.38-41; Demirgüç-Kunt et al, 2003, p.13).

Investigations of the causes of the GFC 2008 have shown that global financial systems are implicitly connected through an interlinked web, comprising the regulated financial markets and the unregulated shadow banking industry. The next section traces the evolution of this link and explains the interconnected dynamics of financial intermediation.
to emphasize the importance of the hedge funds as a key systemic industry participant within the global financial system. It is important to understand the evolution of financial intermediary interconnectedness and the interaction between the institutions to appreciate the intricacies within the modern financial market architecture. Understanding this dynamic is crucial to evaluating the workings of the shadow banking system and the regulation of hedge funds, more specifically because a substantial portion of the funds within the shadow banking system originated from the regulated banking system through banks selling wealth management products to customers or through off-balance sheet vehicles\textsuperscript{25}(Adrian and Shin, 2010, p.604).

\textbf{2.5.2 Financial Intermediation Dynamics}

The operational activities of financial intermediaries have evolved from philosophies and practices developed in the US and the UK and their structures have been reorganized and restructured over time to influence the manner in which financial intermediation is conducted globally. The fundamental role financial intermediaries’ play is based on one basic principle, that there will always have to be some mechanism for channeling the sources of funds into the investments for firms (Cecchetti, 1999, p.1). Businesses need capital and will supply assets to the financial market as collateral to attain this capital. Households are the ultimate holders of these assets, either directly or through various types of investment pools and also provide the ultimate demand (Cecchetti, 1999, p.1). The financial intermediary moves resources between these two groups, businesses and

households, regardless of their legal form, a function which will always continue. This is the most basic and traditional form of the funds flow process in financial intermediation which is effectively outdated. A recent International Monetary Fund paper shows this and found that the growth of the shadow banking system may have been the result of a search for safe and sensible cash management by cash managers who were pressured in the search for value outside the traditional methods when they were faced with limits on insurable bank deposits and a shortage of short-term government-guaranteed instruments such as US Treasury Bills (Poszar, 2011; IFF, 2012, p.5)

A guide to a model of financial contracting and the role of financial intermediaries and markets is summarized in Figure 2.3. Adapted from Walter (2012, p.115; 2002, Exhibit 1) and Mishkin (2008), it shows the flows of funds through a typical financial system in terms of its underlying environmental and regulatory determinants and the generic advantages needed to create value from three primary linkages labeled Tier 1, Tier 2 and Tier 3 respectively. Traditionally, banks appear as intermediary between the ultimate lender and the ultimate borrower of financial capital (see Tier 1). The sources of funds (savings) are held within depository and credit institutions in the form of demand deposits, commercial certificates from households, corporations and governments. These savings invariably finance themselves by placing their liabilities directly with the general public in the form of loans. The financial intermediaries or depository institutions also invest these funds through asset purchases issued by entities defined as users of funds.
Tier 2 intermediation extends or allocates the available financial assets within the balance sheets of Tier 1 financial intermediaries investing in financial products such as structured assets facilitated by investment banks or fiduciaries and collective investment vehicles in the purchase and sale of securities issued publicly and privately within the globalized financial infrastructure, a point at which intermediation becomes entirely global. The global transaction process extends to Tier 3 intermediation which is based on the premise that savings surpluses of the lenders of funds who intend to allocate their resources in seeking higher than normal returns, through various direct sales mechanisms, such as private placements, usually involving fiduciaries, including hedge funds and private equity.
funds, as intermediaries. Value to ultimate savers and investors, inherent in the financial processes described here, occurs in the form of a combination of yield, safety and liquidity (Walter, 1999, p.6). Value to ultimate users of funds is availed in the form of a combination of financing cost, transactions cost, flexibility and liquidity (Walter and Sisli, 2006, p.4). This value can be enhanced through credit backstops, guarantees and derivative instruments (Walter, 2009, p.591). Furthermore, markets are linked across jurisdictions internationally and by function. These functional linkages enable banks to securitize financial assets to be sold to non-bank intermediaries in the shadow banking industry.

The rapid growth of the market-based financial system has changed the nature of financial intermediation and has resulted in the traditional originate-to-distribute model extending into the modern shadow banking system. Thus, the traditional business processes within a financial system have become obsolete and do not fully incorporate the rise of the funds management industry as a major source of funding for banks through the shadow financial system, which is now a substantial portion of the global financial system estimated at approximately USD$67 trillion in 2011 (FSB, 2012, p.3).

26 A backstop in financial terms refers to a type of insurance or last-resort support. When stocks or bonds are issued in order to raise capital, a backstop can be put in place to make sure that the security will be bought. In order to do this a group of underwriters together with a group of sub-underwriters (usually institutional investors) guarantee that they will buy whatever parts of the offering are not sold. A backstop is also used to describe the safety procedure put in place by a government or loan guarantee program which insures the debt of a company or its credit line. Cambridge University Press Online, http://peo.cambridge.org/index.php?option=com_content&view=article&id=489:new-backstop&catid=10:jargon-buster&Itemid=4, Accessed 1 Jan 2012.
2.6 Shadow Banking System

The term “shadow banking” was first coined by Paul McCulley of Pimco in August 2007 to describe a large segment of financial intermediation that is derived outside the balance sheets of regulated commercial banks and other depository institutions (AIMA, 2012, p.3). The implication is that such organisations have been engaging in “bank-like activities” out of the sight of regulators, creating unmonitored risks to the global financial system (AIMA, 2012, p.3). The ambiguity of the shadow banking industry has led to confusions in defining and, hence, enacting appropriate legislation to regulate its activities (Claessens et al., 2012, p.4). There have been a number of arguments by regulatory authorities in relation to a valid definition of shadow banking. The Financial Stability Board (FSB) has broadly defined the sector as a process of credit creation involving activities outside the regular banking system (FSB, 2011, p.3). Similar views have been held by noted scholars in the US Federal Reserve and the European Central Bank. Pozsar et al (2012, pp.4-5) and Bakk-Simon et al (2012, p.5) respectively define shadow banking as “financial activities carried out by non-bank institutions that create leverage and/or engage in credit intermediation such as maturity and liquidity transformation without access to public sources of liquidity such as government guarantees”. Further, the role of hedge funds as a part of the shadow banking system has also been subject to scrutiny.

The Alternative Investment Management Association (AIMA) in its research report entitled, “The Role of Credit Hedge Funds in The Financial System: Asset Managers, Not Shadow Banks” disputed the inclusion of hedge funds as part of the shadow banking system stating that “hedge funds collectively should not be included while defining the unregulated shadow
banking sector because hedge funds are extremely diverse and engage in activities which would be considered as part of the asset management sector and not necessarily participate in credit intermediation” (AIMA, 2012, pp.3-5). Alternative views tabled by the Institute of International Finance (IIF) state that the definition of shadow banking should take a broader approach by, “focusing on non-bank financial activities with the potential to create systemic risk regardless of whether they are deemed to be shadow banking activities or not and combining an analysis from the activity with a macro prudential view of the risks from the system as a whole” (IIF, 2012, pp.1-2).

Although varied, it is clear that the shadow banking sector or shadow financial system is a financialization process analogous to the purchase and sale of assets or financial securities in the regulated banking sector enabled by financial innovation to transact beyond the regulated financial system, advocating risk transference and wealth creation. The term ‘credit intermediation’ has been used frequently and isolated for emphasis within this definition. However, its relevance for definitional purposes is disputable given that there is an element of credit intermediation processes in almost all financial intermediaries, be it within the regulated sector or the unregulated shadow banking sector. For example, in its simplest form, investments in a hedge fund are based on the promise of a financial return, similar to that of a loan provided by a bank, in which parties to a contract would expect a return based on respective loan agreements. Similarly, the leverage extended by financial institutions to hedge funds for investing activities is also based on credit agreements and, thus, can be construed as credit intermediation. An important point is that the unregulated nature of the shadow financial system within the global financial markets poses risks to the
latter’s stability and efficiency because the rapid pace of financial innovation has increased the attractiveness of performing certain types of financial intermediation outside traditional financial intermediaries (BIS, 2012, p.67). The evolution of the shadow banking system has enhanced the resilience of financial systems globally by offering unique financial products and services through a range of special purpose vehicles for managing credit, liquidity and maturity risks. However, the same system has also created risks that can undermine financial stability in the absence of prudential safeguards (BIS, 2012, p.67).

Since the GFC 2008, credit intermediation activities within the shadow banking system have been of particular focus (FSB, 2011, p.1). The European Systemic Risk Board’s (ESRB) response to an ECB (2012) green paper on the shadow banking industry stated that the GFC 2008 demonstrated that the shadow banking industry was a potential source of significant risks, including systemic risk both in its cross-sectional and time dimensions (ESRB, 2012, p.1). The cross-sectional dimension resulted from the interconnectedness between the ‘regular’ banking sector and the shadow banking sector and between the shadow banking entities and activities, leading to complex and opaque intermediation chains. The time dimension, for example pro-cyclicality and leverage, arises from within the shadow banking sector owing to less stringent restrictions and maturity and liquidity mismatches as well as the prevalence of securities-based financial and market price-based valuation activities in the sector (ESRB, 2012, p.1). According to Poschman (2012, p.3) financial regulation to date has focused on protecting investors rather than the safety and soundness of financial intermediaries. The financial intermediaries within the shadow banking system have therefore been barely regulated, have few reporting obligations and
need to meet only a few governance standards which contribute to excessive risk taking activities within the system.

This thesis defines the shadow banking system, in correlation with the shadow financial system, as an interconnected network of financial intermediaries and instruments operating outside of the regulated financial system but is an integral part of it. More importantly, the aim is to emphasise the need for regulating financial intermediation in the shadow banking sector. At the heart of the shadow banking system are activities within the funds flow process which link the regulated financial sector to the unregulated sector through credit intermediation processes and financial instruments such as securitization and repurchase agreements (Repo) which will be discussed further and explained in more detail graphically in the following section.

2.6.1 Shadow Banking Credit Intermediation

Credit intermediation within the shadow banking system involves credit, maturity, and liquidity transformation (ECB, 2012, p.5). The shadow banking system deconstructs the familiar credit intermediation process of deposit-funded, hold-to-maturity lending by traditional banks into a more complex, wholesale-funded, securitization-based intermediation chain of discrete operations typically performed by separate specialist non-bank entities which interact across the wholesale financial market (ICMA, 2012, p.6; Luttrell et al, 2012, p.8). In the traditional banking system, intermediation between savers and borrowers occurs in a single institution. Through the process of funding loans with deposits, banks engage in credit, maturity and liquidity transformation (Adrian and
Shadow banking credit intermediation is functionally similar to traditional banking but the financial flows occur in multiple steps rather than within one institution’s balance sheet where a range of entities using various market funding instruments intermediate credit (Luttrell et al, 2012, p.8). Pozsar et al (2012, p.10) explain the process stating credit transformation in the shadow banking sector refers to the enhancement of the credit quality of debt issued by an intermediary through the use of priority of claims or taking the risk of a borrower’s default and transferring it from the originator of the loan to another party. Maturity transformation refers to the use of short-term deposits to fund long-term loans, which creates liquidity and liquidity transformation refers to the use of liquid instruments to fund illiquid assets (Pozsar et al, 2010; Pozsar et al, 2012, p.10). For example, a pool of illiquid whole loans might trade at a lower price than a liquid rated security secured by the same loan pool, as certification by a credible rating agency would reduce information asymmetries between borrowers and savers (Adrian and Ashcraft, 2012, p.5).

Shadow banks are interconnected along a vertically integrated, long intermediation chain, which intermediates credit through a wide range of securitization and secured funding techniques such as asset-backed commercial paper (ABCP), asset-backed securities (ABS) and CDOs as shown in Figure 2.5 (Pozsar et al, 2010, p.1; Pozsar et al, 2012). Securitization is at central to the shadow banking credit intermediation system and enables intermediaries to address liquidity and solvency risks by transforming illiquid loans into liquid securities which can then be sold onto investors in the financial market. Asset managers are a dominant source of demand for investment income and serve as a source of
collateral for the shadow banking system while banks receive funding through the re-use of ‘pledged’ collateral from asset managers (Pozsar and Singh, 2012, pp.4-5). In the shadow banking credit intermediation process, loans, leases, and mortgages are securitized and thus become tradable instruments (Pozsar et al, 2012, p.10). The system applies the securitization-based lending process where it transforms risky, long-term loans into predominantly risk free short-term instruments with stable net asset value issued by money market funds. The process shown is not exclusive and certain intermediation chains may be a lot more complex for example, the repackaging of ABS C0Ds into CDO^2 (Polzsar, 2010, p.12). Pozsar et al (2010, pp.11-14; Adrian and Ascraft, 2011, pp.15-16) explain the seven steps in the shadow banking credit intermediation process as show in Figure 2.4.

Figure 2.4: Credit Intermediation

Source: Shadow Banking (Pozsar et al, 2010, p.13)

The loan originator²⁸ (Step I) performs credit, maturity and liquidity transformation of loans which are transferred as portfolio assets through loan warehousing²⁹, (Step II) and packaged as ABS (Step III) in special purpose vehicles³⁰ (Step IV) (Pozsar et al, 2010, pp.11-14; Adrian and Ascraft, 2011, pp.15-16). This process, known as ABS Warehousing³¹, enables financial intermediaries to issue rated securities backed by the portfolio of loans and is funded by repurchase agreements³² which function as collateral in transactions between financial intermediaries in the conversion of loans (Step V) that have been held on-balance sheet into marketable securities (ABS) subsequently sold and traded through the SPV (Poschman, 2012, p.16). The funding (Step VII) of these entities and activities is carried out in the wholesale money markets by investors such as banks, mutual funds and hedge funds through short-term repo, commercial paper and asset backed commercial paper instruments (Adrian and Ascraft, 2011, p.16). Financial intermediaries (Step VI) that sell their loans into the securitization market are able to distribute the risks associated with the assets across a wider range of investors, rather than taking on the entire risk themselves (Stein, 2010, p.44).

²⁸ Finance companies which are titled to leases and loans (eg. mortgages) funded through commercial paper/medium term notes.
²⁹ The packing of loans into single or multi-seller conduits financed by asset backed commercial paper (ABCP) (Pozzar et al, 2010, p.12).
³⁰ The pooling and structuring loans into term asset-backed securities is conducted by broker-dealers’ ABS syndicate desks (Pozzar et al, 2010, p.12).
³¹ The packaging of asset-backed securities into single or multi-seller conduits facilitated through trading books and is funded through repo agreements/total swap or hybrid and repo/TRS conduits (Pozzar et al, 2010, p.12).
³² Repurchase agreements/transactions are where a borrower sells a security at below the current market price and agrees to repurchase it at an agreed-upon, higher price in the future. This sale and repurchase provides the same economics as a secured loan with the security being sold serving as collateral. The difference between the current market price of the security and the price at which the borrower sells it represents the haircut. Larger haircuts (when the security is sold to the lender for far below market price) mean more collateral for the lender and lower leverage for the borrower. Smaller haircuts translate into less collateral and more leverage. Using illiquid collateral for loans, even short term loans, represents effective maturity transformation (Gorton and Metrick 2009; Adrian and Shin, 2011, p.602).
On the demand side of institutional cash pools that ultimately hold the ‘riskless’ end-products of these chains which is privately guaranteed, such chains of activities resemble process of risk-stripping whereby underlying pools of long-term, risky loans are stripped of their component risks and turned into safe, short-term liquid instruments or money which complements the securitization and credit intermediation process. Primarily, money demand is the result of securities borrowers posting cash as collateral to asset managers for securities lent (Perotti, 2012, pp.3-6). Thus, the funds flow process of financial intermediation has changed tremendously from the traditional form depicted in Figure 2.3 to include a more complex credit intermediation process. The advent of active asset management through reverse maturity transformation and the need for collateral in the shadow banking industry has completed and complicated this link (Poszar and Singh, 2011, pp.7).


34 Maturity transformation, typically done by banks, refers to the transformation of short-term deposits into long-term loans. Reverse maturity transformation refers to the transformation of long-term savings into short-term savings. Much of this occurs in the shadow banking system, arising from at least three activities. First, asset managers always hold a certain portion of their funds in short-term instruments. These holdings reflect both technical and tactical considerations. On the technical side, fund managers have to manage constant inflows and outflows of funds. Inflows are not always immediately invested in risk assets, but first in short-term instruments. Similarly, short-term instruments may be held in reserve to cope with withdrawals. On the tactical side, allocations to short-term instruments may serve as a source of return for fund managers that are active in market timing. Second, funds with synthetic (or derivatives-based) investment strategies typically invest their client’s funds in short-term instruments and overlay derivatives (such as futures and swaps) onto them to gain their desired exposure to duration, foreign exchange or credit risk. Lastly, collateral mining via securities lending occurs primarily against cash collateral. Securities borrowers wire cash to securities lenders as collateral, which securities lenders transfer into a cash collateral reinvestment account and invest in short-term instruments. According to the Risk Management Association, demand for money from this corner of asset management was in the U.S. $1.2 trillion and $800 billion at end-2007 and 2010 respectively. Pozsar and Singh (2011), “The Non-Bank Nexus and the Shadow Banking System”, International Monetary Fund, Working Paper Series WP/11/289, pp.7-11, http://www.imf.org/external/pubs/ft/wp/2011/wp11289.pdf, Accessed 1 July 2012.
There are a number of consistencies between the regulated banking sector and the shadow banking industry as it relates to the ultimate goal of financial intermediation, which is the channeling of funds to create value. The environmental drivers and advantages which have been historically inherent in traditional financial intermediation process, for example, informational advantages, transaction costs and the function of risk transformation remains the same. However, the modern financial system today has evolved into a nexus which includes the unregulated shadow banking sector, enhanced through financial innovation, as an integral part of the global financial markets. Figure 2.5 is a diagrammatic representation of this nexus which develops from the theory established in Section 2.5.2 (Figure 2.3) to include participation of the shadow banking sector.

Asset managers, including the unregulated alternative investment sector, have created a deepening of the global financial system which, on the positive side, increases liquidity and reduces transactional costs but also creates and transfers unwanted risks through this interconnectedness. Institutional demand for short-term liquid instruments mainly arises from the day-to-day management of long-term savings in the modern asset management complex (Pozsar and Singh, 2011, p.7). Even though asset managers invest households’ long-term savings into long-term instruments, their day-to-day management and return mandates effectively requires them to transform a portion of these long-term savings into short-term savings, which in turn drives the money demand for asset managers and implies that in many instances what seems to be institutional cash is ultimately retail cash (Pozsar and Singh, 2011, p.7).
Figure: 2.5: Financial Intermediation Nexus

Source: Pozsar and Singh (2011, pp.3-6)
The previous notion that asset managers manage long-term savings of ultimate creditors by investing in long-term bonds or equities and holding them till maturity is not as feasible in modern day finance.

The complexity of the shadow banking system and the movement of funds through various forms of intermediation processes have resulted in detrimental consequences for the global financial system. For example, assets managers who frequently trade and invest for their own account fund themselves from the short-term markets, allowing them to take on volatile, illiquid assets which are proportionately riskier. Coupled with excessive leverage, such investments could pose systemic risks to a financial system. It was the proliferation of the shadow banking sector that was perhaps the single biggest driver of the GFC 2008. The collapse of Lehman Brothers showed the extent of the systemic risks which was hidden in the shadow banking sector. When the credit crisis erupted in August 2007 with the failure of two hedge funds run by Bear Stearns, the shares of investment bank Lehman Brothers Holdings Inc. (Lehman Brothers) fell sharply as it was exposed to counterparty risks inherent in the system. As the correction in the US housing market gained momentum, Lehman Brothers continued to be a major participant in the mortgage market. In 2007, Lehman Brothers underwrote more mortgage-backed securities than any other firm, accumulating an USD$85-billion portfolio, or four times its shareholders’ equity. In the fourth quarter of 2007, Lehman Brothers's stock rebounded, as global equity markets

reached new highs and prices for fixed-income assets staged a temporary rebound. However, the firm did not take the opportunity to trim its massive mortgage portfolio which, in retrospect, would turn out to be its last chance. On 15 September 2008, Lehman filed for bankruptcy with USD$639 billion in assets and USD$613 billion in debts.\(^{37}\)

2.7 Conclusion

Regulating risk within a complex financial system is an onerous task for regulators who have to dig into the depths of financial transactions to distinguish activities and conduct which may eventuate in fraud. As confronting as it may sound, the business of money management is the search for yield and is motivated by financial gain which induces rent seeking individuals to push the boundaries set in investor protection laws, often through fraudulent activities such as misrepresentation and manipulation. Financial market regulation is a construct of prudential supervision and conduct-of-business rules bound together as tools to enforce regulators tasked with the responsibility of protecting an economy against irresponsible and reckless behavior by market participants. The interconnectedness of financial systems is built on financial promises based on the demand and supply of financial products which translates to financial gains through investment activities and protected by risk management strategies through which uncontrollable losses can be mitigated and managed efficiently.

The concept of risk management in finance is in itself uniquely vague because effective risk management is usually quantified based on historical data which may not have any impact on future price movements. In turn, it is this task of ‘controlling the uncontrollable’, the ‘unknown, unknowns’, that has precipitated the rise of excessive risk taking and the utilization of derivatives and complex financial instruments. Financial commitments can now be packaged and repackaged into securities of value through credit intermediation and risk transformation processes which have been developed to converge the traditional funds flow processes with the unregulated sphere of economies where the majority of business dealings are conducted over-the-counter. These financial contracts are subsequently transacted by non-bank financial intermediaries such as hedge funds which are in turn funded by private investors and banks investing in a myriad of derivative instruments currently valued at over USD$600 trillion dollars. Thus, equivocally, these risk transference strategies have resulted in an exacerbation of risks within the global financial system where one risky asset is managed by another, with reflections of what may be construed as a Ponzi scheme.

Financial market regulators are in turn tasked with the responsibility to manage this complex maze with outdated enforcement strategies formed for a system within closed economies. The tools and regulatory approaches available sufficiently catered to traditional forms of financial intermediation where the most complex of structures were financial conglomerates which participated in commercial and investment banking activities within the same organisation. In these structures, market supervision strategies were effective and the approaches, be it the functional, institutional or twin peaks
The relative soundness of financial markets for the 30 years before the GFC 2008 is testament to the fact that it was much easier to control such a structure through disclosure, compliance and securities regulation. However, over the past decade the growth of the shadow financial system with the use of off-balance sheet transactions and special purpose vehicles has enabled financial innovation to take a new form, outside the purview of regulators. A simple yet unattainable solution would be to ban in its entirety the shadow financial system but this would result in the collapse of the global credit system to a greater extent than what was experienced in the GFC of 2008. The only probable option for regulators is effective management and enforcement of a financial system which has to take into account the growth of the shadow financial system. However, the effectiveness will only be tested when markets turn around and regulators are tested in their abilities to manage excessiveness within markets.

A very crucial component of the shadow banking system is the hedge fund industry. The growth in demand for alternative asset management strategies which seek to attain absolute returns will continue at an exponential rate. One important reason behind this growth in the post-crisis period is the search for yield which has become non-existent in the fixed-income markets, what used to be the safest investment. Hedge funds, which are effectively unregulated investment vehicles, are now filling this gap by promoting their proprietary investment strategies as unique and active management as the new normal. The demand is evidenced by increased investments from institutional and retail investors. It should always be borne in mind that active management does not necessarily translate to
higher returns, but it is assured that an investor will be exposed to higher risks. Chapter Three is an introduction into this ambiguous but systemically important sector of the shadow banking system which has gained much negative attention since the global financial crisis but has still managed to remain elusive and unregulated, until now.
CHAPTER 3

HEDGE FUNDS – THEORY AND PRACTICE

3.1 Introduction

The significance of the hedge fund industry as a critical part of the global financial system has increased considerably since the onset of the GFC 2008. Hedge funds account for almost half of the trading volume in New York and London, two of the largest financial centers in the world\(^1\), with approximately USD$2.1 trillion in assets under management (AUM) and it is estimated that this will increase in value to USD$5 trillion by 2016\(^2\). The influence which hedge funds have within global financial systems and their ability to have an impact on the funds flow process should not be underestimated. This growing influence has meant that such investment vehicles have become systemically important within any financial system and to the investor protection mandate of financial market regulators.

This chapter provides an overview of the theory and practice of the hedge fund industry. In order to understand and effectively analyze the regulatory framework governing hedge funds, it is important to fully appreciate the dynamism of the industry, its function within financial systems and the associated risks of the expansive investment strategies. The

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chapter begins with an introduction to hedge funds by visiting their origins and growth, an analysis on the difficulties faced by financial market regulators in formulating a legal definition of hedge funds and a brief discussion of the complex structures and investment strategies which hedge funds incorporate and execute respectively. This is followed by an examination of the systemic risks posed by the industry to investors, which is part of the central theme of this thesis. The systemic risk which hedge funds pose is illustrated through two cases, the collapse of LTCM in 1998 and subsequently, Bear Stearns Hedge Funds in 2008. The purpose of analyzing these cases is to exemplify a critical point, that after the collapse of LTCM there were numerous regulatory initiatives recommended as a result of the investigations into its collapse by the US government Presidents Working Group on Financial Markets. These investigations were a reaction to loss of investor confidence in the financial markets. One result was to mandate registration of hedge fund managers and to require increased disclosure and transparency of hedge fund activities. However, these were not implemented stringently with a preference for industry self-regulation instead.

Ten years after the initial warnings of the level of risks which hedge funds can pose to a financial system, the GFC 2008 was precipitated by the collapse of Bear Stearns Hedge Fund, an event which occurred because of misrepresentation and fraudulent conduct by the funds’ investment managers. These events distinctly highlight that industry self-regulation is an ineffective approach to regulating hedge funds. Further, a growing trend within the hedge fund industry is that of hedge fund activism. Hedge funds have become increasingly active in the management of the corporations they invest in, having controlling
influence in the decision making processes and hence making crucial commercial decisions which may not be in the best interest of the broader investor group. There have been instances of conflict of interest and collusive controls by certain activist hedge fund managers which have led to financial losses by smaller, less powerful investors. These occurrences should not be taken lightly by financial market regulators and stakeholders alike. It has to be pointed that this statement is not directed towards activities which have a positive impact on the efficient allocation of resources of such organisations but rather emphasizes those which are motivated by self-interest to the detriment of less powerful retail investors precipitated by the risk of fraud, misconduct, manipulation and misrepresentation, which will always be prevalent in unregulated industries are which motivated by financialization.

3.2 The Origins and Growth of Hedge Funds

The concept of hedge funds was developed based on an investment methodology formulated by Alfred Winslow Jones (Jones) in 1949, a sociologist and financial journalist who combined two specific investment techniques; leverage and short selling, to create a conservative investment strategy (Caldwell, 1995, p.7). Conservative, in this context, referred to an investing system that was designed to better able to cope with risks within financial markets and, in particular, it was the way Jones combined these characteristics that made his hedge fund a unique investment model (Kaal, 2005, p.6; Robotti, 2009, p.6). In Jones’ model, short-selling was used to eliminate part of the market risk involved with holding long stock positions and a modest amount of leverage was utilized to increase the level of financial exposure to the invested security. In this way, Jones sought to balance
market risk and produce a net return that depended on his ability to select “the relative best and worst” investments (Antoszewski, 2007, p.381).

Short selling is accomplished by selling shares not owned in order to buy them back at a lower price in the future that is consummated by the delivery of a security borrowed by, or for the account of, the seller. In order to deliver the security to the purchaser, the short seller borrows the security, typically from a broker-dealer or an institutional investor. The short seller later closes out the position by returning the security to the lender, typically by purchasing equivalent securities on the open market, or by using an equivalent security that they already own. In general, short selling is utilized to profit from an expected downward price movement, to provide liquidity in response to unanticipated demand or to hedge the risk of a long position in the same or a related security (SEC, 2003, pp.39-40). Leverage is a crucial element of hedge fund investment strategies and can be viewed as a means of potentially increasing an investment’s value or return without increasing the amount of invested capital (Patel, 2008, p.11). The concept of leverage will be elaborated in the next section.

Jones’s financial acumen was well in advance of both Wall Street practitioners and the academic community in developing an understanding of market risk as well as the relationship between individual stocks and the market (Landau, 1968, pp.20-24). Jones had

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developed his own measure of market risk and formulated strategies deciphering the manner in which individual stocks interacted within financial markets before the academic community had codified the Capital Asset Pricing Model (CAPM) with its notion of above average returns\(^5\). Even more astonishing is that he was actively managing the exposure of a risk-adjusted portfolio with this system (Landau, 1968, pp.20-24). The success of Jones's hedge fund model did not gain much attention in the wider investor community until the mid-1960s when public interest in managers' highly profitable strategies brought a surge to its popularity (Loomis, 1966, pp.237-242). However, early into the process of their growth and development, hedge funds experienced substantial setbacks, suffering heavy losses and massive asset outflows which, in several cases, resulted in closures and subsequently faded away (Loomis, 1970).

The re-emergence of hedge funds into the investment vehicles of today begun in the mid-1980s with renewed investor interest because of their historically impressive performance record and ability to generate absolute returns, particularly viable with the use of complex derivative financial instruments which were previously unavailable. This subsequently contributed to the establishment of thousands of new hedge funds as investment vehicles taking advantage of regulatory exemptions made available to sophisticated investors in the US and the UK. The deregulation of financial markets in the 1980s, advancements in technological developments and financial innovations further fueled its growth onwards for the next 30 years (Dichev and Yu, 2011, p.249). However, the liquidity crisis during the GFC 2008 and a loss of investor confidence in financial markets lead to a ‘run’ on hedge

funds which saw assets under management (AUM) fall to all-time lows and the collapse of numerous loosely funded vehicles due to margin calls, excessive risk exposure and fraudulent activities\(^6\). This has been proven a transitory short-term downturn as the most recent data\(^7\) indicate a resurgence of AUM held by hedge funds and a substantial growth in the industry (van Eechoud \textit{et al}, 2010, p.269; Horsfield-Bradbury, 2008, p.6). The fallacy cried by news media about the end of an era was simply that, a fallacy, hedge funds have come back stronger and are here to stay, so are the risks to the financial system\(^8\).

3.3 Definition and Characteristics

The hedge fund industry is made up of a diverse range of unregulated private investment vehicles with a wide array of investment strategies not generally available to most regulated funds (Pekarek, 2007, pp.917-918). Product differentiation is an important factor in the case of the hedge fund industry and this is distinguished by the unique investment strategies developed commensurate with acceptable investor risk profiles, achieved mainly through investing in complex derivative financial instruments. However, even though differentiation is an important element to remain competitive, hedge funds managers market themselves exclusively to sophisticated investors under a veil of secrecy because of a desire to protect their investment strategies as proprietary information. It is this


exclusive which has ultimately contributed tremendously to the growth of the industry and its attractiveness to sophisticated investors in search of exceptional returns for their money, not available to the wider retail investor community until more recently. More importantly, a combination of these factors has also obfuscated the ability to understand their form and function, resulting in difficulties of enacting appropriate legal definitions for hedge funds. The constant development in financial markets and innovative investment strategies has further complicated the ability to formulate specificities which would enable consistency in defining hedge funds.

The term ‘hedge fund’ automatically creates a relationship with the concept of ‘to hedge’. ‘To hedge’, in accordance with Jones’s investment philosophy, translates to the application of investment strategies which would result in a reduction in the risk of a financial loss if unfavorable movements occur in the value of an owned financial asset, usually carried out by purchasing positions in derivative contracts (Ineichen, 2004, p.22; Edwards, 1999, p.189). The modern day hedge funds differ in this focus as they seek to achieve absolute returns which do not necessarily include hedging strategies (Evans et al, 2005, p.53). An absolute return refers to investment strategies devised to target a return that is more than a market benchmark rate, for example, the Dow Jones Industrial Index. It signifies above average performance standards which are the result of undertaking financial risks not normally pursued by regulated investment funds or conservative investors. The aim is to perform better than regulated funds, to attain returns that remain positive under all market conditions and financial cycles and those which are not substantially correlated with the overall market performance.
The impetus of effective and efficient regulation necessitates specific definitions of the universe of institutions over which supervisory authority is to be exercised. These definitions need to be logical and consistent as well as robust enough to be used against actions designed to avoid regulatory oversight (Crockett, 2007, p. 20). However, defining a hedge fund is not simply a question of semantics. For example, if hedge funds constitute a separate and identifiable asset class then it would be logical to take account of this specificity in asset allocation decisions and regulate them as financial products. On the other hand, if they are simply an alternative way to gain exposure to risks and returns already inherent in other financial instruments, they should be considered as alternative investment vehicles and thus regulated as entities (Crockett, 2007, p.20). The ability to adequately define a hedge fund is further complicated by the conflict of interest arising from other market participants engaging in many of the same practices. For example, individuals and some institutions are also able to buy stocks on margin, commercial banks use leverage on a regular basis and the proprietary trading desks of investment banks take positions, buy and sell derivatives, and alter their portfolios in the same manner as hedge funds (Eichengreen and Mathieson, 1999). Thus any line between hedge funds and other financial intermediaries has become increasingly arbitrary (Eichengreen and Mathieson, 1999; Cumming and Johan, 2008). The inability to appropriately define a hedge fund or separate the uniqueness of its investing activities from other investment vehicles within a financial system poses problems for financial market regulators and legislators intending to carry out supervision effectively.
There have been numerous authors who have endeavored to define what hedge funds are and what they do but restrict themselves to the enumeration of typical characteristics as opposed to specific definitions (Oesterle, 2006, p.3; Stulz, 2007, p.177, van Eechoud et al, 2010, p.273; Kaal, 2005, p23; Oppold, 2008, p.834). Oesterle (2006, p.3) defines a hedge fund as privately held, privately managed investment funds which are designed to maximize the traders’ freedom to employ complex trading strategies, structure themselves by minimizing their exposure to direct regulatory supervision by market regulators. He concludes by saying that the most accurate definition of a hedge fund is a fund that is not registered under a list of specific market regulations. Stulz (2007, p.177) defines hedge funds as unregulated pools of money managed by an investment advisor, the hedge fund manager, who has a great deal of flexibility in his investment strategies. The US Securities Exchange Commission (SEC, 2003, p.viii) defines hedge funds in its staff report entitled “Implications of the Growth of Hedge Funds”, as “an entity that holds a pool of securities and perhaps other assets that does not register as an investment company under the Investment Company Act 1940”. The confusion in setting out a clear definition of hedge funds is best explained from a statement by the FSA (2002, p.8) which stated:

There is no universally accepted meaning of the expression 'hedge fund'; indeed, many competing and sometimes partially contradicting definitions exist. The term first came into use in the 1950s to describe any investment fund that used incentive fees, short-selling, and leverage. A summary definition frequently used in official sector reports is ‘any pooled investment vehicle that is privately organised, administered by professional investment managers, and not widely available to the public’.

These varying approaches in efforts to define hedge funds have meant that a common definition has not been easy to achieve. An ideal approach to formulating a definition would be to distinguish these unique characteristics from traditional investment funds.
A key difference between hedge funds and traditional funds is their return objective. Hedge funds seek to deliver absolute returns while maintaining capital preservation regardless of prevailing market conditions (Gawron, 2007, p.35). Their success is largely dependent on the skill of the manager in trying to exploit market inefficiencies and is measured by how they perform relative to selected benchmarks regardless of whether these rise or fall (van Berkel, 2008, p.200; Riviere, 2010, p.31). This is enabled by a very loose investment mandate which means that they are unconstrained in terms of the investment strategies employed and the markets they may enter, in contrast to traditional managers who are seeking relative returns in rated financial instruments and specific markets. They can also be distinguished by the activity levels of their investments; hedge funds have a much more active investment mandate than regulated funds. Consequently, hedge fund managers are less dependent on direct market performance as compared to traditional fund managers’ eventhough they transact in the same market (Fung and Hsieh, 2004a, p.67).

Hedge funds use substantial leverage and usually hold both long and short positions and often employ complex financial instruments in their portfolios (Eichengreen and Mathieson, 1999; Fung and Hsieh 2000, p.293). They typically leverage their investments by margining their positions and through the use of short sales strategies which are not available to traditional investment funds because of regulatory limitations based on investor protection rules (Ang et al, 2011, pp.103-105). Leverage measures the extent of the relative size of the long and short positions in risky assets relative to the size of the portfolio where the long position represents short-term lending and the short position represents short-term borrowing (Gorovyy, 2012, pp.4-5). The use of leverage allows a
hedge fund to commit more than the capital that it has under management and may have a significant impact on investment results because, while it may enhance investment gains, it may also magnify investment losses (Patel, 2008, p.13). For example, a highly leveraged hedge fund investing in illiquid securities may be exposed to increased risk in a ‘credit freeze’ market condition where the full value of its investments cannot be realized and forced to close out illiquid positions at unfavorable prices (Diamond and Rajan, 2011, p.558). These losses received substantial attention in the popular press both around the LTCM collapse in 1998 and Bear Stearns during the GFC 2008 (Titman, 2009, pp.2-3). In both instances, the use of leverage had been extensive.

The compensation structure of hedge funds is another defining characteristic which differentiates them from traditional investment funds. Hedge funds typically charge a management fee equaling two percent of the value of the assets under management and a performance fee of 20 percent based on a predetermined benchmark which is usually calculated monthly or quarterly (SEC, 2003, p.9; Lederman, 2007, pp.2-8). The management fee covers expenses for operating and administering the fund, for example, expenses for overhead, personnel and capital costs (Lhabitant, 2007, p.228). The managers are commonly compensated through a flat percentage of assets and carried interests⁹. The term ‘carried interest’ generally refers to a hedge fund manager’s right to part of the gains and income received from the performance of the fund identified by the level of investment returns (Bullard, 2008, p.293). In addition, some funds may also employ ‘hurdle rates’ and

‘high-water marks’. A hurdle rate relates to the performance fee which is calculated based on profit above a certain rate, such as the risk-free rate (Connor and Woo, 2004, p.20; Kambhu et al, 2007, p.2). If returns for the period are below that rate, the fund manager will not collect a performance fee. A high-water mark means that the fund will charge a performance fee only when the returns of the fund reach a level at or above which it was previously (Preiserowicz, 2006, p.811). Further, hedge funds also implement a ‘lock-up’ period restriction that prohibits a capital contribution from being withdrawn after it is first invested in the fund. Lock up periods are typically less than one quarter, but may be as long as two years, determined through a contractual agreement between the hedge fund manager and the investor (Agarwal and Naik, 2000, pp.328-329). In addition, hedge fund managers may impose withdrawal restrictions whereby investors will be required to give a specified period of notice before being able to withdraw capital (Ang and Bollen, 2010, p.1072). Finally, hedge funds may also implement withdrawal restrictions based on a ‘gate’ to limit how much capital can be withdrawn at any given date, which is usually based upon a fraction of the net asset value of the fund (Shadab, 2009, p.9). Shabab (2009, p.9) states that hedge funds limit the liquidity of their shares for several reasons. Limitations on liquidity may benefit the fund in the long run because capital redemptions at a given point may be disruptive to the fund’s operations and inconsistent with the fund’s investment objectives or trading strategy. Restrictions on the resale of hedge fund shares are required for a hedge fund to qualify for certain regulatory exemptions relating to raising capital in most jurisdictions. They place restrictions on the trading of their shares so as to not be deemed a publicly traded partnership that must pay higher corporate taxes. Most hedge fund managers have a significant portion of their wealth invested in the fund they manage.
This co-commitment gives investors additional confidence, ensuring that investor’s and manager’s interests are closely aligned.

An ongoing contentious difference between hedge funds and traditional investment funds is the lack of transparency and disclosure requirements which will be further elaborated in detail in Chapter Five and is briefly addressed here for completeness. Hedge funds refrain from disclosing any information about their investment strategies and activities based on the stance that doing so will impede their competitive advantage and result in duplication of trades and ultimately eliminating profit opportunities if revealed to the general public (Thompson, 2009, p.997; Partnoy and Thomas, 2007, p.35). This is also the reason why hedge funds seek exemptions from registration requirements with financial market regulators which has historically meant that they have only been able to market themselves to sophisticated investors. However, the retailization of hedge funds and the growth of the pension fund industry has seen a growing trend of retail investors increasingly exposed to hedge fund investing activities. For the purpose of this thesis, hedge funds can be collectively defined as eclectic investment fund pools, typically organized as private partnerships and structured to take advantage of exemptions within financial market regulations. Hedge funds invest in financial markets executing financial strategies with the use of financial instruments, structured in varied complexities across numerous markets globally and can also be located in offshore tax havens. Their managers, who are paid on a fee-for-performance basis, are generally free to use a variety of investment techniques including short positions and leverage, to raise returns and achieve superior performance. A crucial component of the hedge fund investing model is the manner in which they are
structured and organised. Thus, it is important to explore these different structures in order to provide a rationale for the way hedge fund partnerships are organized (Fung and Hsieh, 1999).

### 3.4 Hedge Fund Structures

Hedge funds are more popularly recognized in the financial community by their legal structures which are organized to take advantage of regulatory restrictions. The unique characteristics of these investment vehicles require flexibility as a result of their highly speculative, information-motivated, trading strategies which conflict within a highly regulated legal environment (Connor and Woo, 2004, p.8). Most hedge funds, having originated and structured in common law jurisdictions such as the US and the UK take the form of limited partnerships with certain funds structured as corporations or trusts in order to give the hedge fund manager maximum control over the investment activities (Wider and Scanlan 2004; Fioretos, 2010, p.702). The fund manager will be legally separate from the fund itself, although the management entity may serve as the general partner for a fund organized as a limited partnership (Cumming and Dai, 2010, p.1003). Another important virtue of this type of investment vehicle is that it allows more flexibility in establishing capital accounts for each participant to calculate and reallocate performance-based fees back to the fund manager (Krug, 2010, p.664). The fund’s investors are bound by a governing document, for example a limited partnership agreement, an operating agreement or a product disclosure statement to provide the foundation for the organisation, management and investment mandate of the fund (August and Cohen, 2006, p.18). This is dependent on the jurisdiction in which the fund is incorporated. The
document must conform to the requirements of the jurisdiction of formation and will set forth the method of governing the fund, the nature of the capital accounts, the mechanics of investment and qualifying for entry into the fund, redemptions, withdrawals, transfers, dissolution, indemnifications, and dispute resolution (August and Cohen, 2006, p.18).

Hedge funds are located in a mixture of onshore major financial centers and offshore low tax and light-touch regulatory regimes to take advantage of more favorable tax incentives, auditing and accounting regulation (Oppold, 2008, p.835). They are typically open-ended and actively managed and issue and redeem units or shares directly with investors based on the net asset value\textsuperscript{10}. In comparison, closed-ended funds are not eligible for liquidity withdrawals and are either required to be held till liquidation or traded on exchange (McVea, 2007, p.714; Spangler, 2007, pp.33-34). Different aspects such as tax efficiency, proximity to financial markets, access to skilled professionals, access to potential investors and beneficial regulation determine the optimal location of each entity within the structure (Hagerman, 2007, p.15; Spangler, 2009, p.1199).

Figure 3.1 depicts a typical domestic hedge fund structure also known as a stand-alone structure which is incorporated within the jurisdiction where the primary business is conducted and funding is sourced. The hedge fund manager serves as a general partner adhering to the regulatory requirements applicable to incorporated onshore structures, its governing documents and, should the fund expand to structure itself as a multi-fund, there

will be a need to incorporate special purpose vehicles or management vehicles to adequately separate the legal ownership of investors and separable investment strategies\textsuperscript{11}. Further, hedge funds also generally incorporate themselves by linking to offshore regulated jurisdictions and offshore tax havens. Fund structures for investment managers which establish an offshore link generally fit into two further categories, a side-by-side or master-feeder structure. The side-by-side structure (Figure 3.2) encapsulates the common traditional form of hedge fund structure incorporated within the jurisdiction where the principal business is conducted and funding sourced but also includes an

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure3.1.png}
\caption{Stand-Alone Structure}
\end{figure}

\textsuperscript{11} Vaughan, D. and Bancroft, M. (Undated), “Structuring Issues For Hedge Funds” Chapter 4, David Vaughan, Partner, Dechert LLP, Washington DC and Margaret Bancroft, Partner, Dechert LLP, New York, 
\url{http://www.dechert.com/files/Publication/060982da-1924-4af4-ba9-}
\url{dc0bcb916c9d/Presentation/PublicationAttachment/96475a86-7acf-492d-9220-f1f103e7d0350/US2004Structure.pdf}, Accessed 1 June 2012.
offshore limited partnership\textsuperscript{12}. This type of structure is formed to address the mutual interest of domestic and offshore investors where the fund manager advises each fund within the side-by-side structure separately but each fund makes the same or substantially the same types of investments\textsuperscript{13}.

\textbf{Figure 3.2: Side-By-Side Structure}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure3.2.png}
\caption{Side-By-Side Structure}
\end{figure}

In a master-feeder structure all of the investment monies, both from offshore and onshore investors, is invested in the feeder fund to be aggregated together in the master fund and subsequently invested by the fund manager according to a single set of investment objectives and restrictions. There are economies of scale benefits in combining pools of investments raised by different classes of investors cross-jurisdictionally (Aggarwal and Jorion, 2010, p.241).


The investments enable fund manager to leverage against credit lines and meet asset sized based investment qualifying tests\(^{14}\). Further, economic efficiencies also arise in the manner in which investments are made since only a single trading entity is used, thereby avoiding the need for the investment manager to split trades or engage in ‘re-balancing’ trades as between parallel structures and, thereby, lower operational costs (Ng, 2009, p.54). Although in many structures the master fund and the feeder fund will have similar boards of directors, arguments in favor of separate boards include minimizing conflicts of interest and promoting independent oversight\(^{15}\).


The master fund is typically incorporated in a tax and investment friendly jurisdiction which pools assets from various kinds of investors, depicted here as 'Domestic Taxable Investors' and 'Foreign and Domestic Tax Exempt Investors' for ease of reference. Thus, a common strategy within an incorporated hedge fund structure is the creation of an investment vehicle meant for the pooling of assets under an agreed investment strategy, usually investable in a portfolio of financial instruments, with varied degrees of diversification.

### 3.5 Hedge Fund Strategies

Hedge funds are classified as entities that focus almost exclusively on the speculative role of investment management, that is, they attempt to outperform the market average by superior security valuation and successful trading strategies (Connor and Woo, 2004, p.26). It is important to appreciate the vast variations of hedge fund strategies which are never identical but differentiated based on variables such as required returns and exposure to risk and volatility of invested financial instruments. However, it is virtually impossible to identify all the different strategies which hedge funds typically employ. For example, hedge funds are known to incorporate a multitude of different strategies within one investment portfolio and diversify through various organisational structures within the global financial system which makes determining specifics ineffective. Thus, it is appropriate to approach this subject with an overview and focus on three main strategies which hedge funds are known to execute as identified by the SEC (2003, p.34) namely, market-trend or tactical, event-driven and arbitrage strategies.
Market-trend or tactical strategies seek to generate returns by predicting major market trends and other significant market movements, often as a result of changes in government policy, which will have an impact on equities, interest rates or commodities (SEC, 2003, p.34). Hedge funds which employ these strategies are commonly known as ‘global macro’ funds where such funds identify investment opportunities globally based on macro-economic variables (Crockett, 2007, p.21). Global macro hedge funds do not have limits on the multiplicity of strategies they can employ as they are able to invest 'long and short' in stocks, bonds, currencies, and derivatives, including options and futures (Cole et al, 2007, p.8). They traverse national boundaries, investing among developed countries as well as emerging markets and use leverage as the opportunity arises to increase returns (Pruchnicka-Grabias, 2010, p.151). They execute their investment strategies in different asset classes taking advantage of changes in trends and profiting from unidentified opportunities such as movements in unemployment rates, political instability and interest rate decisions (Pruchnicka-Grabias, 2010, p.151). The best-known global macro hedge fund is the Quantum Fund managed by hedge fund manager George Soros.

Event-driven strategies, by contrast, seek to exploit investment opportunities involving mispricing of securities associated with discrete events concerning corporate activity, such as corporate insolvencies, reorganizations, mergers or takeovers, for example, merger arbitrage and distressed investing. It has a much more micro view as compared to global macro strategies and hedge funds usually focus these strategies in markets in which they

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are located. Merger arbitrage generally involves acquiring the securities of a company that is subject to a special event such as a takeover or reorganization while distressed investing primarily concerns the purchase of debt securities which originate from companies that are in the process of reorganization or liquidation or companies engaged in other transactions such as balance sheet restructuring. Hedge fund managers will purchase the securities or debt of companies that are announced as acquisition targets which often trade at a discount to the proposed acquisition price due to the uncertainty that the acquisition will actually be consummated (Oltchick, 2002, p.46). The risk to hedge funds which focus on even-drive strategies is the unpredictable nature of corporate events. For example, a merger or acquisition may not be finalized, there may be an unfavorable counter-bid on a takeover and even in situations where the outcome of a particular transaction is clear, it may not have the expected impact on securities pricing. As a result, the difference in performance between event-driven managers can be significant.

Arbitrage strategies meanwhile seek to identify and exploit pricing disparities between securities that are closely related, while at the same time attempting to insulate investors from the effects of adverse market-wide movements (McVea, 2008, p.7; AIMA, 2012, p.6; SEC 2003, p.35). The use here of the term ‘arbitrage’ varies somewhat from its traditional form, since hedge fund arbitrage strategies are associated with trades that entail some risk of loss or uncertainty about total profits (McVea, 2008, p.7; ECB, 2005, p.9). In the hedge

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fund world, arbitrage more commonly refers to the simultaneous purchase and sale of two similar securities whose prices, in the opinion of the trader, are not in sync with what the trader believes to be their “true value.” Acting on the assumption that prices will revert to true value over time, the trader will sell short the overpriced security and buy the underpriced security. Once prices revert to true value, the trade can be liquidated at a profit\textsuperscript{19}. Although their low volatility makes such strategies attractive, they nevertheless require medium to high leverage in order to benefit from small pricing distortions, particularly in fixed income markets (ECB, 2005, p.9).

The investment strategies identified is an attempt to portray the dynamism of hedge fund investing executed by fund managers to achieve absolute returns, and is not an exhaustive list. Hedge fund investment strategies are generally more complex, utilize in-depth research and proprietary knowledge in an attempt to differentiate and attain a competitive advantage. However, it is this very flexibility and dynamism, coupled with the use of leverage and short sales which has posed tremendous risks to global financial systems creating unwelcomed volatility and increased danger. The GFC 2008 has exposed the ability of the hedge fund industry to distort financial markets and its unregulated nature coupled with lack of transparency agenda makes the containment of a possible systemic risk event difficult to ascertain. The following section analyses the relationship between systemic risk and the threat which hedge funds pose to a financial system with a detailed analysis of the collapse of LTCM in 1998 and Bear Stearns Hedge Funds ten years later.

3.6 Systemic Risk and Hedge Funds

The term ‘systemic risk’ is used to describe the possibility of a series of correlated defaults among financial intermediaries which occur over a short period of time, often caused by a single major financial turmoil (Chan et al, 2005, p.1; Abraham, 2011, pp.16-17). Hedge funds have been singled out as one of the contributors of the GFC 2008 by financial market regulators and their investing activities have been identified to potentially be a cause of systemic risks within financial systems (Simkovic, 2009, pp.258-262). The Financial Stability Forum (2007) identified three main sources of concern from the hedge fund industry: a systemic risk arising from their excessive leverage, the potentially disorderly impact of their failures on banks and markets, and a market dynamics issue related to their concentrated market positions (ECB, 2009, p.5). One of the major reasons the hedge fund industry has become a cause of concern has been the tremendous growth of the unregulated shadow banking sector over the past decades, fuelled by the demand for higher returns in alternative investments in the face of stock-market volatility and mounting pension-fund liabilities (Patel, 2008, p.61). This search for yield has meant that the massive inflow of funds, especially into the hedge fund industry has also obfuscated the true risk profile within financial systems. The regulated banking sector is ultimately exposed to these risks through proprietary trading activities, credit arrangements of structured products, and prime brokerage services (Lo, 2009, p.11). Accordingly, the risk exposures of financial intermediaries has become considerably complex and interdependent, especially in the face of globalization and the increased consolidation between banking, the financial services sector and the shadow banking industry (Munteanu, 2010, p.1). This concern is not only in regards to the funds’ investors but also
the impact on the funds’ counterparties and especially prime brokers who often finance the funds whereby a significant failure can have serious negative implications on price information and liquidity in the markets, curtail market confidence and lead to financial contagion and crises (Hagerman, 2007, p.18).

Governments have become increasingly concerned about the potential of systemic failure stemming from hedge fund collapses, originally brought to attention by the near-collapse of LTCM and more recently prompted by the increasing popularity of hedge funds as a favored investment tool (Schwarz, 2008, p.196). In a speech\textsuperscript{20} by Mary Schapiro, the Chairperson of the SEC, addressing the impact of the GFC 2008 on regulatory gaps within the financial system, she warned that:

\textit{The road to investor confidence requires a concerted effort to fill the regulatory gaps that have become so apparent over the last 18 months. One of the most significant gaps likely to be filled relates to hedge funds – which have flown under the regulatory radar for too long. And without even a comprehensive database about hedge funds and their managers, it is virtually impossible to monitor their activities for systemic risk and investor protection purposes.}

The debate encapsulating the definition of systemic risk and the link to hedge funds is widespread as academics and market regulators scramble to reason the complicated interconnectedness of global financial systems. Nickerson and Kupiec (2004, p. 123) define systemic risk as the potential for a modest economic shock to induce substantial volatility

in asset prices, significant reductions in corporate liquidity, potential bankruptcies and efficiency losses. The Group of Ten (2001, p.126) proposes the following definition:

Systemic financial risk is the risk that an event will trigger a loss of economic value or confidence in, and attendant increases in uncertainty about, a substantial portion of the financial system that is serious enough to quite probably have significant adverse effects on the real economy. Systemic risk events can be sudden and unexpected, or the likelihood of their occurrence can build up through time in the absence of appropriate policy responses. The adverse real economic effects from systemic problems are generally seen as arising from disruptions to the payment system, to credit flows, and from the destruction of asset values. Two related assumptions underlie this definition. First, economic shocks may become systemic because of the existence of negative externalities associated with severe disruptions in the financial system. If there were no spillover effects, or negative externalities, there would be, arguably, no role for public policy. Second, systemic financial events must be very likely to induce undesirable real effects, such as substantial reduction in output and employment, in the absence of appropriate policy responses. In this definition, a financial disruption that does not have a high probability of causing a significant disruption of real economic activity is not a systemic risk event (Gerlach, 2009, p.2).

This definition highlights three important characteristics of systemic risk. It has a substantial impact on a financial system with spillovers to financial intermediaries and related counterparties due to the interconnectedness of financial systems and hence resulting in a rise to counterparty risks, an impact which materializes because of highly adverse macro-economic effects in the absence of strong regulatory responses. However, while this definition is clear, it is also rather abstract. In order to measure and to control systemic risks, the definition must be made operational and, in the case of the threat which the hedge fund industry poses to systemic stability, it is the enforcement of operational risk assessment and mandating increased transparency of such investment vehicles so that risky and fraudulent activities can be effectively monitored (Gerlach, 2009, p.2). Schwarz (2008, p.197) take a similar interconnected view of financial intermediaries, explaining
that systemic risks are risks that arise due to a default by one market participant which will have repercussions on other participants due to the interlocking nature of financial markets. Kaufmann (1996) explains this interconnectedness and its links to systemic risks as to occur because “all economic agents are interconnected”, stating:

The interconnection provided a chain along which shocks to any one agent are transmitted to others. The personal or institutional balance sheet of each agent includes assets that are either liabilities of other agents or whose values depend on the behavior of other agents. Likewise, the liabilities of each agent are the assets of others. If an agent suffers a decline in the value of its assets, the value of its capital will decline. This will likely reduce the spending behavior of the agent and thereby also the income and asset values of other agents. Moreover, if the loss in asset values were sufficiently large to exceed an agent’s capital, it would cause the agent to default on their debt obligations. This, in turn, will reduce the values of assets on the balance sheet of the agent’s creditors and ignite a chain reaction of reduced spending and defaults (Kaufmann, 1996, p.25; Liu and Mello, 2011, pp.491-494).

An important distinction should be made in differentiating systemic risks from financial risks. According to Kambhu et al (2007, pp.8-9) financial risk is the effect of misplaced and wrongly calculated investment strategies and concentrates on one or two organizations while systemic risks result in financial shocks which have the potential to lead to substantial, adverse effects on the real economy or the transmission of financial events to the real economy.

Another prominent cause of the increasing concern for systemic risks within financial markets is financial innovation and the use of special purpose entities, which is common practice within the hedge fund industry. Simkovic (2009) found that the roots of the GFC 2008, and indeed all past crises, is based on one of the most fundamental problems of commercial law; hidden financial leverage. A prominent reason for this was legislation for
financial instruments incentivized fund managers to transfer complex and opaque financial products into separate entities so as to segregate the risks they posed from the parent entity. This method of risk management meant that such transactions were structured separately, while also allowing financial intermediaries to hide the extent of their leverage and thus obfuscate the real value of financial risks. An OECD (2011, p.55) investigation revealed that the higher the leverage levels get the more extreme price movements have to be expected and this increases the probability of crashes. Thus, if there is hidden financial leverage in the mix, the true nature of risks within the financial system is obfuscated.

In a publication entitled the “Global Governance of Financial Systems: The International Regulation of Systemic Risk”, the authors argue three principal points; that the current international and domestic efforts to contain the generation of systemic risk in financial systems are inadequate; this inadequacy increases systemic risk; and that an international regulatory response is required (Alexander et al, 2006, p.14; Banaei, 2007, p.548). Thus, systemic risks can be defined as the risk of a financial shock within the financial system that has a systemic effect on the rest of the economy, globally through the interconnected financial markets and hence affecting financial intermediaries and related counterparties collectively. Like other participants in the financial system, hedge funds invested in many of the financial instruments linked to the GFC 2008. As a consequence, their role in the financial crisis and potential contribution to systemic risk have drawn increased attention from the, financial market regulators, participants in the financial system, and researchers.
According to the FSA, hedge funds are able to contribute to systemic risk through two main channels: the credit channel and the market channel (FSA, 2010, p.2). This was explained in Chapter Two as part of the credit intermediation processes within the shadow banking industry. Hedge funds pose systemic risks through the credit channel when losses arise due to default to creditors and related financial intermediaries or counterparties. These losses are extended into the broader financial system through the funds flow process exacerbating the systemic exposure through securities transactions and related counterparty derivative trades (Pirrong, 2011, pp.13-15). If the contagion effect of this by a systemically important single fund or across multiple smaller funds is large enough, thedestabilizing impact of losses across affected counterparties will be multiplied.

Systemic risks through the market channel are also significant when hedge funds participate in an asset bubble which collapses. In a number of asset classes, hedge funds may be significant investors and providers of liquidity and it is possible for their collective impact to be one of the drivers of unsustainable asset price upswings or asset bubbles in financial markets (FSA, 2010, p.1). For example, a report by the United Nations (UN) in the aftermath of the GFC 2008 of the effects of information on price formation in the commodities market stated that hedge fund investment strategies eventuates in herding behavior which directly contributed to commodity price bubbles. Thus, when the ‘bubble burst’ a converse reaction and herd behaviour led to the downside swings which amplified price volatility of such financial instruments (UN, 2011, pp. 32-47). Like a tragedy of the
commons\textsuperscript{21}, no individual market participant has sufficient incentive, absent regulation, to limit their risk taking in order to reduce the systemic danger to other participants and third parties (Schwarz, 2008, p.198). Furthermore, the impact which hedge funds have had as contributors to systemic risks within financial systems has largely been disregarded even though there were significant events before the GFC 2008 which indicated the systemic significance of the hedge fund industry. An initial sign of the negative externalities caused by hedge funds was identified in the collapse of LTCM which, although it invited investigations, did not result in any meaningful regulatory actions to mitigate the problem. The events are a strong indication that the no-action by regulators eventually resulted in the collapse of Bear Stearns Hedge Funds ten years later and the implosion of systemic risks leading to the GFC 2008.

3.6.1 The Failure of Long-Term Capital Management

The 1998 failure of LTCM is said to have nearly been the cause of a contagion which set to spread across the global financial system as the financial losses of the hedge fund threatened to create major liquidity crisis amongst its counterparties (Jorion, 2000, p.1). The crisis brought the problem of hedge funds as contributors of systemic risks into the spotlight and to the attention of the financial market regulators with much of the focus placed on the need to control the risk and leverage of unregulated financial firms, raising questions about improving counterparty risk management and regulating hedge funds (King and Maier, 2009, pp.286-287; Athanassiou, 2009, p.67). The problem was so large

\textsuperscript{21} The original concept of a tragedy of the commons can be traced back to Aristotle cited in Schwarz (2008, p. 198, Footnote 15) stating: “[T]hat which is common to the greatest number has the least care bestowed upon it. Everyone thinks chiefly of his own, hardly at all of the common interest”.

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that the Federal Reserve Bank of New York (Fed) had to intervene and bailout LTCM to stop the contagion from spreading across the financial system (Zimmerman, 2000, p.124).

LTCM was designed to be the ‘ultimate hedge fund’ by two of the most illustrious scholars in economics and finance managing it, Myron S. Scholes and Robert C. Merton. They shared the 1987 Noble Memorial Prize in Economic Sciences for “a revolutionary method to determine the value of derivatives” known as the Black-Scholes Model. With an AUM of approximately US$4.8 billion, the hedge fund utilized trading strategies which included convergence trading22 and dynamic hedging23 and specialized in high-volume arbitrage trades in bond and bond-derivatives markets (Partnoy and Thomas, 2007, pp.34-36). As the hedge fund grew, it gradually become more active in international financial markets and was more willing to speculate. LTCM primarily specialized in a strategy known as ‘market-neutral arbitrage’ where it had long positions in bonds that it considered undervalued and short positions in bonds that it considered overvalued, but more specifically, it bought high-yielding, less liquid bonds, such as the Danish mortgage-backed securities, bonds issued by

22 Convergence traders take risky positions against noise trading. When they face capital losses from unfavorable stocks, they liquidate positions due to their reduced risk bearing capacity, resulting in amplification of the original shocks. Although convergence traders reduce asset price volatility and provide liquidity most of the time, in certain extreme circumstances the wealth effect can cause them to be destabilizing, i.e. they can trade in exactly the same direction as noise traders when they are liquidating losing positions (Kaal, 2005, p. 52, footnote 123). Xiong (2001), pp.248-249 – “Convergence trading strategies were made popular by the Hedge Fund Long-Term Capital Management (LTCM). A typical convergence trading strategy is to be that the price difference between two assets with similar, but not identical, characteristics will narrow in the future.”

23 Benninga and Wiener (1998, p.1) – A dynamic hedging strategy typically involves two positions: Firstly, a static positions in a security or a commitment by a firm. For example – a financial institution has written a call on a stock or a portfolio – this call expires it or not? Secondly, an offsetting position in a financial contract. Typically, this counter-balancing position is adjusted when market conditions change; hence the name dynamic hedging strategy. To hedge its written call, the issuing firm decides to buy shares of the underlying stock or portfolio. The number of shares purchased at the time will depend on the price of the underlying stock or portfolio and on the amount of time remaining until the expiration of the call. Another way of viewing this is that the amount of stock held against the call positions depends on the probability that the option will be exercised.

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emerging market countries, and ‘junk’ corporate bonds, and sold short low-yielding, more liquid bonds such as the US government bonds (Edwards, 1999, p.198). At the time prior to its collapse, it had approximately 80 percent of its balance sheet positions invested in bonds of the G7 countries which were in turn collateralised in repo and reverse repo agreements through a number of counterparties (Kaal, 2005, p.53, Dowd, 1989, p.3). The overriding cause of the failure of LTCM was the gradual erosion of its risk management practices during a period when competition for hedge fund business by banks and securities firms were more aggressive towards hedge funds which were viewed as desirable trading partners (PWG, 1999, p.23; Fioretos, 2010, p.708).

This focus on hedge fund business meant that the counterparties were willing to circumvent crucial risk management practices to accommodate the demands of their customers. LTCM was able to achieve a high level of leverage in large part because of practices in the derivatives market and the market for repurchase agreements (Brice, 2010, p.5). At the time of its failure, LTCM was the most highly leveraged hedge fund, with a leverage-to-equity ratio exceeding 25:1, reporting to the Commodities Futures Trading Commission (CFTC) (PWG, 1999, p.14; GAO, 1999, p.14; Bullard, 2008, p.310). The large size of LTCM’s trading positions in several markets exposed it to significant unhedged financial risk which resulted in extreme losses with the festering of the Russian Ruble Crisis in 1998, caused by an unanticipated declaration of default by the Russian government as it was unable to service its sovereign debt commitments. This confounded LTCM’s risk-management models, making an orderly building-down of its positions and the acquisition of fresh capital injections exceptionally difficult (Anthanassiou, 2009, pp.68-
As a result of the turmoil in the international bond market, the fund was forced to liquidate its assets to meet margin requirements and hence suffered extreme losses.

This failure was even more threatening because the commitment of LTCM's trades was material and spanned across a variety of systemically important counterparties who were substantially active in the collapsing government bond market and had already experienced huge financial losses after Russia's default (van Eechoud et al., 2010, p.289). In order to prevent LTCM from bringing down a core part of the financial system, the Fed stepped in. Two factors influenced the Fed's involvement. First, in the rush of LTCM's counterparties to close-out their positions, other market participants, investors who had no dealings with LTCM, would have been affected as well (McVea, 2008, p.71). Second, as losses spread to other market participants and LTCM's counterparties, this led to tremendous uncertainty about how far prices would move (Ordower, 2010, p.299). Under these circumstances, there was a likelihood that a number of credit and interest rate markets would experience extreme price volatility and possibly cease to function. This would have caused a contagion, loss of investor confidence, and to a rush out of private credits, leading to a further widening of credit spreads, deeper liquidations of positions (Overmyer, 2010, p.2200 n.108; Zimmerman, 2000).

The findings from the President Working Group on Financial Markets which investigated the failure of LTCM showed significant failures in operational risks whereby published financial statements did not reveal to LTCM's counterparties, meaningful details of the fund's risk profile and the concentration of position exposure in certain markets because of
the limitations inherent in a typical financial statement for the timely assessment of LTCM’s trading risks (PWG, 1999, p.8). Another problem identified was the failure of counterparty credit risk management (CCRM). As with many hedge funds, LTCM did the bulk of its borrowing in the repo market. LTCM would sell an asset to an investment bank or other counterparty with the promise to buy it back later (Thompson, 2009, p.8; PWG, 1999, p.D-10). It was allowed to carry out its investing activities in OTC trades that were cleared with inadequate collateral margins or ‘haircuts24’ on repurchase agreements which subsequently allowed it to build leverage and increase its risk exposure. The requirement for a haircut is meant to reduce the risk to the seller that the underlying asset declines in value during the course of the repurchase agreement. This, however, was effectively disregarded in the case of LTCM (Jorion, 2000, pp.2-7). The deficient credit management procedures and inadequate collateral margin requirements meant that LTCM was able to increase its leverage risks and which subsequently exacerbated counterparty credit risks.

Further, the findings of the U.S. Hearing on Hedge Fund Operations before the Committee on Banking and Financial Services25 (U.S.CHFO) identified two operational issues which would have had significant implications for the financial system if LTCM was not bailed-out. The first issue was the manner in which LTCM was structured. It was incorporated as a Delaware Limited Partnership but the fund it operated, Long-Term Capital Portfolio L.P, was incorporated in a tax haven, organized as a Caymans Island limited partnership

24 A ‘haircut’ is the reduction of value to securities used as collateral in a margin loan. That is, when one places securities as collateral, the brokerage making the loan treats them as being worth less than they actually are, so as to give itself a cushion in case its market price decreases (Roulet, 2011, p.14, n.11).
According to Haubrich (2007, pp.2-4) this complex structure meant that any buyout of the fund would be a complicated cross-jurisdictional process and if both entities were allowed to declare bankruptcy in different jurisdictions, this would have exacerbated problems in seeking any substantive resolution (U.S.CHFO, 1998, pp.25-28). The second issue was related to LTCM’s large holding of financial derivatives. In the U.S., bankruptcy usually triggers an ‘automatic stay’ that would prevent creditors from seizing the borrower’s assets. However, OTC derivative contracts were exempt from this provision and, in case of bankruptcy, the creditors would have been able to terminate the contract, taking the collateral for partial payment (U.S.CHFO, 1998, p.E.6). If this was allowed to take place, the creditors would have subsequently sold all the remaining liquid securities. Taking into account the size of LTCM’s portfolio, such liquidation would have been very disruptive for all related counterparties within the global financial system (Haubrich, 2007, p.2).

The LTCM collapse brought into light the failure of risk management practices and significant conflict of interests between banks and the hedge fund industry. It was clear that banks lent heavily to LTCM in order to finance its leverage positions and that the bailout was orchestrated primarily in their own interest. LTCM’s seventeen biggest counterparties, which include banks such as Merrill Lynch, Goldman Sachs, Morgan Stanley, Salomon Smith Barney, would have lost at least USD$2.8 billion had the bailout not been organized (Robotti, 2004, p.119). In general, two main explanations of counterparties’ involvement were given. The first was that the role of banks is one of meeting their clients’ requests and that, by so doing, they can fail to judge the riskiness of their operations
In the case of LTCM, the allure of geniality that surrounded the fund’s high profile managers confused the judgments of counterparties (Robotti, 2003, p.199). The second explanation was that the interconnectedness of their financial transactions in turn made them vulnerable to substantial losses which thus led to purposefully hiding the true financial risks of these transactions. More importantly, the outcomes of the investigations made recommendations for increased transparency and registration requirements for hedge funds and their managers but this was subsequently not implemented, with responsibility given to the hedge fund industry to self-regulate. Supervisory inaction has invariably been the consequence of regulatory failure due to continual inaction by the SEC, one of the leading causes of the collapse of Bear Stearns and the GFC 2008.

### 3.6.2 The Collapse of Bear Stearns

Ten years after the LTCM debacle, the collapse of Bear Stearns & Co. Inc. (Bear Stearns) in 2008 emphasized the systemic risk problems which hedge funds pose to the integrity of a financial system back into the purview of regulators. Bear Stearns was one of the pioneers of, and the fifth largest investment bank on, Wall Street. By year end 2007, its balance sheet showed USD$395 billion in assets supported by USD$11.1 billion in equity, a leverage ratio of approximately 33:1 (Tammero, 2010, p.598). Notional contracts amounted to around USD$13.4 trillion in derivative financial instruments of which around 14 percent were in listed futures and options contracts. Its collapse in 2008 proved to be the beginning of a

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financial crisis which will see no end if the true risk of leveraged positions and derivative contracts within financial systems are not consolidated.

One of the causes of the demise of Bear Stearns was two of its hedge funds, the High-Grade Structured Credit Strategies Fund (HGCF) which was incorporated in 2003, and the High-Grade Structured Strategies Enhanced Leverage Fund (HGLF), created in 2006, both of which were sponsored through its subsidiary, Bear Stearns Asset Management (BSAM), in 2007. The funds were part of a growing industry in investment vehicles that specialized in illiquid assets such as exotic securities (Patel, 2008, p.42). An important selling point for investors in the hedge funds was the reputation of both funds’ and their relationship with Bear Stearns. Bear Stearns was known as a leader in CDOs and other exotic securities within the financial industry. The hedge funds were marketed as safe investments because of Bear Stearns’s reputation and the use of the company’s proprietary systems to identify and manage risk\(^\text{27}\). Moreover, Bear Stearns was also involved in every part of the BSAM business\(^\text{28}\). For example, Bear Stearns Securities Corporation, a wholly-owned subsidiary of the company, served as the prime broker for the hedge funds and PFPPC Inc., another Bear Stearns subsidiary, was the hedge funds’ administrator while BSAM was the investment manager for the HGCF and HGLF\(^\text{29}\). In hindsight, it is disappointing that these conflicts of


\(^{29}\) United States District Court, Southern District of New York: In RE: The Bear Stearns Companies Inc. Securities, Derivative, And ERISA Litigation; Consolidation Class Action Complaint For the Violation of the
interests were never highlighted as a significant corporate governance failure and it is strongly believed that such inadequate governance principles within Bear Stearns were significant contributors to its demise.

According to an SEC complaint in *SEC v Ralph R. Coffi & Matthew M. Tannin*[^30], filed in the U.S. District Court for the Eastern District of New York, the HGCF and HGLF collapsed after taking highly leveraged positions in structured securities based largely on subprime mortgage-backed securities. The collapse was a result of risky investment strategies which focused on complex financial instruments, heavily invested in illiquid assets without a consistent market. The funds were leveraged at 35 times their invested AUM, largely due to misrepresented valuations, and as the market conditions deteriorated the returns of the two funds dropped further below valuations increasing losses exponentially[^31]. There were numerous hidden financial risks within these two hedge funds and one of the main reasons for its collapse was misrepresentation and fraud where the managers of the fund mislead investors and counterparties through incorrect valuation and manipulated financial statement information[^32]. Further, the managers had misrepresented fund performance to evade investor redemption requests in order to prevent a short-term systemic collapse of the fund. The hedge funds were subsequently bailed-out by the parent company, Bear


Stearns, out of concern that the failure of these entities could raise investors’ concerns about the firm itself and create irreparable reputational risks, but this proved to be unsustainable (FCIC, 2011, p.240).

The systemic risk posed by HGCF and HGLF to its counterparties was a result of the broader connection of Bear Stearns in the global financial system. It was an important prime broker globally, committed to numerous OTC contracts and transactions which subsequently led to a chain of liquidity risks and hence contagion to the financial system (King and Maier, 2009, p.289). It was a major counterpart in credit default swap transactions and the repo market which was interconnected between counterparties, forming complex relations with each other (Broughman, 2010, p.193). The risky exposures taken and made by Bear Stearns identify recklessness in due diligence and a disregard for compliance procedures. A crucial point to be made is that BSAM was known to have concentrated positions in the shadow banking system, taking on large amounts of risk by utilizing excessive leverage which was not disclosed but hidden from its balance sheets through special purpose vehicles (Pozsar, 2008, pp.19-24). The existence of its connection with the unregulated shadow banking industry and financial contracts illustrates the potential problems which could arise due to the interconnectedness between the regulated financial system and the shadow banking system. A run on the bank was not the root cause of the collapse; rather, the fear that the “borrow short and lend longer” pyramid of credit used by the bank would crumble drove investors to withdraw capital and lenders to cease lending en masse, thus cutting off any source of funding and
increasing liquidity and credit risks for the bank and its eventual collapse (Broughman, 2010, p.195).

It is important to understand clearly the concept of systemic risk in the midst of the credit crisis which coincided with the global financial crisis. Chairman Bernanke clearly suggested that “the US credit crisis revealed glaring inadequacies in the regulatory and supervisory framework of the United States. One of the primary purposes of that framework should be to avoid having risk-management failures at individual institutions such as Bear Stearns engender systemic risk for the entire financial system”. Again, in Chairman Ben Bernanke’s words, "the collapse of Bear Stearns was triggered by a run of its creditors and customers, analogous to the run of depositors on a commercial bank." Acknowledging that he was surprised by the run on Bear Stearns because its borrowings were largely secured, Bernanke went on to state that "the illiquidity of markets in mid-March was so severe that creditors lost confidence that they could recoup their losses by selling the collateral [on Bear Stearns]" thus, precipitating a contagion in financial markets resulting in the GFC 2008.

There is no better explanation of the notion of a systemic collapse and its synonymity with counterparty risk management than from the statement written by Myron Scholes in an article entitled “Crisis and Risk Management” in May 2000, American Review Papers and

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Proceedings (Scholes, 2000, p.17) after the collapse of LTCM. Without regard to the consequences of excessively risky trading strategies, Scholes wrote that:

The increase in volatility (particularly in equity markets) and the flight to liquidity around the world resulted in an extraordinary reduction in the capital base of the firm that I was associated with, Long-Term Capital Management (LTCM). This reduction in capital culminated in a form of negotiated bankruptcy. A consortium of 14 institutions, with outstanding claims against LTCM, infused new equity capital into LTCM and took over it and the management of its assets.

Although the Federal Reserve Bank (FRB) facilitated the takeover, it did not bail out LTCM. Many debtor entities found it in their self-interest not to post the collateral that was owed to LTCM and other creditor entities claimed to be ahead of others to secure earlier payoffs. Without the FRB acting quickly to mitigate these holdup activities, LTCM would have had to file for bankruptcy – for some, a more efficient outcome, but a far more costly outcome for society. If there was a bailout, it failed: LTCM has been effectively liquidated.

The systemic risks posed by LTCM and Bear Stearns’ Hedge Funds identify the importance of CCRM and the need for effective due diligence to be carried out between regulated and unregulated financial intermediaries through tools such as margin requirements and collateral assurance practices. These practices are designed to reduce counterparty credit risk in leveraged trading by creating a buffer against increased exposure in volatile markets to the broker financing the derivatives contract (Carney, 2013, p.13). In general, a financial institution may be willing to extend credit to the hedge fund against the posting of specific collateral that is valued at no less than the amount of the exposure. This reduction in settlement risk in leveraged trading increases confidence and thereby promotes active financing of leveraged trading (Kambhu, *et al.*, 2007, p.4). Margin can be seen as offering enhanced protection against counterparty credit risk where it is effectively implemented (BIS, 2012, p.3). However, the potential benefits of margin requirements must be weighed against the liquidity impact that would result from the need of counterparties to provide
liquid, high-quality collateral to meet those requirements, including potential changes to market functioning as a result of increased demand for such collateral in the aggregate, the variation margin (BIS, 2012, p.3).

The variation margin is delivered when the exposure exceeds the nuisance or minimum transfer amount, for example a margin call triggered by extreme volatility (ISDA, 1996, p.41). Initial margin is the amount of collateral that is needed to cover potential future changes in the value of the contract (Dudley and Nimalendran, 2011, pp.1231-1233; ISDA, 1996, p.41). Both types of margin requirements work to ensure that credit facilitators are protected against a default or liquidated trading position by maintaining sufficiency of collateral provided. Other forms of traditional CCRM include: the development of a broad set of risk metrics including internal ratings, ongoing monitoring and evaluation of exposures such as stress testing on a consolidated basis over a range of suitably stressful scenarios; due diligence to understand the strategies and history of the counterparty; limits on specific trades, exposures and settlement protocols which help control exposure and reduce the risk of the financial institution when dealing with counterparties (Kambhu et al, 2007, p.5). The risk-sensitive assessment of a potential future exposure to a liquidity crisis has focused on CCRM strategies between financial intermediaries and hedge funds. However, investors play an important role in the surveillance of hedge fund behavior and counteracting excessive risk taking though active participation in objective and strategy evaluation in particular, at the initial stages of investment decision making.
3.7 Investor Protection

Hedge Funds have been allowed exemptions from regulatory scrutiny for various reasons, amongst them has been the “sophisticated investor rule” (Karmel, 2008, p.685; Smith, 2011). As will be elaborated in Chapter Four, the overriding principles of this rule restricts hedge funds from soliciting investment contributions from the general public with only high net worth individuals and institutional investors able to gain access to the dynamic trading strategies which hedge funds profess in attaining absolute returns. The assumptions of this rule identify sophisticated investors as informed and knowledgeable participants of the sophisticated financial strategies which hedge funds undertake and accept the associated risks. The approach of financial market regulators has been to allow hedge funds to operate as private investment vehicles in the public domain, that is, the regulated financial system, without the necessary legislative controls to restrict their behavior. However, the complexities of hedge fund activities, especially with inherent informational asymmetries within the financial system, renders this philosophy untrue (Athanassiou, 2008, pp.256-260). Sophisticated or not, the collapse of numerous hedge funds and increasing criminal sanctions against those who engaged in fraudulent conduct such as insider trading proves that investors need protection from hedge fund activity. Further, the retailization of hedge funds has, directly or indirectly, exposed less sophisticated or retail investors to the same risks as their more knowledgeable counterparts, assisted by substantial changes in financial markets which have led to a consolidation of national exchanges, yielding fragmentation and the rise of alternative trading systems.
The exposure of retail investors to the risks of hedge fund investment strategies in financial markets has also increased through their holdings in pension funds and the types of financial instruments have multiplied through financial engineering (Burke, 2009, p.20). Today's reality is that investing is no longer an optional activity amongst working adults who are increasingly expected to assume the responsibility of their financial security in retirement and thus have no choice but to invest in the financial markets, thereby exposing their savings to the same risks taken on by more knowledgeable participants (Black, 2008, p.305).

Regulations based on investor protection have consistently featured amongst the main components of most financial market regulatory schemes, with national arrangements differing from one another in terms of the emphasis that they place on the individual investors assuming responsibility for the evaluation of which specific investments suit them best on the basis of information that product providers are mandated by law to disclose (Athanassiou, 2008, pp.52-53). The economic rationale for investor protection regulation by governments is to induce investors to undertake market risks and that the oversight provided by financial market regulators of ensuring that investor interests are guarded against market anomalies maintains confidence in the stability of financial market practices (Burke, 2009, p.10; Horsfield-Bradbury, 2008, p.11). Edwards (2006, p.38) distinguishes between investor protection regulatory regimes as either ‘top down’ or ‘bottom up’. A top-down regime is characterized by the requirement that investment products or schemes be authorized together with rules about what that scheme can and cannot do. The primary purpose of these regulations is both to better inform investors and
to protect them by limiting exposure to financial loss. In contrast, a bottom-up regulatory regime is based on a disclosure-based regime where greater trust and reliance is placed on rules that require investment product providers to accurately describe the nature of these investment products and their potential risks. This information empowers investors to assess and adequately analyze their risk appetite with an acceptable investment strategy (King and Maier, 2009, pp.286-289). A fundamental caveat to this scheme is an acceptance on the part of both regulators and investors that some investment products will fail and that investors will experience significant financial losses, perhaps even their entire investments (Edwards, 2006, p.38). Thus, the responsibility of law-makers to investors’ dependent on a fair and transparent financial system, with preference for governmental intervention as opposed to self-regulation, is as much a driver for economic growth as is enabling innovation (Shadab, 2009, pp.17-19). Indeed, empirical evidence suggests that investor protection rules and economic growth are interrelated (La Porta et al, 1997 p.1131).

Adequate investor protection regulations increase confidence within a financial system and consequently more participation, thus invariably making investor protection one of the most visible objectives pursued by financial market supervisors and law-makers worldwide (La Porta et al, 1999, p.471). This is more so in the context of institutional investment vehicles, such as mutual and pension funds, where “the overriding goal of public policy underlying regulation, is investor protection” (Edwards, 1999, p. 191). Hedge funds are investment vehicles which thrive on the ability to invest with utmost flexibility through the use of complex financial instruments and mandate riskier investment
philosophies as compared to most regulated funds. This complicates the ability of regulators to adequately uphold their investor protection mandate. These complications relate to the ability of assessing funds’ investment strategies and risk exposure, in particular the non-financial risks which hedge funds posed to investors for example, fraudulent investment schemes, misrepresentation and manipulation which will be addressed in detail in Chapter Five (Kaal, 2005, p.33; Shadab, 2009, p.41; Awrey, 2011). It is apparent from the collapse of LTCM, Bear Stearns Hedge Funds and numerous others after the GFC 2008 that these investment vehicles are not appropriate for retail investors. Furthermore, the rise of hedge fund activism has created added complications for the importance of investor protection and the adverse consequence of such activities which the following section will address.

3.7.1 Hedge Fund Activism

Ryan and Schneider (2002, p.555) define investor activism as “the use of power by an investor to either influence the processes or outcomes of a given portfolio firm or to evoke large-scale change across multiple firms through the symbolic targeting of one or more portfolio firms” (Schneider and Ryan, 2011, pp.352-353). The growth of hedge fund activism is attributable to a number of distinct developments within the industry. These include the sustained growth in the volume of their assets, enabling hedge funds to hold substantial, highly concentrated positions that they can use to exert influence over their target companies (FSA, 2005, pp.1-2). The competitive pressures as a result of a relative decline in profits, force hedge fund managers to become actively involved in the governance-side of their investment targets (Schneider and Ryan, 2011, p.350; Farrell and
The growing acceptability of shareholder activism in the post-Enron and WorldCom era as well as the greater willingness of investors to hold underperforming boards accountable for their failings and the sweeping-away of protectionist barriers has facilitated a cross-border brand of activism unheard of in previous years (Athanassiou, 2008, p.85; Briggs, 2007, pp.683-684). Hedge fund managers are also not faced with substantive legal requirements to diversify their investments and have the absolute discretion to focus substantial investments and resources on target firms, enabling them to engage in strategies which may not be available to regulated funds (Boyson and Mooradian, 2011, p.172; Bessière et al, 2011, p.1226). Most studies on hedge fund activism document the positive implications of such activities. However, there are negative externalities experienced by less powerful investors and stakeholders as a result of aggressive changes implemented to achieve short term goals of profitability (Brav et al, 2008, Klein and Zur, 2009, Clifford, 2008, Greenwood and Schor, 2009).

Schneider and Ryan (2011, pp.350-351) find that hedge funds, being unfettered by conflicts of interest, market-value transparency, and a rigid regulatory environment that restrain other investors, often represent a form of control over potential managerial self-interests. They explain that this establishes a ‘principle-principle’ conflict in which the controlling shareholder extracts a disproportionate amount of a firms’ shareholder value because they hold substantial, highly concentrated positions and can use this to exert influence over their target companies. At other times, hedge funds’ conflict with other investors, who typically are ‘long-only’ investors seeking an increase in share price based on the fund’s oppositional intention regarding the value of the firm’s shares (Kahan and Rock, 2007,
Brav et al (2008) provide an alternative view stating that research claiming hedge fund activism destroys value due to their short-term interests is based on sample evidence which is inherently plagued by various biases. They instead present evidence based on a large-scale sample over five years (2001-2006) and find that hedge funds seldom seek control and are generally non-confrontational. This stance is not being disputed, but rather the claim is laid that there are instances where hedge fund activism has been detrimental to investor interests (Klein and Zur, 2009, pp.225-226).

It is the general view that the goals of a hedge fund are dramatically different from the long-term goals of large corporations and ‘long-only’ shareholders. There is concern about how this may affect capital markets and investors given that hedge funds target short-term gains rather than focusing on long-term growth and stability within a company or industry (Schmidt, 2003, p.169). One prime example of the potential impact of hedge funds activism on financial market participants occurred recently in the case when Deutsche Borse, a German bank made a bid to purchase the London Stock Exchange. The managers of funds’ which held a significant portion of stock in Deutsche Borse did not agree with the bank’s strategic goals. Using their collective ownership, they had the board members replaced and stopped the bid for the London Stock Exchange (Schmidt, 2003, pp.168-169). This move was clearly within their rights as shareholders, with disregard of the impact of such actions on other stakeholders, especially if the acquisition would have resulted in value creation (Menendez et al, 2012, pp.61-73). Thus the ‘short-termism’ of activist hedge funds with the mandate to increase profitability at all costs creates potentially negative effects on the target firms and eventually the value of investors’ holdings. These strategies contribute to
an increasingly vulnerable financial system and stakeholders, especially less powerful retail investors, end up most vulnerable to financial losses as a result of the ruthless profit motive of activist hedge funds which engage in self-interested behavior.

### 3.8 Conclusion

The hedge fund industry has grown in the last decades to be an important part of the global financial system and a contributory party to systemic risks. This has been particularly so because of the flexible nature of such investment vehicles which developed based on three distinct strategies: the use of leverage, short selling and to be incorporated as unregulated investment vehicles. Hedge funds do have a positive impact on financial systems as providers of liquidity, enablers of price discovery and enhancers of market efficiency. Hedge funds are an integral part of the global financial system. However, the numerous examples of irresponsible risky behavior by hedge funds has been detrimental to the financial well-being of economies and individuals worldwide.

This thesis accepts the generous positive impact which hedge funds have had on financial systems and seeks to scrutinize the negative externalities which hedge funds contribute to, for example, systemic risks. The systemic risks which hedge funds pose remain the same as they were during the collapse of LTCM and then Bear Stearns in 2008 which led to the GFC 2008. Excessive leverage, reckless investment strategies and lax due diligence are amongst the issues which will continue to influence investor wealth as will fraudulent and deceptive conduct. Informational asymmetry creates valuation discrepancies of such funds and their investment activities globally will possibly never be revealed because secrecy trumps over
transparency. In early 2010, regulators seemed poised to clamp down on the hedge fund industry. To a large extent, their instincts were right. At their peak, hedge funds controlled the derivative linked financial system more than they deserved, and they took risks that cost societies dearly. Regulation is about considering costs and benefits and in order to decide whether to regulate or not one must understand all the costs and effects of both regulating and not regulating which includes the social costs of such mandates in the public interest. A part of that is to properly assess the risks associated with the industry. The next chapter provides a comparative analysis of hedge fund regulation in the US and the UK, the two major and most powerful financial systems in the world. It seeks to evidence the difference of the regulatory framework which governs the hedge fund industry before and after the global financial crisis and will provide a framework for recommended proposals for hedge fund regulation in Australia.
CHAPTER 4

HEDGE FUNDS REGULATION IN THE US AND UK

"Excessive deregulation is at the root of the current crisis, and there is a real danger that the pendulum will swing too far the other way. That would be unfortunate because regulations are liable to be even more deficient than the market mechanism itself. That's because regulators are not only human but also bureaucratic and susceptible to political influences.”

- George Soros, Speech to the U.S. Congress

4.1 Introduction

The regulatory environment in which hedge funds operate in the US and the UK has evolved over the past 70 years into what is envisaged to be a complex web of disclosure and compliance requirements which will not have the desired effect of investor protection and preventing systemic risks without adequate enforcement. Chapter Three established that the hedge fund industry was historically formed as privately managed investment vehicles, the purpose of which was to pool funds from high net worth individuals and financial institutions that were equipped with adequate financial sophistication to understand and accept the riskier nature of such investment vehicles. The legislative recognition of financial sophistication meant that these investors and institutions had the financial capacity and risk management acumen to manage or sustain possible financial losses and did not require the same form of regulatory oversight available to retail

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investors. This allowed hedge funds to take advantage of regulatory exemptions against registration requirements. Thus, one prominent motivation for the lack of direct oversight of the hedge fund industry has been based on the acknowledgement that financial regulation needed to be flexible enough to cater to a wide range of investor profiles and encourage innovation, promote progress and, hence, the availability of exemptions to facilitate such activities. Furthermore, an important underlying reason for regulating financial markets is to instill investors with confidence in the financial intermediation process through which their investment activities are carried out. The efforts to promote this has been less than successful because much of the business activities have been conducted in the unregulated shadow banking industry which has been crucial in enabling hedge funds to obscure behind the veil of secrecy.

The notion of financial sophistication excluded retail investors from investing in hedge funds as they were categorized by financial market regulators as less financially sophisticated, risk averse and needed protection from fraudulent and deceptive conduct through financial market regulation predominantly aimed at enabling smooth and efficient transaction flows and peace of mind in investing. However, the past decade has seen growing influence of retail investor funds investing in hedge funds, especially through pension funds. The integration of financial products and markets has blurred the line between the regulated and unregulated sphere which used to adequately protect retail investors. The GFC 2008, the collapse of numerous hedge funds and resultant systemic risks has proven that no individual, whether retail or sophisticated, is immune to financial losses due to reckless behaviour. Unfortunately, regulators had failed to keep up with the
rapid changes within financial markets and in ensuring the safety and soundness of financial systems globally.

Critics have argued that governments did not adjust their regulatory practices to address 21st century financial markets\(^2\). The repeal of the *Glass-Steagall Act of 1933* in the US effectively removed the separation that previously existed between investment banks and depositary institutions\(^3\). Many of those regulations were dismantled in response to an idea promoted by academics of the University of Chicago, School of Economics based on the theories underlying the efficient markets hypothesis. According to this view, unregulated financial markets promote economic efficiency and increase the welfare of all individuals in a society\(^4\). As a result, argues economist Paul Krugman and U.S. Treasury Secretary, Timothy Geithner, “the regulatory framework did not keep pace with financial innovation such as the increasing importance of the shadow banking system, derivatives and off-balance sheet financing\(^5\)” and they identified hedge funds as the key players within the shadow banking system which contributed to the GFC of 2008, calling for improved regulatory scrutiny of the hedge fund industry. The stance for increasing regulatory oversight of hedge fund activities globally was further heightened by the high profile indictment of Bernard Madoff (Madoff) after the collapse of his hedge fund, which was


eventually identified as a simple fraudulent ‘Ponzi’ scheme. However, it is yet to be determined where the true onus of responsibility lies in reference to the fraud as politicians and regulators continue debate to the best approach to regulating hedge funds. The regulatory status of hedge funds as compared to that of traditional financial intermediaries such as banks, mutual funds, brokerage houses or insurance companies, has always been ambiguous. On the one hand, hedge funds operate in regulated markets, utilize the infrastructure of regulated financial centres and deal with regulated financial institutions, for example brokerage firms and banks, to implement their investment strategies (Lhabitant, 2006, p.37). They are therefore, in a sense, indirectly regulated. As shown in Chapter Three, hedge funds tend to structure themselves in such a way as to avoid direct regulatory oversight and escape the registration or licensing requirements generally applicable to investment companies6 thus, effectively seeking to avoid direct regulation.

The aim of this chapter is to establish that the popular notion that hedge funds ‘evade’ regulation cannot be substantiated by recent experiences. Hedge funds do not evade regulation; they successfully take advantage of registration exemptions available through securities legislation. However, the exemptions available have allowed some hedge funds to conduct investing activities at a level of flexibility that has posed extreme risks to the integrity of certain financial systems. The chapter seeks to highlight the important and

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more prominent approaches taken by hedge funds through available legislation in seeking exemptions from registration requirements in the US and subsequently the alternative approach taken by the FSA in its risk based strategy to formulate supervisory approaches in the UK. The chapter provides a comparative analysis of the regulatory framework governing hedge funds in the US and UK, the legislation in place before the global financial crisis and the introduction of financial market regulatory reform initiatives until December of 2011, through the *Dodd-Frank Wall Street Reform and Consumer Protection Act 2010* (Dodd-Frank Act) in the US and the *Alternative Investment Fund Managers Directive 2010* (AIFMD) in the UK. This chapter is not an exhaustive analysis of legislation pertaining to hedge funds in the US or the UK. Instead, it provides guidance on current actions taken by both jurisdictions in formulating more stringent oversight of hedge fund activities, an issue which has yet to be adequately addressed in Australia. An analysis of future proposed changes is conducted to identify the new regulatory approaches recommended up until December 2011. Hedge funds want to operate with maximum flexibility, achieving maximum profitability. Regulatory environments and industry solutions are intrinsically interdependent. Consequently, it is necessary to analyse both in order to understand the business landscape and scope for the future of financial markets worldwide. This will allow an understanding of these approaches which will serve in establishing guidelines so as to effectively critique the regulatory framework which applies in the regulation and governance of hedge funds in Australia.
4.2 Regulation in the United States before the Financial Crisis

The US financial system is structured in a manner which advocates the free market economy philosophy where the onus is placed on financial intermediaries to conduct business with integrity and responsibility while considering the risks to their stakeholders. Hence, the regulatory authorities should only intervene as a remedy when market forces fail to properly address certain disruptions ((Lhabitant, 2006, p.39). This was the case in the stock market crash of 1929 and the ensuing depression which created a firm conviction that unregulated financial markets could lead to rampant speculation, eventual market bubbles, and ruin for unprotected investors (Lhabitant, 2006, p.39). The result was the imposition of strict federal regulation to control the access of investors to investment vehicles and constrain financial institutions with regard to the types of investment activities they could undertake. While all these regulations set rules that seemed to work well for traditional investment funds, they are often incompatible with the investment philosophies of hedge fund operations and investment strategies which utilise complex financial instruments and leverage to attain absolute returns. US hedge funds have therefore used some of the well-established exemptions that were built into the securities law regime to operate outside its scope. These exemptions are applied through a combination of relevant legislation within the Securities Act 1933, the Securities Exchange Act 1934, the Investment Company Act 1940 and the Investment Advisers Act 1940.
4.2.1 The Securities Act 1933

The Securities Act of 1933 (the Securities Act) is a disclosure statute directed at regulating the offering and distribution of securities sold to the public (Gibson, 2000, p.688). The provisions within the Securities Act emphasise the requirement for full and fair disclosure to a prospective investor, all material facts about a security’s issue and the securities being offered compliant with registration requirements for issuers of public securities with the SEC (Riviere, 2011, p.271). The disclosure obligations and restrictions are imposed on the sellers of the securities as opposed to the buyers, consistent with the motivations of enacting the Securities Act and its overall investor protection mandate which is focused on the distribution process, the broker-dealers, clearing houses and other financial intermediaries (Oppold, 2008, p.843). These provisions are further enforced by the Securities Exchange Act 1934, as will be discussed in section 4.2.2, which addresses mandates applicable to securities transactions and imposes obligations on both purchasers as well as sellers (Horsfield–Bradbury, 2008, p.25). The legislative history of the Securities Act reflects concerns that investors participating in financial markets were not sufficiently protected against inadequate disclosure, misrepresentation, and manipulative schemes (Finger, 2009, p.737). Thus, anti-fraud provisions, registration and disclosure requirements

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7 15 U.S.C. § 77(b) (1) (2000 & Supp. 2001). The term “security” means any stock, treasury stock, bond, debenture, evidence of indebtedness, certificate of interest or participation in any profit-sharing agreement, collateral-trust certificate, reorganization certificate or subscription, transferable share, investment contract, voting-trust certificate, certificate of deposit for a security, fractional undivided interest in oil, gas, or other mineral rights, any put, call, straddle, option, or privilege on any security, certificate of deposit, or group or index of securities (interest therein or based on the value thereof), any put, call, straddle, option or privilege entered into on a national securities exchange relating to foreign currency, or, in general, any interest or instrument commonly known as a “security”, or any certificate of interest or participation in, temporary or interim certificate for, receipt for, guarantee of, or warrant or right to subscribe to or purchase, any of the foregoing. *Note:* The definition was amended to exclude security-based swap agreements but also to provide that such agreements, although not securities are subject to the securities laws’ antifraud provisions. *See Commodity Futures Modernization Act of 2000*, Pub. L. No. 106-54, 114 Stat. 2763 (Dec, 21, 2000).

of the Securities Act compel the revelation of all facts that an investor would consider important in making a decision to purchase securities (Morrissey, 2010, p.651).

There are important provisions addressed within this legislation which affect the investment activities of hedge funds. However, the flexible structure of hedge funds and the emphasis of private offerings restricted to sophisticated and accredited investors have permitted the majority of hedge funds to escape registration requirements (Natali, 2006, p.117). Hedge funds actively seek exclusion from registration of the fund’s securities through available exemptions which focus on the applicability of private placement⁹ exemptions, the recognition of financial sophistication of investors and restrictions in relation to marketing such investments to the general public (Edwards, 2003, p.5). Section 4(2) of the Securities Act addresses the private placement exemption which is intended to enable issuers to negotiate with sophisticated investors the conditions under which capital commitments would be made and is based on the understanding that sophisticated investors have less need for protection from disclosure than the average retail investor (Oppold, 2008, p.843; Smith, 2011, p.230). The impetus of the private placement exemption can be traced to 1935 when the US Congress included these exemptions to allow for situations involving isolated sales of securities or sales where there was no practical need for the application of the Securities Act¹⁰. More specifically, exemptions allowed “an issuer

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¹⁰ Letter of General Counsel Discussing the Factors to be Considered in determining the Availability of the Exemption from Registration Provided by the Second Clause of Section 4(1), of the Securities Act Release No. 285, Fed. Sec. L. Rep (CCH) 2, 740-2, 744 (Jan 24, 1935).
to make specific or isolated sale of securities to a particular person,” and was directed at transactions “where there [was] no practical need for [the bill’s] application or where the benefits [were] too remote”\(^{11}\) (Loss \textit{et al}, 2007, p.1363; Riviere, 2010, p.87; Finger, 2009, p.738).

The recognition of financial sophistication in the US was established in \textit{SEC v Ralston Purina Co}\(^{12}\) where the Supreme Court of the United States held that in order to qualify for the private placement exemption, the definitive requirement was an investor’s ability to “fend for herself and have access to the kind of information that would be included in a registration statement” (Finger, 2009, p.738; Karmel, 2008, p.686). The court interpreted the exemptions in light of the statutory purposes of the Securities Act and stated that “the availability of the exemption should turn on whether the particular class of persons affected need the protection of the Securities Act. An offering to those who are shown to be able to fend for themselves is a transaction not involving any public offering\(^{13}\)” Thus, the recognition of financial sophistication meant that such investors would be privy to information and advice generally not available to the public and any financial transaction would not include a public offering\(^{14}\) of the securities\(^{15}\).


In 1980, the private placement exemption was extended further as part of the *Small Business Investment Incentive Act of 1980* to include recognition of accredited investors\(^\text{16}\) to be offered similar exemptions. The Act was enacted to enhance the ability of the SEC to assist small businesses in their efforts to compete in the capital marketplace and allowed small and limited securities offerings under USD$5 million to be made to such accredited investors, exempting registration requirements (Morrissey, 2010, p.655). Regulation D, Rule 501(a1-a8) of the Securities Act defines an accredited investor for a number of private placements\(^\text{17}\) applicable on the sale of securities. The SEC adopted two accreditor investor definitions; one based on net worth and one based on income. Under the net worth test, an accredited investor is one “whose net worth at the time of purchase is USD$1 million which may either be based on individual worth or combined net worth with the investor’s spouse”. Under the income-based definition, an accredited investor is one “who has an income in excess of USD$200,000, in each of the last two years and who reasonably expects an income in excess of USD$200,000 in the current year”, therefore expanding the...

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\(^{16}\) Accredited Investor Definition: The US Federal Securities Laws define the term Accredited Investor in Rule 501 of Regulation D as: A bank, insurance company, registered investment company, business development company, or small business investment company; An employee benefit plan, within the meaning of the Employee Retirement Income Security Act, if a bank, insurance company, or registered investment adviser makes the investment decisions, or if the plan has total assets in excess of $5 million; A charitable organization, corporation, or partnership with assets exceeding $5 million; A director, executive officer, or general partner of the company selling the securities; A business in which all the equity owners are accredited investors; A natural person who has individual net worth, or joint net worth with the person’s spouse, that exceeds $1 million at the time of the purchase; A natural person with income exceeding $200,000 in each of the two most recent years or joint income with a spouse exceeding $300,000 for those years and a reasonable expectation of the same income level in the current year; or A trust with assets in excess of $5 million, not formed to acquire the securities offered, whose purchases a sophisticated person makes. *US SEC, Accredited Investor Definition*; [http://www.sec.gov/answers/accred.htm](http://www.sec.gov/answers/accred.htm), Accessed 1 March 2010.

recognition criterion of private placements (Finger, 2009, p.742). The purpose of the financial considerations is to acknowledge the wealth and, hence, ability to withstand financial losses of a particular investor type as differentiated from retail investors. Hedge funds commonly seek exemptions under Rule 506\(^\text{18}\) of Regulation D, *Exemption for Limited Offers and Sales Without Regard to Dollar Amount of Offering* in conjunction with definitional interpretations of Rule 501 (Broaded, 2009, p.37). Under Rule 506, hedge funds which rely on the exemption requirements are restricted from selling their securities to more than 35 non-accredited investors who are required to be sophisticated in their understanding of the complexities in matters of business and finance (Shadab, 2009, pp.17-18, 45). Consistent with the sophisticated investor definition, they must have sufficient knowledge and experience in financial and business matters to make them capable of evaluating the merits and risks of the prospective investment\(^\text{19}\), although certain specified financial information\(^\text{20}\) must be made available to purchasers who are not accredited (Kripke, 1983, p.836).

Hedge funds rely on Rule 144A of the Securities Act which provides an exemption from registration requirements of the Securities Act for resale of securities sold in private placements to qualified institutional buyers (Oztan and Greene, 2009, pp.10-11). The SEC

\(^{18}\) Rule 506, 17 C.F.R §230.506 (2007), the relevant portions of Rule 506 read: To qualify for an exemption under this section, offers and sales must satisfy all the terms and conditions of [Rule 501] and [Rule 502]. There are no more than or the issuer reasonably believes that there are no more than 35 purchasers from the issuer in any offering under this section. Each purchaser who is not an accredited investor either alone or with his purchaser representative(s) has such knowledge and experience in financial and business matters that he is capable of evaluating the merits and risks of the prospective investment, or the issuer reasonably believes immediately prior to making any sale that such purchaser comes within this description.

\(^{19}\) Section 4(2); Regulation D; Rule 506, point 2, [http://www.sec.gov/answers/rule506.htm](http://www.sec.gov/answers/rule506.htm), Accessed 21 July 2010.

\(^{20}\) Section 4(2); Regulation D; Rule 505, [http://www.sec.gov/answers/rule505.htm](http://www.sec.gov/answers/rule505.htm), Accessed 21 July 2010.
regards this rule as a step in achieving a more liquid and efficient institutional resale market for unregistered securities, particularly foreign securities (Karmel, 2008, p.688-689). If a hedge fund offers its services to offshore investors publically, particularly non-US investors, under the Securities Act, the fund must make certain that any implications of jurisdictional restrictions or adherence to legislative requirements of its investors are met and that the fund does not engage in any activities that would subject it to US securities regulation (Wang, 2002, pp.351-352). However, there are exemptions available under Regulation S of the Securities Act where registration is not necessary if the offer and sale of a security takes place outside the US (Bradbury, 2008, p.24). In addition to the US Federal securities legislation, hedge funds have to consider the applicability of US State law that govern the offer and sale of securities and seek exemption should they structure in a specific region. These laws are alternatively known as ‘Blue-Sky’ laws after the preamble to an early Wisconsin law designed to prevent companies from selling ‘pieces of the blue sky’ or fictitious securities to unsuspecting investors. In theory, compliance with a state’s Blue-Sky laws needs to be determined before any offer is made into or from the state to a resident of such a state (Lhabitant, 2006, p.55). A hedge fund being distributed in any particular state must meet certain requirements as set out in these statutes and the disclosures associated with the law are similarly referred to as ‘Blue Sky’ filings (Macey and Miller, 1991, p.348). However, there are exemptions from ‘Blue Sky’ registration and qualification requirements for issuers relying on Rule 506 under Section 18 of the Securities Act which would remove the need for a hedge fund to submit a filing to a particular state (Paredes, 2006, p.985). While state authorities are still permitted to investigate fraud, Section 18 prohibits individual states from regulating the substance of
offering documents and the conditions on securities that are part of offerings, thus the responsibility of mandating hedge fund registration requirements invariably lies with the SEC for effective enforcement (Liffmann, 2005, p.2154).

4.2.2 The Securities Exchange Act (1934)

The Securities Exchange Act of 1934 (Exchange Act) was enacted to regulate the secondary trading of securities which were issued under the Securities Act. The Exchange Act legislated for the establishment of the securities exchanges, brokers and dealers and, hence, imposes registration and continuous disclosure requirements on issuers of securities (Laby, 2010, p.402). Generally, continuous disclosure is required for three types of companies: those with securities listed on a national securities exchange pursuant to Section 12(b); those with assets in excess of USD$10 million and a class of equity securities held by at least 500 persons pursuant to Section 12(g); and companies with an effective registration statement under the Securities Act filed pursuant to Section 15(d) (Natali, 2006, p.119; Edwards and Gaon, 2002, p.59-60). The Exchange Act has a much broader scope than the Securities Act in its regulation of securities distributions, including the regulation of day-to-day trading (Kambhu et al, 2007). It has an issuer registration requirement apart from the one found in the Securities Act which is not triggered by a particular transaction such as a public offering, but rather applies to virtually all publicly traded securities in the US (McVea, 2008, p.67). The Exchange Act in turn mandates periodic reporting requirements. Section 15(a) of the Exchange Act requires broker-dealers engaged in interstate securities transactions to register with the SEC but, unlike investment advisers, broker-dealers are not categorically bound by statute, regulation or
precedent to a *per se* rule imposing fiduciary obligations on their clients (Varnavides, 2011, pp.205-207).

Hedge funds, as issuers of securities, generally are not brokers. A broker is defined under the Exchange Act as any person engaged in the business of carrying out transactions in securities for the account of others (Laby, 2010, p.403). In most cases, hedge funds trade for their own account rather than effecting transactions for other parties and hence will not need to undergo broker registration. A dealer is defined under the Exchange Act as any person engaged in the business of buying and selling securities for his own account, through a broker or otherwise, but does not include a bank or any person insofar as she buys or sells securities for her own account, either individually or in some fiduciary capacity21 (Horgan 2001, p.655). Hence, a hedge fund will not have to undergo a dealer registration provided its personnel do not practice any of the situations that encapsulate the actions of a dealer to an extent that they will qualify as dealers under the definition of the Exchange Act. These actions have been identified by the SEC through a series of no-action letters22.

The rules are of less consequence to hedge funds as investment vehicles as most of the regulation applies only to registered and reporting companies but hedge fund managers

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22 See for example; Davenport Management Inc. SEC No-Action Letter (13 Apr 1993). The SEC provided relief from broker registration of the partnership’s general partner, based on the assertion by representatives of the partnership that all investments and other decisions of the partnership were under the direct control of the general partner and the general partner’s activities making decisions on behalf of the partnership to trade in securities were not considered the activities of a broker but rather activities in the general course of the business of the partnership.
are subject to the antifraud provisions which have to be strictly adhered to (La Porta et al, 1998). There are two important rules as part of the general antifraud provisions of Section 10(b) that are not so limited, in particular, Rule 10b-5 which makes it unlawful for a person to engage in fraud with regard to a securities transaction (Silverman, 2011, p.1795-1798). Rule 10b-5 has been central to many securities litigation cases (McVea, 2008, p.69). The second provision is the ‘tender offer’ antifraud provision found in Section 14(e) (Natali, 2006, p.119). There are some instances in which issuers do not have to register securities but nevertheless will be subject to its periodic reporting provisions (Cox and Hazen, 2003, p.1631). In addition, the Exchange Act requires brokers-dealers to register with the SEC if they are either physically located in the US or if, no matter where they are situated, they effect, induce or attempt to induce securities transactions with investors in the jurisdiction (Varnavides, 2011, p.205).

### 4.2.3 The Investment Company Act 1940

The *Investment Company Act of 1940* (Investment Company Act) regulates the organization of investment companies which by definition “are or hold themselves out as being engaged primarily, or propose to engage primarily, in the business of investing, reinvesting or trading in securities” (Bullard, 2008, p.292). The legislative framework governing investment companies is in congruence with the overall investor protection mandate of financial market regulation which aims at protecting retail investors and preventing abuses such as fraud and misconduct by regulating the registration of investment companies and transactions between an investment company and its affiliates. In short, the aim is to

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establish rules within such organisations which will not pose risks to any of its stakeholders and maintain investor confidence. However, there are also provisions within the Investment Company Act which applies to privately managed investment vehicles from registration requirements which hedge funds generally seek.

Hedge funds which primarily engage in investing in and/or trading securities fall within the definition of an investment company under Section 3(a)(1)(A) of the Investment Company Act and, thus, in the absence of being granted an exemption, hedge funds must register as investment companies (Ordower, 2010, p.300). However, registered hedge funds are subject to a number of constraints because being registered implies restrictions on the types of investments that they may hold as well as on the investment strategy, in particular relative to the ability to leverage positions\(^{24}\), use derivatives, engage in short selling\(^ {25}\), purchase less liquid securities or run a concentrated instead of diversified portfolio\(^ {26}\) and imposes a considerable amount of disclosure on the content of portfolios. Thus, hedge funds seek to avoid being defined as an investment company under the Investment Company Act and seek exemption because, among other things, the regulatory regime limits investment flexibility, increases compliance costs and risks loss of proprietary information which is crucial to the success of any hedge fund. For example, transactions of registered funds with affiliates are restricted, leverage is limited, corporate governance and

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\(^{24}\) Section 18(f)(1) of the Investment Company act generally allows open-ended investment companies to leverage themselves only by borrowing from a bank, and provided that the borrowing is subject to 300% asset coverage.

\(^{25}\) Registered investment companies are required to disclose their short-selling activity in their financial statements that accompany their annual and semi-annual reports.

\(^{26}\) Section 13(a)(3) of the Investment Company Act requires registered investment companies to obtain the consent of their shareholders before deviating from their fundamental policies, including to concentrate a portfolio in certain industries.
periodic disclosure reporting requirements are imposed. Private investment funds are not subject to these statutory requirements, but fund managers are subject to fiduciary standards requiring them to act in honesty and good faith.

The primary exclusions from registration relied on by hedge funds are provided within Sections 3(c)(1) and 3(c)(7) of the Investment Company Act. Hedge funds relying on these exclusions are private funds that do not make offerings of their securities publically (Nelson, 2007, p.223). Section 3(c)(1) provides an exemption from the definition of an investment company to any issuer whose outstanding securities are beneficially owned by no more than 100 investors and the interests in the fund must be privately placed to investors (Riviere, 2010, p.14). Under Section 3(c)(1), each individual investor in the hedge fund is considered as a beneficial owner unless the investor is an investing entity where further compliance is required. Furthermore, the hedge fund’s ability to claim an investing entity as one beneficial owner depends on whether the investing entity owns 10 percent or more of the fund’s outstanding voting securities (Ordower, 2007, p.337). If the investing entity owns more than 10 percent of the hedge fund’s voting securities, then the Investment Company Act requires that the hedge fund ‘look into’ the investing entity and count each beneficial owner of the investing entity as a beneficial owner of the hedge fund (Gibson, 2000, p.695). The public offering provision is similar to provisions required

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27 Section 3 of the Investment Company Act of 1940.
28 15 U.S.C § 80a-3(c)(1)(A) (defining “beneficial owner). This provision was enacted to prevent parties from circumventing the requirement that an exemption is only available if the entity is limited to 100 beneficial owners.
29 See Gibson (2010, p.695) Footnote 105; 15.U.S.C §80a-3(c)(1)(A) (determining when beneficial ownership shall be “deemed”). The hedge fund is required to apply a "look through" test whenever an investing entity acquires additional voting securities of the hedge fund. However, a hedge fund is not required to apply the "look through" test if an investing entity’s voting securities increase because of withdrawal by another
under Section 4(2) of the Securities Act and, hence, a hedge fund is deemed to have satisfied these requirements if it complies with the Securities Act.

The second available exception from the definition of investment company, that provided by Section 3(c)(7) of the Investment Company Act, any investment vehicle that sells its securities to ‘qualified purchasers’ and does not make any public offerings. The exemption applies to an unlimited number of accredited investors as long as they have over USD$5 million in investable assets (Frankel, 2008, p. 663). However, although Section 3(c)(7) theoretically allows a fund to admit an unlimited number of qualified purchasers, Section 12(g)(1) of the Exchange Act, Registration of Securities by Issuer; Exemptions, effectively limits the number of US investors in an offshore fund to 499. Offshore funds may also take advantage of Section 3(c)(1) and 3(c)(7) with respect to part of an offering sold to US residents. Thus, so long as a hedge fund has fewer than 100 beneficial owners, does not offer its securities publicly and accepts only accredited and/or qualified investors, it is exemption from registration requirements under the provisions of the Investment Company Act.

4.2.4 The Investment Advisers Act 1940

The Investment Advisers Act of 1940 (Advisers Act) requires an investment adviser with more than fifteen clients and over USD$30,000,000 in assets to register with the SEC and investor unless the withdrawal is planned to circumvent the “look through provision”. An entity that is not an investment company can own then per cent or more of the outstanding voting securities of the hedge fund without applying the look-through test.

comply with its regulations unless exempt (Donahue, 2007, p.251). An investment adviser is defined as any person who, for compensation, engages in the business of advising others as to the value of securities or as to the availability of investing in, purchasing or selling securities\(^{31}\). The Advisers Act was enacted by the US Congress as mainly a registration and anti-fraud statute to protect investors by ensuring adequate disclosure by investment advisers and is often interpreted to hold investment advisers to a fiduciary standard on behalf of their clients and to have an affirmative duty to act in the best interests of their clients (Angel, 2011, p.9; Varnavides, 2011, p.211; Barbash and Massari, 2008, p.628).

A fund manager was exempt from registration under Section 203(b)(3) of the Advisers Act known as the ‘private adviser exemption’ if she had fewer than fifteen clients during the preceding twelve months, did not advise registered funds and did not hold herself to the public as an investment adviser. The Advisers Act does not provide a definitive guidance as to what constitutes “holding oneself out to the public as an investment adviser” specifically stipulates. However, consistent with the Securities Act, this phrase can be interpreted broadly to include disseminating advertisements related to investment advisory activities, maintaining a listing as an investment adviser in a telephone or building directory, publishing the adviser’s willingness to accept new clients, and using letterhead or business cards referring to investment advisory activities. It should be noted that, even if a hedge fund manager was exempt from registration as an investment adviser under the Advisers

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\(^{31}\) Section 80b-2(a)(11). This definition also includes those, for compensation and as part of a regular business, issue or promulgate analyses or reports concerning securities. This definition does not include those such as a bank which is not an investment company, the publisher of any bona fide newspaper or business publication of general circulation, or any lawyer, accountant, or teacher whose performance of such services is incidental to the practice of his or her profession; Mota (2006), p.61 footnote 47.
Act, the manager was nevertheless subject to the antifraud provisions under Section 206(1) of the Advisers Act which states that an investment adviser is prohibited from “employ[ing] any device, scheme, or artifice to defraud any client”. Section 206(2) precludes an adviser from “engag[ing] in any transaction, practice, or course of business which operates as a fraud upon any client” and is also consistent with the antifraud provisions of the Securities Act (Barbash and Massari, 2008, p.630).

The critical issue in determining the number of clients an investment adviser had was the manner in which ‘clients’ were counted. Rule 203(b)(3)-1 of the Advisers Act specified that an adviser to a limited partnership may count the partnership, rather than each of its partners, including foreign clients, as one client for purposes of the private adviser exemption. The rule also specified that a limited partner would not be counted as a client of the partnership’s general partner or any other adviser to the partnership if the interests were securities, the advice the adviser provided was based on the investment objectives of the limited partners as a group and the adviser was not the ‘alter ego’ of a registered investment adviser (Krug, 2010, p.667). Therefore, so long as a hedge fund was not registered under the Investment Companies Act and the fund managers met the criterion under the Advisers Act, they were exempt from registration requirements under the private adviser exemption rules.

4.3 Regulation in the United Kingdom before the Financial Crisis

London is Europe’s leading center for hedge fund management and second only to New York globally. According to the industry group ‘TheCityofUK’, an independent financial
service advisory, at the end of 2010, 80 percent of European based hedge fund investments, totaling US$770 billion, were managed from London. The city of London has been marketed as a center for hedge fund service providers which predominantly caters to the European region and includes services such as administration, prime brokers and custodians. There is no specific regime for regulating hedge funds in the UK but a hedge fund manager will be subject to mainstream UK regulation and requires authorization by the FSA. Thus, hedge fund managers are generally dependent on regulatory initiatives imposed by the FSA based on pre-determined, outcome-oriented supervisory strategies.

The FSA has a statutory objective of maintaining market confidence, consumer protection and a reduction of financial crime. It advocates a risk-based approach to financial market supervision where it focuses on three main sources of risks, namely external environment risks, consumer and industry wide risks and risks from individual institutions (Black, 2004, p.23). This approach prioritizes the sources of risks based on the probability that a particular risk will materialize and occur (Black, 2004, pp.22-23). Institutions are allotted a number of measures to identify the impact of risk and then classified under one of four impact bands; high, medium one, medium two and low (Kaal, 2005, p.101). This involves setting up a framework which is used to assess the probability that the risk might

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33 An “authorized person” is defined in FSMA 2000, Section 31 as (a) a person who has a Part IV permission to carry on one or more regulated activities; (b) an EEA firm qualifying for authorization under Schedule 3; (c) a Treaty firm qualifying for authorization under Schedule 4; (d) a person who is otherwise authorized by a provision of, or made under, this Act.
materialize and have an impact on FSA objectives, analyzing a risk profile for each institution from which an overall risk score is determined for each firm\textsuperscript{36}. Financial market participants are therefore evaluated through this risk assessment model and the FSA prioritizes its supervisory capacity in accordance with their respective ratings. Consequently, institutions which are categorized as low risk would require less scrutiny and oversight as compared to high risk entities which would attract closer and regular supervision. This approach means a light touch and mutual agreement based on the level of risk exposure, ultimately putting trust in the fiduciaries within the organisations rather than prescribing hard rules to follow (Kaal, 2005, p.101). A discussion paper published by the FSA in August 2002 entitled “Hedge Funds and the FSA” investigated the need for hedge fund regulation in the UK. In particular, it tabled whether the regulations which applied to investment managers generally were applicable to hedge fund managers or whether special rules were required\textsuperscript{37}. In its statements, the FSA expressed the view that due to the low risk and low impact\textsuperscript{38} nature of hedge funds, specific regulation was not required and this paved the way for the approach taken to manage oversight towards the hedge fund industry until changes were introduced after the GFC 2008.


\textsuperscript{37} Article 15 of the Financial Services and Markets Act 2000 (Promotions of Collective Investment Schemes Order) (Exemptions) Order 2001 (2001 No. 1060). A collective investment scheme, as defined in Section 235 of the Act (Collective Investment Schemes), which is in summary: any arrangements with respect to property of any description, including money, the purpose or effect of which is to enable persons taking part in the arrangements (whether by becoming owners of the property or any part of it or otherwise) to participate in or receive profits or income arising from the acquisition, holding, management or disposal of the property or sums paid out of such profits or income; and which are not excluded by the Financial Services and Markets Act (Collective Investment Schemes) Order 2001, http://fshandbook.info/FS/html/handbook/PERG/9/4, Accessed 21 Dec 2012.

4.3.1 Hedge Funds and Financial Promotion

Hedge funds in the UK are required to be authorized should they seek to promote and market their investment products to retail investors within the jurisdiction. This would be dependent upon whether the fund is considered to be a collective investment scheme (CIS). In order to market to the general public, hedge funds have to adhere to CIS requirements which include that the funds are authorized by the FSA and that authorized funds report details of their investment scheme, something that most hedge funds are opposed to doing for fear of giving away proprietary investment strategies (Tiffith, 2007, p.520). Thus, most hedge funds have historically not sought authorization in the UK, restricting their investor base to sophisticated investors and classified as unregulated CIS under the Financial Services and Markets Act 2000 (FSMA). This requirement is complicated if the hedge fund manager is conducting regulated activities from outside the UK but targeting UK persons or trading on UK markets because, although they may be subject to indirect regulation, in the absence of a permanent place of business in the UK they may not be required to be authorized by the FSA and, hence, would escape from direct supervision or oversight. If a hedge fund is domiciled within the UK, the incorporated structure of a fund vehicle affects the FSA’s approach to regulation and differs

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39 CIS Order, Articles 14, 17, 18, 20, 21, 22, 23 and 24
significantly depending on whether it is open-ended\textsuperscript{42} or closed-ended\textsuperscript{43}. An open-ended hedge fund will fall within the definition of a CIS, the operation of which is a regulated activity requiring authorization. In contrast, closed-ended hedge funds\textsuperscript{44} fall outside this definition and therefore do not require an authorized operator and cannot be marketed to retail investors without themselves applying to the FSA for authorization (Spangler, 2009, pp.99–112).

The FSA has strict guidelines on the definition of financial promotions\textsuperscript{45} which focuses on the ‘motivations’ of the financial promotion made. According to the FSA, a financial promotion is a “communication that is an invitation or an inducement to engage in investment activity, and involves an element of persuasion\textsuperscript{46}”. Emphasis is placed on the word inducement, without any restrictions on the method in which this information is

\textsuperscript{42} An open-ended fund is defined as a management company which is offering for sale or has outstanding any redeemable security of which it is an issuer. A redeemable security is a security, other than short-term paper, under the terms of which the holder, upon its presentation to the issuer or to a person designed by the issuer, is entitled to receive approximately his proportionate share of the issuer’s current assets, or the case equivalent thereof (Spangler, 2009, p.908, para.19.06).

\textsuperscript{43} Closed-end funds are management investment companies that are not open-end funds, and hence, do not issue redeemable securities. Instead, securities of closed-end funds are often traded on exchanges, often at discounts (but sometimes at premiums) to their net asset value. Because closed-end funds are not redeemable for their net asset value, such funds do not have the same assurances that open-end funds have (Spangler, 2009, p.908, p.19.07).

\textsuperscript{44} Whether or not a company is open-ended will depend on whether a reasonable investor would expect to be able to realize his investment based on the underlying net asset value within a period appearing to him to be reasonable.


\textsuperscript{46} Financial Services Market Act 2000, Post N2 Selling Restrictions, \url{http://www.icmagroup.org/ICMAGroup/files/7d/7d414722-39a3-465d-b3fe-a339537112a5.PDF}; Section 21 of the FSMA (Restrictions on financial promotion) prohibits the communication of invitations or inducements to engage in investment activity by persons who are not authorized. As “communication” is defined to include causing a communication to be made, an issuer (who is not an authorized person) will be concerned to ensure that any communication made by it or which it may be said to have caused to be made (for example in an offering circular) is exempt from this prohibition. An issuer which is an authorized person will also be concerned to ensure that any communication made by it or which it may be said to have caused to be made is exempt from this prohibition as that will ensure that the communication is outside the scope of Financial Promotion Rules applicable to it made under Section 145 of the FSMA (Financial Promotion Rules).
communicated\textsuperscript{47}. The financial promotion restriction under Section 21\textsuperscript{48} of the FSMA prohibits a person, in the course of business, from communicating an invitation or inducement to engage in investment activity unless she is an authorized person under the FSMA. The authorized person may issue a financial promotion or approve the issue of a financial promotion by another person but is obliged to comply with FSA rules in connection with such activities. Specifically, financial promotions made by authorized persons must comply with FSA rules in connection with Chapter 4 of the Conduct of Business Sourcebook (COBS) rules. The basic requirement is that a financial promotion is given or approved by an authorized person in respect to an investment must be “fair, clear and not misleading”. Hence, the onus is placed on the authorized person who bears responsibility for actions taken during such promotions without any requirements about assessing the investors understanding of the information or how qualified they would have to be in understanding sophisticated investment strategies. Contravention of the provisions of Section 21 of the FSMA and Chapter 4 of the COBS rules will render the authorized person guilty of an offence and liable to imprisonment for a term not exceeding two years or a fine, or both\textsuperscript{49}.

There are a number of exemptions available for HNWI and sophisticated investors in relation to the financial promotion restrictions where an unauthorized person wishes to issue a financial promotion without the approval of an authorized person. This is similar to

\begin{flushleft}
\textsuperscript{49} Section 25, FSMA 2000.
\end{flushleft}
the position taken in the US whereby the investor sophistication argument has allowed exemptions from registration requirements to hedge funds. According to the FSA, the exemptions for HNWI and sophisticated investors are designed to reflect the typical characteristics of ‘business angels’ and other sources of informal capital for start-up and small companies. This exemption applies to non-real time and solicited real time communications to an individual and relies on self-certification by the investor coupled with a ‘health warning’ by the person making the financial promotion (Spangler, 2009, pp.13-14). In summary, the FSA does not provide, unlike the SEC, a general exemption opportunity for hedge funds under legislation apart from exemptions to HNWI and sophisticated investors in regards to financial promotion. A hedge fund manager located in the UK would be subject to mainstream regulation within the jurisdiction and the same treatment is given to an entity incorporated as a fund vehicle, as any other investment vehicle. The US hedge fund manager and hedge fund is able to take advantage of exemptions which enables it to utilize investment strategies not available to fiduciaries of registered funds or investment managers. The FSA, on the other hand, provides a single legal framework instead of several different ones. As a result, it combines existing law and self-regulatory requirements in many areas. This in turn simplifies regulatory activities significantly and decreases transaction costs. Thus, the FSA can also be assumed to provide a state of equilibrium between costs and fulfilling regulations. This framework does have its downsides, including that there is no specific framework for hedge funds to follow and

50 Financial Promotions Order Art. 48.
51 Financial Promotions Order Art. 50(A).
hence there may be complications and confusion in the manner in which they are regulated especially in light of the execution of complex investment strategies.

The risk based approach of the FSA left it vulnerable at the height of the financial crisis because it was not operationally or financially ready with the required resources to supervise the implosion of hedge fund activity which thrive on volatility. There is a common theme within the approach between regulations of both jurisdictions, financial promotion. The manner in which a hedge fund is promoted must not constitute any form of general solicitation or general advertising and action is taken against a promoter or sponsor who fails to state a material fact or otherwise materially misstates the facts relating to the offer of securities, or engages in any other fraudulent activity. The sale of interests in a hedge fund must be conducted by means of a private placement of securities of the hedge fund to sophisticated or accredited investors and high net worth individuals, who met the conditions for exemptions. Following the global financial crisis, governing officials in both jurisdictions took immediate and decisive actions because of the increasing call for tighter regulation on financial markets and stricter scrutiny over hedge fund activities. The Dodd-Frank Act was legislated in the US on the 15th of July 2010 and in the UK the AIFMD was ratified by the European Commission on the 21st of July 2011 in a concerted response by both jurisdictions as a result of the need for greater oversight of hedge fund activities following the GFC 2008.
4.4 The Private Fund Investment Advisers Registration Act

The US Congress passed the *Dodd-Frank Wall Street Reform and Consumer Protection Act*, *H.R 4172 2010* (Dodd-Frank Act) on July 15 2010 in response to actions which needed to be taken to stabilize financial systems around the world and has been touted as the most ambitious financial regulatory reforms made since the Great Depression of 1929. A part of the reforms was the *Private Fund Investment Advisers Registration Act of 2010* which directly impacts the manner in which hedge funds operate, both within and outside the US. A majority of the regulatory reforms affecting hedge funds will see amendments to existing legislation which focus on mandatory disclosure of hedge fund activities, increased supervision and registration requirements based on specified AUM thresholds. A significant change was the enactment of Section 402 of the Dodd-Frank Act which amends Section 202(a) of the Advisers Act by including definitions of the terms ‘private fund’ and ‘foreign private adviser’, designed to address gaps in definitions which did not exist previously. The enactment of Section 402 was specifically directed towards hedge funds which would be recognized as investment companies under the Investment Company Act.

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55 A “private fund” is any issuer that would be an investment company under Section 3 of the Investment Company Act of 1940 (the “Investment Company Act”), but for the exception provided by either Section 3(c)(1) (it has no more than 100 owners) or Section 3(c)(7) (offers to qualified purchasers only) thereunder.

56 Section 202(a)(30) of the Advisers Act defines a foreign private adviser as an investment adviser that meets all of the following conditions: (1) has no place of business in the US; (2) has in total, fewer than 15 clients and investors in the US in private funds advised by the adviser; (3) has aggregate assets under management of less than USD$25 million attributable to clients in the US, including US domiciled private funds and US investors in private funds advised by the adviser; (4) does not hold itself out generally to the public in the US as an investment adviser; and does not advise registered investment companies or registered business development companies. An adviser that meets all of the conditions of the exemptions set above is not required to register as an investment adviser.
but sought exemptions from registration requirements available within Sections 3(c)(1) or 3(c)(7)\textsuperscript{57} of the Investment Company Act. Importantly, the Dodd-Frank Act eliminates the ‘private adviser exemption\textsuperscript{58}, which exempted from registration, investment advisers providing advice to private funds who had less than 15 clients\textsuperscript{59}, did not hold themselves out to the public as investment advisers\textsuperscript{60} and did not advise registered funds or business development companies\textsuperscript{61} which were subject to registration requirements under the Investment Company Act. The Dodd-Frank Act has included in it provisions for increasing disclosure and record keeping information of investment activities as well as permitting the SEC to declare rules which would require hedge fund advisers as defined by the Act\textsuperscript{62} to have adequate provisions in place to protect their client assets. The following provides details of the specific changes to the legislation that will have an impact on hedge fund managers domiciled in and out of the US in particular and the repeal of the private adviser exemption which will require most hedge funds to register with the SEC or respective State regulatory authorities, an important exemption which hedge funds have heavily relied on to successfully manage their operations and to execute their investment strategies.

\textsuperscript{57} Section 403, Dodd-Frank Act 2010.
\textsuperscript{58} Section 403, Dodd-Frank Act 2010; Elimination of Private Adviser Exemption; Limited Exemption For Foreign Private Advisers; Limited Intrastate Exemption.
\textsuperscript{59} Section 203(b)(1), Investment Company Act 1940 (As Amended).
\textsuperscript{60} Neither holds itself out generally to the public in the United States as an investment adviser nor acts as an investment adviser to any investment company registered under the Investment Company Act of 1940 (the “Investment Company Act”) or any business development company.
\textsuperscript{61} Section 402(a)(30), Dodd-Frank Act 2010; Business development companies under Section 4 of the Investment Company Act are Small Business Investment Companies that provide venture capital to small independent businesses, both new and already established. 15 U.S.C. § 80a(54).
\textsuperscript{62} Section 402, Title IV Dodd-Frank Act 2010.
4.4.1 Hedge Fund Registration

The Dodd-Frank Act eliminates the private adviser exemption from Section 203(b)(3) of the Advisers Act which has been the one key exemption used by hedge fund managers to escape direct regulatory oversight by the SEC (Sierra-Yanez, 2011, p.18). This will require most private fund advisers to register under the Advisers Act, subject to the AUM threshold, and is proposed to have a significant impact on the alternative investments industry. Prior to these requirements, an investment adviser who was regulated or required to be regulated by a State regulator may register with the SEC unless the adviser had AUM of USD$30 million or was exempted from registration requirements under provisions of the Advisers Act. However, even with the repeal of the private advisors exemption, it is important to note that hedge funds can still seek to avoid registration under the Investment Company Act which has not changed because of the enactment of the Dodd-Frank Act as they can continue to rely on exemptions available in sections 3(c)(1) and 3(c)(7) of the Investment Company Act (Nichols, 2011, p.637).

The Dodd-Frank Act sets out exemptions of and reporting by certain private fund advisers under Section 203 of the Advisers Act by adding that investment advisers who act solely as advisers to private funds and with AUM in the US of less than USD$150 million will be exempted from registration with the SEC, raised from the previous USD$30 million. The Dodd-Frank Act raised the threshold for SEC registration to USD$100 million in AUM by

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64 Section 402(2)(a), Dodd-Frank Act 2010 – The term “private fund” means an issuer that would be an investment company, as defined in Section 3 of the Investment Company Act of 1940 (15 U.S.C. 80a-3), but for Section 3(c)(1) or 3(c)(7) of the Act.
65 Section 408 (1), (2), Dodd-Frank Act 2010.
creating a new category of advisers known as ‘mid-sized advisers’. A mid-sized adviser, which generally may not register with the SEC and will be subject to State registration requirements, is defined as an adviser who manages between USD$25 million and USD$100 million for her clients, would be required to register in the State where she maintains her principal office and place of business and would be subjected to examination by the State if required to be registered (Gilman, 2011, p.48). In order to determine if the adviser is required to register, one must look at the AUM thresholds. Since there are no specific provisions, the SEC has proposed that the adviser must include in its assets under management the value of any private fund(s) over which it exercises continuous and regular supervisory or management services, regardless of the type of assets held by the fund and advisers must also include in the calculation of regulatory assets under management the amount of uncalled capital commitments made to the fund (Sierra-Yanez, 2011, p.18). An adviser who has clients other than ‘private funds’ for example, a pension fund, will be exempt from registration if its AUM is USD$100 million or less and provided the adviser registers with the State in which it has its place of business as principal office. There is a further provision for advisers who have offices in 15 or more States in the US and not registered with the SEC (Grafton, 2010, p.39). If an adviser does not meet the requirements for registration with the SEC due to the limits on its AUM but has to register in 15 or more States, they will be inadvertently allowed to be registered with the SEC, provided the abovementioned AUM criteria applies\(^{66}\).

\(^{66}\) Section 408(2), Dodd-Frank Act 2010.
Further, there are exemptions available to foreign registered advisers from the registration requirements in limited circumstances. To qualify for exemption, the Dodd-Frank Act in Section 202(a)(30) requires that a foreign adviser must not have more than 15 clients and investors and a registered place of business in the US. The foreign adviser is allowed to advise private funds which have less than USD$25 million in AUM but is restricted from marketing herself publicly neither as an investment adviser nor act as an investment adviser to any company which is registered under the provisions of the Investment Company Act.

These changes will likely add further confusion to the already ambiguous registration requirements within the US and raise concerns of insufficient capacity and resources for states to regulate hedge fund advisers. For example, the provisions of the foreign investor exemption requirements reflect similarities with the regulatory approach taken by the SEC before the introduction of the Dodd-Frank Act for US based hedge funds but subject to limitations in AUM thresholds. There has not been any advice released by the SEC on whether look-through provision requirements will be applicable to foreign hedge funds which would confuse the relevance of AUM requirement thresholds. The complicated threshold requirements also raises alerts on the possibility that funds can and may deliberately structure themselves to avoid registration, for example, through the use of multiple structures, special purpose vehicles and limiting or layering the amount of AUM in separate entities. These actions could very well be a source of extreme systemic risk within

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67 Section 203(b)(3), Dodd-Frank Act 2010.
the financial system if hedge funds are able to structure themselves through multiple entities with financial capacities large enough to move and manipulate markets.

4.4.2 Systemic Risk Disclosure Reporting

A revolutionary change brought about by the US Congress was the inclusion of Section 404 of the Dodd-Frank Act which amended provisions within Section 204 of the Advisers Act to require advisers to private funds to maintain records and reports which will also be subject to inspection by the SEC. Information as stipulated by the Dodd-Frank Act as necessary and appropriate in the public interest and for the protection of investors, or for the assessment of systemic risk by the Financial Stability Oversight Council (FSOC) include: the amount of assets under management and use of leverage, including off-balance sheet leverage; counterparty credit risk exposure, trading and investment positions, valuation policies and practices of the fund; types of assets held; side arrangements or side letters, whereby certain investors in a fund obtain more favorable rights or entitlements than other investors and a hedge fund's trading practices. The Dodd-Frank Act requires the SEC to conduct periodic inspections of the records of private funds maintained by an investment adviser registered under the Dodd-Frank Act and also mandates for the SEC to conduct spot-inspections when it deems it necessary and necessary.

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68 Section 204(3), Dodd-Frank Act 2010.
69 Section 201(b)(1)(A), Dodd-Frank Act 2010.
70 Section 204(b)(3)(A), Dodd-Frank Act 2010.
71 Section 204(b)(3)(B), Dodd-Frank Act 2010.
72 Section 204(b)(3)(C), Dodd-Frank Act 2010.
73 Section 204(b)(3)(D), Dodd-Frank Act 2010.
74 Section 204(b)(3)(E), Dodd-Frank Act 2010.
75 Section 204(b)(3)(F), Dodd-Frank Act 2010.
76 Section 204(b)(3)(G), Dodd-Frank Act 2010.
appropriate in the public interest and for the protection of investors, or for the assessment of systemic risk.

The SEC is required to maintain confidentiality in reference to the information disclosed by investment advisers who will have the right to any legal property of such information under Section 404(2)(b)(2). To ensure confidentiality, Section 404 expressly exempts regulators from the provisions of 5 U.S.C Section 552\textsuperscript{77}, which requires US Federal agencies, among other things, to provide certain information requested by the public under the Freedom of Information Act (Nichols, 2011, p.637). This crucial provision is intended to enable effective oversight of hedge funds as regulators are able to monitor a fund's activity without compromising proprietary information and undermining a hedge fund manager’s ability to be competitive in financial markets, a point of contention which has been historically used by hedge funds as a means to discourage mandating registration and disclosure requirements. The US Congress also recognised that the value of money, inflation and future economic changes would require a need to change the definition of a ‘client’ in relation to the type of individuals who would be eligible and considered sophisticated enough to invest in hedge funds

\textbf{4.4.3 Definition of Client}

The legislative definition of ‘client’ has been an important provision used by hedge funds seeking exemptions from registration. The manner in which ‘one client’ is defined for

\textsuperscript{77} Title 5 USC Section 552 - Public Information; Agency Rules, Opinions, Orders, Records and Proceedings, Cornell University Law, Legal Information Institute, \url{http://www.law.cornell.edu/uscode/text/5/552}, Accessed 16 March 2013.
purposes of the Investment Company Act has been crucial to maintaining an exemption status under the Sections 3(c)(1) and 3(c)(7) and the cause of numerous debates and court disputes78. The Dodd-Frank Act maintains the current status quo definition of client includes only persons or entities that have a direct advisory relationship with the adviser. It prohibits the SEC from including in the definition of client an investor in a private fund managed by an investment adviser if such a private fund has entered into an advisory contract with an adviser. Section 413 of the Dodd-Frank Act recommended further changes to the definition of an ‘accredited investor’ and requested the SEC to undertake a review of the appropriateness of the current definition under Regulation D of the Securities Act as it applies to natural persons79, as the SEC may deem appropriate for investor protection80.

Accredited investors have always been considered as individuals with the financial sophistication and wealth to understand the risks of particular investments and thus do not require regulatory protection. The essence of this rule remains however, the US Congress recommended adjustments to be made so that the “individual net worth of a natural person, or joint net worth with the spouse of that person”, at the point of investing in a hedge fund, has to be more than USD$1 million, excluding the value of the primary residence. The exclusion of primary residence from the net worth calculations can be viewed from two opposing perspectives. Firstly, that the intent of the US Congress in providing for this is to protect individuals risking all assets they have title to and, alternatively, the subprime mortgage crisis has shown that real estate valuation

79 The “natural person” distinction specifically includes individual investors only and excludes corporations or business entities.
80 Section 413(b)(1), Dodd-Frank Act 2010 – Adjusting the Accredited Investor Standard – Initial Review.
methodologies in the US are inconsistent, subject to manipulation and hence residential values should be left out of any net worth calculations as it may be misleading to hedge fund managers. The Dodd-Frank Act specifies that the SEC can review the definition of accredited investor as it applies to natural persons to decide if the requirement of the definition should be adjusted or modified to protect investors and for the public interest\textsuperscript{81}. The Dodd-Frank Act directs the SEC not to further adjust the $1 million net worth standard for a period of four years following its enactment\textsuperscript{82}, but tasks the SEC to undertake a review of the standard as a whole and make such other changes as it deems appropriate. Thus, as it stands, the new definition of accredited investors only applies to new investors in private funds and existing investors in private funds that make additional capital contributions. Existing investors in private funds who do not make any additional capital contributions will not require recertification\textsuperscript{83}.

The SEC as directed by Section 418\textsuperscript{84} of the Dodd-Frank Act introduced changes to the recognition of a ‘qualified client\textsuperscript{85}' by increasing the dollar amount threshold requirements of assets under management to USD$1 million and the investor net worth to USD$2 million from the previous USD$750,000 and USD$1 million respectively\textsuperscript{86}. Further, Section 418 amends Section 205(e) of the Advisers Act to require the SEC to adjust for inflation the USD$1 million assets under management, and USD$2 million net worth thresholds for

\textsuperscript{81} Section 413(2)(B), Dodd-Frank Act 2010.
\textsuperscript{82} Section 413(a), Dodd-Frank Act 2010.
\textsuperscript{83} Section 413(b), Dodd-Frank Act 2010.
\textsuperscript{84} Section 418, Dodd-Frank Act 2010 – Qualified Client Standard.
\textsuperscript{86} 17 C.F.R. §25.205-3(2010); see also 15 U.S.C. 80b-5(e).
determining a client’s status as a ‘qualified client’ within one year after the date of the Dodd-Frank Act’s enactment and every five years thereafter\textsuperscript{87}.

The extensive regulatory changes introduced after the enactment of the Dodd-Frank Act is viewed as a positive response to regaining investor confidence in the US after the GFC 2008. It is hoped that the force of the law in supervising the activities of hedge funds and mandating disclosure requirements will curb financial exuberance and risky behaviour within the industry but the globalized financial system requires harmonization in legislative actions, especially in circumstances which give rise to regulatory arbitrage. In response to the challenges and the changes in the global financial market regulatory architecture and the need for harmonization in regulatory actions, the European Union introduced the \textit{Alternative Investment Fund Managers Directive} (AIFMD) in 2010 as its response to curbing risky behavior within the shadow banking sector and alternative investment industry. The following section details these legislative actions.

\section*{4.5 The Alternative Investment Fund Managers Directive}

The AIFMD was unanimously approved by the Parliament of the European Union on the 11\textsuperscript{th} of November 2010. The Directive was enacted as the European response to what has been a global reaction for the need to regulate alternative investments funds as result of the fallout of the global financial crisis and to bring together the regulation of the alternative investment sector under a single market regulatory framework in the EU. The legislation has also created a means by which any Alternative Investment Fund Managers

\textsuperscript{87} Section 418, Dodd-Frank Act 2010.
(AIFM) authorized under the directive will be able to ‘passport’ their funds freely across all Member States in the EU, harmonizing financial systems across the region once the funds have been authorized and, purportedly, reducing the risks of regulatory arbitrage. UK hedge fund managers who intend to carry out investing activities in any part of the EU will be required to adhere to the legislative requirements and which would possibly also be enforced by the UK authorities, although this has not been finalized at the time of writing this thesis.

The Directive broadly defines an Alternative Investment Fund (AIF) as any collective investment scheme which does not require authorization under the existing Undertaking for Collective Investment in Transferable Securities Directive (UCITS) and has been designed to regulate investment vehicles within the alternative investment industry which were previously excluded from direct supervision or regulation because of exemptions or exclusions. This would include hedge funds, private equity firms, venture capitalist and any other managed investment vehicles intending to domicile within the EU and UK. An AIFM may manage UCITS funds, however authorization to do so under the UCITS Directive is separate from that under the AIFMD and if a manager wishes to obtain authorization she has to do so separately (Crosognani et al, 2011, p.344).

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89 Directive on Alternative Investment Fund Managers ("AIFMD"); Frequently Asked Questions, Memo/10/572 (November 11, 2010) (FAQ). The breadth of this definition is curtailed somewhat by a number of exceptions. Specifically, the Directive does not apply to collective investment schemes regulated under the UCITS Directive. EU credit institutions, pension funds, life assurance or reinsurance companies or sovereign wealth funds; Art 2, S. 2(c)-(g). The Directive also does not apply to an AIFM established in the EU but which does not provide management services to an AIF domiciled or marketed in the EU; Art 2, S.2(b). Further, the Directive contemplates the delegation of administration (but not management) function to offshore entities where (1) the third party is authorized to provide such services or is regulated in the third country and subject to prudential supervision, (2) there is an appropriate cooperation agreement between the competent authority of the AIFM and the supervisory authority of the third party, and (3) the procedural requirements of the Directive relating to the delegation of functions are fulfilled; Art 18 and 36.
The AIFMD mandates that any AIFM seeking to manage or market an AIF within the EU must obtain authorization from the relevant authorities in its home Member State. The Directive contains minimum AUM requirements for managers with portfolios of total assets in excess of €100 million, similar to the provisions provided under the Dodd-Frank Act. AIFMs with AUM over and above this threshold will be regulated under the provisions of the Directive. The basis of this threshold according to the EU Commission is that effective supervisory attention will be focused on the areas where risks are concentrated and a threshold of €100 million would capture roughly 30 percent of hedge fund managers, managing almost 90 percent of assets of EU domiciled hedge funds, would be covered by the AIFMD. It would capture almost half of managers of other non-UCITS funds and provide almost full coverage of the assets invested in their funds. Further, the AIFMD contains two de minimis exemptions for small managers.

All AIFM managing AIF portfolios with total assets of less than €100 million will be exempt from the provisions as the funds are considered unlikely to pose significant risks and hence extending regulatory requirements to these would impose significant costs and administrative burden which would not be justified by the benefits according to the

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90 AIFMD, Art. 4, S.1. An AIFM may be authorized to provide management services in respect of all or only certain types of AIF; AIFMD, Art. 4. S.2.
91 AIFMD, Art. 2, S.2(a). There is a potential ambiguity in the Directive on whether the threshold applies to the “fund” as a collective or individual fund manager. The Commission estimates that the €100 million threshold will capture 30% of all hedge fund managers.
EU Commission\textsuperscript{94}. Additionally, AIFM which only manage AIFs, which are not leveraged and impose a lock-up period of five years to investors will be eligible for a \textit{de minimis} threshold of €500 million\textsuperscript{95}. However, it is uncertain whether this threshold applies to the AUM of the ‘fund’ in its entirety or the individual managers as included in the Dodd-Frank Act and this could pose a problem of layering of funds and/or fund managers.

Thus, the AIFMD implicitly mandates regulatory and supervisory procedures which AIFMs’ will be required to adhere to, firstly seeking authorization to manage alternative investment funds within the EU and, subsequently, comply with substantive requirements including capital adequacy, conduct of business, governance and risk management, third party independent valuation and initial periodic and even-driven disclosure to investors, the competent authorities and certain third party stakeholders. The AIFMD also empowers the EC to restrict the use of leverage by AIFs.

\textbf{4.5.1 Authorization and Capital Requirements}

All AIFMs are required to be authorized by relevant competent authorities of the jurisdictions in which the fund is domiciled before being granted permission to conduct their investing activities across the EU regions. An AIFM must apply for authorization with their home member state and submit detailed information to demonstrate qualifications and ability to fulfill conditions as required under the AIFMD\textsuperscript{96}. The mandate for disclosure


\textsuperscript{95} AIFMD, Art. 2, S.2(a).

\textsuperscript{96} AIFMD, Art. 6.1.
of information is consistent with the US requirements as stipulated in the Dodd Frank Act and includes information pertaining to the valuation and safekeeping of portfolios assets, the fund’s organisational structure and management functions as well as qualifications of all AIFMs managing investing activities within the fund. The authorization requirements are intended to act as an initial investor protection evaluation strategy whereupon grant of the status to AIFM will be able to conduct its business operations within any member state. This includes the marketing of the financial products it manages to professional or sophisticated investors and the AIFMD also allows AIFMs to market their products to retail investors which are mandated under stricter investor protection provisions. Along with authorization provisions, the AIFMD requires AIFMs to maintain initial ongoing capital requirements of at least €125,000 with a supplemental capital requirement of proportionately zero-point-zero-two percent of aggregate AUM exceeding €250 million. The capital adequacy requirements dictated in this directive are very broad in nature and do not identify in detail the applicability of conditions, nor does it isolate any particular type of alternative investment strategy and places AIFMs in a difficult position. This is because certain strategies which would require more capital investments, for example, hedge funds which focus on arbitrage strategies, would be placed at a competitive disadvantage. Furthermore, regulatory agencies will be required to understand and apply

97 AIFMD, Art. 5.
98 Either directly or via the establishment of a branch, subject to (1) the scope of its original authorization, (2) the communication of its intention to do so to the competent authorities in its home Member State, and (2) meeting the relevant procedural requirements; AIFMD, Art 34, S.1-3.
100 AIFMD, Art. 32, S.1.
the various oversight requirements on funds with different structures and investment strategies, complicating the supervisory process further.

### 4.5.2 Conduct of Business, Governance and Risk Management Requirements

The AIFMD enforces requirements for authorized AIFMs in business conduct and ethical standards which were previously non-existent for hedge fund managers in the EU. It imposes fiduciary obligations on AIFMs, specifically to act in the best interest of the fund and its clients, with due care and diligence, honesty and maintaining market integrity. This includes a prohibition against any undisclosed preferential treatment of investors or participating in side letter agreements, thereby highlighting a stance by the ECB against unfair collusion, a common practice amongst hedge fund managers across the globe. The AIFM has to ensure that conflicts of interest are not prevalent in business transactions, related parties and that all stakeholders are treated fairly and, thereafter, maintain and operate effective organizational and administrative arrangements with a view to preventing these conflicts from adversely affecting the interests of an AIF or its investors. Art 10. S.1-2 of the AIFMD requires AIFMs to disclose to investors, any material conflict of interest within its operation or where it determines its conflict arrangements are not sufficient to ensure reasonable confidence that the interests of all AIF investors will not be adversely affected as to the risks of damage to investors' interests as opposed to preventing the damage itself. In the interest of investor protection against excessive risk taking, the AIFMD also requires AIFM to implement risk management

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102 AIFMD, Art. 9, S.1(a)-(c).
103 AIFMD, Art. 10, S.1.
104 AIFMD, Art. 10, S.1.
105 AIFMD, Art. 10, S.1-2.
systems which will enable adequate monitoring of investment strategies$^{106}$. Risk management and monitoring will have to extend beyond financial modeling and will require the documentation and implementation of policies and procedures pertaining to due diligence, conduct regular stress tests of these systems under both normal and exceptional market conditions$^{107}$ of investment positions and to ensure that capital adequacy and the liquidity profile of its asset$^{108}$ requirements are adhered to. The risk exposure of the fund has to be within the guidelines based on investment agreements. This will include risks in relation to short selling strategies$^{109}$ and there is a separation of portfolio and risk management functions within the operational environment of an AIFM$^{110}$.

### 4.5.3 Third Party Valuation and Safekeeping Requirements

Valuation of securities is directly linked to the NAV of a fund and, up till now, there have not been strict requirements for alternative investment vehicles to conduct independent valuation simply because of the light-touch approach by regulatory agencies on oversight$^{111}$. The AIFMD now requires an AIFM to appoint an independent third party to value the portfolio assets and the issued securities of a fund to be conducted yearly at the

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$^{106}$ AIFMD, Art. 11, S.2.
$^{107}$ AIFMD, Art 12, S.1.
$^{108}$ AIFMD, Art 12, S.2.
$^{109}$ AIFMD, Art 11 S.4.
$^{110}$ AIFMD, Art 11, S.1.
$^{111}$ AIFMD, Art. 17, S.1(a)-(c), where an ALF is domiciled in a third country, Member States will allow it to delegate the performance of its functions to a sub-depositary in the same third country provided that the legislation of that third country is equivalent to the Directive and effectively enforced; Art 38, S.1, such sub-depositaries must also, be (1) subject to effective prudential regulation and supervision which is equivalent to the relevant EU law, and (2) domiciled in jurisdictions where cooperation between the home Member State and the relevant authorities of the third country is sufficiently ensured; Art 38, S.1(a)-(c).
least\(^{112}\) and supervisory oversight of the valuation process. An AIFM must also appoint a single depositary\(^{113}\) for the purposes of receiving subscription proceeds from AIF investors and safekeeping of portfolio assets which has to be a financial or credit institution registered within the EU. AIFMs are allowed to maintain depositors in non-EU depositories so long as they are subject to compatible prudential regulation. For EU funds, the depositary must be established in the home Member State of the fund. For non-EU funds, the depositary must be established in the third country where the fund is established, the home Member State of the fund manager (Ferran, 2011, p.401).

### 4.5.4 Disclosure and Transparency Requirements

Regulation by disclosure places the onus of responsibility and accountability on the fiduciary and the motivations of the AIFMD to have increased disclosure transparency requirements suggests this stance. The AIFMD lays down a series of initial, periodic and event-driven disclosure requirements designed to enhance the transparency of AIF activities to all stakeholders including regulatory authorities (Awrey, 2011, p.11). Information such as a description of the relevant AIF’s investment strategy and objectives\(^{114}\), valuation and redemption policies, custody, administration and risk management procedures, and fees, charges and expenses\(^{115}\) has been mandated to be provided to investors. More importantly, AIFMs will be required to adhere to ongoing

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\(^{112}\) AIFMD, Art. 16, S.1.  
\(^{113}\) AIFMD, Art. 17, S.3, An AIFM cannot, however act as a depositary; Art. 17, S.2.  
\(^{114}\) Including descriptions of (1) the permitted assets and techniques and their attendant risk, (2) any investment restrictions, and (3) the circumstances in which the AIF may use leverage and the types and sources of permitted leverage; AIFMD, Art. 20, S.1.  
\(^{115}\) AIFMD, Art. 20, S.1.
disclosure requirements such as an independently audited financial position report\textsuperscript{116} to be submitted to regulatory authorities of the home Member State\textsuperscript{117} and investors. This is to enable transparency and the consistent dissemination of information in an effort to maintain a high standard and regular supervisory practices.

There are additional disclosure requirements stipulated by the AIFMD which reinforces its stance for greater transparency. AIFMs will be required to provide information about investing activities in relation to illiquid assets, any changes in liquidity, risk profiles and risk management systems. These transparency requirements are extended to information submitted to regulatory authorities whereby the AIFM will be required to submit aggregate information to the regulatory authorities on a regular basis respecting the principal markets and instruments in which its AIFs trade, their principal exposures and important concentrations of risk\textsuperscript{118} as well as the main categories of assets in which its AIFs are invested and the use of short selling, if relevant.\textsuperscript{119}

\textbf{4.5.5 Leverage Requirements}

Lastly, the AIFMD empowers the European Commission to set leverage requirements of AIFs where it deems them necessary to ensure the stability and integrity of the financial system as a protection from systemic risks. It further empowers national authorities to restrict the use of leverage in respect to individual AIFMs and AIFs in exceptional circumstances. Article 4(1)(v) of AIFMD defines leverage as any method by which AIFM

\textsuperscript{116} AIFMD, Art. 21, S.39a).
\textsuperscript{117} AIFMD, Art. 21, S.3(a).
\textsuperscript{118} AIFMD, Art. 21, S.1.
\textsuperscript{119} AIFMD, Art. 21, S.2(d)-(e).
increase exposure of a managed AIF, whether through cash of securities, or any leverage embedded through derivative positions (EC, 2012, p.5). However, the European Commission is still in the process of finalizing guidelines on the appropriate methods of calculating leverage and on methods by which an AIFM may increase the exposure of an AIF through leverage, intended to control excessive risk activities of AIFMs. AIFMs are also obliged to set maximum levels of leverage and make proper leverage disclosure to investors in an effort to reduce information asymmetry and assist investors in evaluating an AIFM’s investment mandate prudently (Fross and Rohr, 2012, p.3-9).

### 4.6 Conclusion

The mandate to regulate the hedge fund industry in the US and the UK has been a laborious task for financial market supervisors faced with the dilemma of upholding their responsibilities in promoting market integrity and protecting investors on the one hand, and at the same time, ensuring that financial innovation and economic growth is not impeded by too much regulation.

Hedge funds in the US and the UK have historically taken advantage of exemptions from within financial market regulatory provisions or subject to light-touch supervision and structured themselves as privately managed investment vehicles. A common requirement to be granted these exemptions has been to refrain from marketing the fund or its financial products to the general public. Limitations on the number and type of investors meant that only investors of a certain stature were eligible, those who were financially sophisticated enough to undertake the risks involved and individuals who were classified as high net
worth individuals able to withstand financial losses arising from riskier investing activities. The numerical wealth requirements in place to define qualified or sophisticated investors did not, however, take into account that even investors who fulfill these numerical wealth requirements do not always have the adequate level of knowledge, understanding and sophistication required to invest in highly complex financial instruments. It is clear from the collapses of large financial institutions that even those equipped with the knowledge and expertise and hence financially sophisticated were unable to understand or manage the risks within their investment activities. The historical approach to risk management applied to hedge fund investment strategies requires a reassessment and also an appreciation that over-reliance on financial modeling without taking into account the operational risks within a funds management is inadequate. This historical method of analysis has not changed even after the ambitious regulatory reforms which have taken place in the US and UK.

Although hedge funds themselves may have not caused the GFC 2008, nevertheless legislators in the US and the UK have taken enormous steps to ensure that such funds, which were previously considered the domain of the rich and resourceful, are regulated. One reason for this is the growth of retail investors interested and willing to invest in hedge funds, attracted by the above average returns attainable. Another reason could be the growth of the global pension fund industry which holds much of the net worth of such retail investors, investing in hedge funds. The introduction of the Dodd-Frank Act and the AIFMD has been touted as a solution to protecting financial systems in the US, EU and UK against risks posed by hedge funds, thus legitimizing their availability to retail investors.
The effectiveness of these regulatory changes will only be truly tested if it prevents another financial crisis, which incidentally, will not occur if there is effective enforcement and supervision within financial markets. The Dodd-Frank Act requires registration by hedge funds managers with the SEC if their AUM exceeds USD$150 million while in the EU the AIFMD requires a registration for any fund with AUM of €100 million or more.

Other dissimilarities between the provisions of the Dodd-Frank Act and the AIFMD include EU-wide passport regime, limitations on compensation structure of EU AIFMs, fiduciary duties for AIFMs, and limits on the amount of leverage AIFMs can use. The differences in hedge fund regulations will have greater implications because they create legal uncertainty and significant transactional costs while opening up both markets to regulatory arbitrage. If hedge fund managers are subject to stricter rules in one jurisdiction while competing for clients and profit margins with funds in jurisdictions that impose less restrictive rules they could be placed at a comparative disadvantage and hence seek alternative structures or more favorable jurisdictions to conduct their investing activities. The only certainty brought about by these reforms is that there will be further ambiguity. The costs of compliance for hedge funds will increase with the heightened regulatory burden. Hedge funds managers authorized in the EU and UK will be eligible for its ‘passporting’ provisions as opposed to those in the US. These actions may be construed as protectionist and retaliatory actions may be encountered by funds outside the supervised regions. There may be a mass migration of funds out of the US into tax havens because of its stricter disclosure requirements, affecting its financial services industry. The point of financial reforms is to develop a system which better performs the previous one, a change where key economic
functions such as information generation and capital allocation, monitoring, governance and the management of risks is aligned to create a safer environment. The fact remains that although US and UK hedge fund operators utilize similar strategies and participate in the same markets, they will be subjected to different regulatory regimes.

The one important issue that has never been adequately approached or addressed is the operational risks within hedge funds. On the assumption that hedge fund failure and fraud over the period of the global financial crisis were causes of the billions of dollars in savings lost, actions should be taken at the root of the problem, its operations. Chapter Five approaches this problem with a solution to mitigating and controlling the risks which hedge funds have within their operations through risk transparency and provides recommendations which can be used to dilute any contagion in the global financial markets, if regulators supervise effectively. The protection of financial markets against fraud and failure, deception and misconduct has to be a concerted effort which begins with the promotion of increased risk transparency, enhanced by co-operation oversight and enforcement of regulators and effective due diligence by investors in managing their investment portfolios.
CHAPTER 5

HEDGE FUND TRANSPARENCY AND FRAUD RISK

“There are known knowns. These are things we know that we know. There are known unknowns. That is to say, things that we know we don’t know. But there are also unknown unknowns. These are things we don’t know we don’t know.”

- United States Secretary of Defense Donald Rumsfeld (February 2002)¹

5.1 Introduction

The mandate for greater transparency within hedge funds has been a strongly debated topic by legislators, financial market regulators and industry bodies for over 20 years now, in particular after the collapse of LTCM in 1998. The focus of these public debates and pronouncements have been for increased disclosure of hedge fund activities as opposed to more transparency which, whether intended or not, signifies an abstention from interference in the activities of the elusive industry. A hedge fund cannot be considered transparent without providing disclosure. However, it can disclose all its positions and yet the actions and activities of a hedge fund may not be transparent (Hedges VI, 2005, p.411). The level and depth of information on hedge fund investment strategies and operational activities to be publicly disclosed has been protected by the veil of its private organizational structure and the argument that such information is proprietary to a hedge funds’ performance and crucial in maintaining its competitive advantage. This stance

has been reinforced by exemptions available through legislation and no-action letters in
the US and light-touch regulatory approach in the UK before the financial crisis.

As presented in Chapter Four, the changes to the newly introduced regulatory approaches
governing hedge funds in the US and the UK is set to enforce more stringent controls and
eventually compliance requirements, intended to overcome this problem and has been
widely publicized\(^2\) the as a response which will invariably increase the administrative
burdens in relation to disclosure and transparency. However, the question of whether
these regulations are sufficient to prevent another hedge fund failure due to fraud has not
been tested and is subject to dispute, while implementation deadlines are extended as the
focus of financial market regulators is shifted to solving the sovereign debt crisis in Europe.
There is no argument over the need for more transparency and disclosure of hedge fund
activities, especially as the generally opaque and secretive industry emerges out of the
shadows into the retail investor environment. This, coupled with the extensive systemic
risks hedge fund activities pose to the global financial system, warrants greater scrutiny of
appropriate and sustainable levels of detailed information which should be made available
to investors. The question is whether legislating risk management through disclosure is the
answer.

There are two types of legislative approaches which provide the basis for a legally
mandated risk management environment. There are regulations that would demand hedge

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funds have appropriate risk management systems, which includes not only ensuring that the system is adequately maintained but consistently monitored, and there are regulations that would require the hedge fund to disclose information on the risks that the fund exposes to stakeholders and counterparties (van Daelem, 2010, p.98). The decision to invest in a hedge fund will depend on the level of risk which is acceptable to an investor, reliant on an assessment of calculated return profiles commensurate with such risks and is based on disclosed information available to investors. However, the popular investment advisory rhetoric of ‘higher risk for higher returns’ unconscionably places a caveat on the purpose of disclosure in which the ultimate responsibility of financial losses is borne by the investor based on their decision to invest rather than the onus placed on the hedge fund manager to act with prudence. Hedge funds extend this assumption by relying on provisions within the sophisticated investor rule which maintains that such investors are knowledgeable and, hence, able and willing to make risky investment decisions independently.

The self-regulatory environment that hedge funds have long been accustomed to has also enabled them to evade disclosure requirements by promoting their investment strategies as uniquely proprietary and crucial to achieve absolute returns. This ability to attain above market returns is the criteria which ultimately attracts investors to the hedge fund industry. Thus, there is an underlying assumption which motivates certain investors to contribute to hedge funds, based on their reputation of achieving absolute returns as privately managed investment vehicles which operate in a self-regulatory environment with limited disclosure. This may have been understandable when investing in hedge funds was restricted to institutional and high net worth investors who were willing to take on the
risks for higher returns without the need to be defended by investor protection rules. However, as the industry expands its reach into the retail investor sphere this line of ‘sophistication’ has been blurred and creates a moral hazard for regulatory agencies with ‘unsophisticated investors’ possibly unknowingly, contributing capital to potentially reckless investing activities.

The availability of hedge fund investing to retail investors also creates a dichotomy of irresponsibility where retail investors can be lured by hype and greed into such funds without necessarily understanding their risk profile, in particular the complex financial instruments in which hedge funds may invest. For example, it is estimated that the global over-the-counter derivatives market, in which hedge funds are active participants, is worth approximately USD$600 trillion³ and operates without the regulatory framework of most mainstream financial products. This exposes retail investors to the exact risks which they seek to avoid and, indeed, one which cannot be afforded. Higher returns is a simple measure to satisfy greed, but at the same time it is dangerously tempting if not seen in the context of risk, a multifaceted and elusive notion especially at a time when caution in financial markets is paramount and traditional risk management philosophies have proven to be ineffective. A lack of transparency within hedge fund activities exacerbates this problem and makes effective monitoring impossible, facilitating inappropriate behavior such as misrepresentation and manipulation motivated by performance pressures and the drive to maintain the high returns demanded by investors.

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This chapter focuses on efforts to mitigate the ‘unknown unknowns’ within the multifaceted risk profiles of hedge funds. Section 5.2 introduces risk transparency and details private and public initiatives undertaken to promote more transparent disclosure of hedge fund information, the success of which has been slow growing. Section 5.3 substantiates the unknown and unquantifiable risks within hedge funds and elaborates on the notion of hedge fund operational risks. The section begins with an introduction into the available research statistics of hedge fund failures and is followed by an analysis of the importance of mitigating operational risks within hedge funds. Although an area of limited academic research, the fallout from the GFC 2008 has brought to light the need for investors to pay much more attention to this principle of knowledge and, hence, increase awareness, especially the difficulties in precisely valuing a hedge fund portfolio and the vulnerabilities of its Net Asset Value (NAV) quantification to manipulation and misrepresentation, which is addressed in section 5.4. Finally, section 5.5 analyses the collapse of Bernard Madoff Investment Securities, the largest hedge fund fraud to date which was the result of a Ponzi scheme. This fund was chosen as a basis of analysis because the fraud itself was uniquely different from the norm as it did not rely on sophisticated investment strategies to defraud investors and defies the feasibility of current regulatory and disclosure requirements tabled by regulators to adequately protect retail investors.

5.2 Risk, Uncertainty and Hedge Funds

There is distinction which needs to be drawn between what is commonly known as accepted risks and uncertainty. In 1921, the economist Frank Knight (1921, p.72) proposed a seminal difference between the terms ‘risk’ and ‘uncertainty’. He stated that:
The practical difference between the two categories, is that in the former, the distribution of the outcome in a group of instances is known, either through calculation a priori or from statistics of past experiences, while in the case of uncertainty this is not true, the reason being in general that it is impossible to form a group of instances because the situation dealt with is in a high degree unique. The best example of uncertainty is in connection with the exercise of judgment or the formation of those opinions as to the future course of events, which opinions and not scientific knowledge actually guide most of our conduct.

Hedge funds tread along the fine line between risk and uncertainty in the pursuit of absolute returns. Their investment strategies are marketed as contributing factors in their ability to generate superior risk adjusted return and it is that which essentially differentiates hedge fund managers from their counterparts. This superior performance is prevalent over and above the lucrative fees typical of the industry, averaging between 1.5 to 2 percent of assets under management and 20 percent of any positive performance. As identified in Chapter Three, hedge fund investors invariably demand high returns in exchange for the corresponding fees paid and the risks that they are expected to bear. It has been unanimously accepted that hedge fund strategies are riskier and complicated to understand but surprisingly few investors and fiduciaries devote much attention to active risk-management and due diligence, especially in situations where there is co-investment within the fund by the manager. This co-investment criterion in turn tends to be widely viewed within the investor community as a default risk control and the acknowledgement that because the fund manager has her own money invested in the fund she will act with prudence and not take extreme risks to the detriment of the fund's solvency.

Vrontos et al (2008, p.741) state that potential hedge fund investors may know very little about the funds' investment processes, the risks associated with the fund, or the skills of
the fund manager. While the former could be of little practical importance to the investor, the risks and, primarily, the capacity of the individuals managing the fund are not. They postulate that the skill and performance of a hedge fund manager in general is often summarized by an estimate of its ‘alpha’ or the intercept in the regression of the funds’ excess return on the excess return of one or more passive benchmarks (Vrontos et al, 2008, p.741). The choice of benchmarks is often guided by a pricing model in the spirit of Ross (1976) ‘Arbitrage Pricing Theory’. However, risk formulation methodologies which are based on traditional risk management models have proven to be unable to capture the true risk profiles of hedge fund investment activities and add further to these complications. Lo (2001, pp.17-21) points out that it is easy to understate the true dimensions of the risks to a portfolio of hedge fund investments in a bull market where asset prices are rising and investment strategies are depicted by uniform risk measurement methodologies such as Value-At-Risk⁴ (VaR) but generic risk assessment models cannot fully capture the spectrum

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⁴VaR is a predictive (ex-ante) tool used to prevent portfolio managers from exceeding risk tolerances that have been developed in the portfolio policies. It can be measured at the portfolio, sector, asset class, and security level. Multiple VaR methodologies are available and each has its own benefits and drawbacks. To illustrate, suppose a USD$100 million portfolio has a monthly VaR of USD$8.3 million with a 99% confidence level. VaR simply means that there is a 1% chance for losses greater than USD$8.3 million in any given month of a defined holding period under normal market conditions. It is worth noting that VaR is an estimate, not a uniquely defined value. Moreover, the trading positions under review are fixed for the period in question. Finally, VaR does not address the distribution of potential losses on those rare occasions when the VaR estimate is exceeded. These constraints should also be kept in mind when using VaR. The ease of using VaR is also its pitfall. VaR summarizes within one number the risk exposure of a portfolio. But it is valid only under a set of assumptions that should always be kept in mind when handling VaR. VaR involves two arbitrarily chosen parameters: the holding period and the confidence level. The holding period corresponds to the horizon of the risk analysis. In other words, when computing a daily VaR, we are interested in estimating the worst expected loss that may occur by the end of the next trading day at a certain confidence level under normal market conditions. The usual holding periods are one day or one month. The holding period can depend on the fund’s investment and/or reporting horizons, and/or on the local regulatory requirements. The confidence level is intuitively a reliability measure that expresses the accuracy of the result. The higher the confidence level, the more likely we expect VaR to approach its true value or to be within a pre-specified interval. It is therefore no surprise that most regulators require a 95% or 99% confidence interval to compute VaR, Berry, R. (Undated), “Value at Risk: An Overview of Analytical VaR”, J.P. Morgan Investment Analytics and Consulting http://www.jpmorgan.com/tss/General/email/1159360877242, Accessed 31 Dec 2012.
of risks that hedge funds exhibit. This is because their investment strategies are varied and the degree of overlap is too small to be captured by a statistical model that was originally designed for OTC derivative dealers to evaluate the risk exposure of portfolios of derivative securities (Lo, 2001, pp.17-21). Duc and Schorderet (2008, p.100) state that when facing such a problem the usual solution is to explain the returns through a factor model, the essence of which is that the risk embedded in any hedge fund can be split into two components; the first is a function of the systematic factors to which the manager is exposed to and, second, the risk that remains unexplained by these factors and as such can be referred to as specifically identified with a particular manager. Further, the comparative performance of hedge funds with other market players’ executing similar strategies is a difficult task as most investment strategies are uniquely proprietary and never disclosed. Therefore, the management of risks to obtain a defined return requires a highly methodical and multidimensional approach (Horowitz, 2004, p.74). Investors should consistently maintain caution that past performance is not indicative of future results and hence active due diligence should be a paramount requirement as part of risk management in ensuring that the continual alpha generation capabilities of a fund’s investing activities are based on a manager’s investment acumen as opposed to fraud, manipulation or misrepresentation. These issues can be often disregarded in volatile and unpredictable markets where an underestimation of risks results in substantial losses and complicates the decision making processes of investors who rely on traditional valuation methodologies. The lack of disclosure of hedge fund activities adds to these complications and has been demonstrated as a contributing factor to the failure of numerous hedge funds including the collapse of
LTCM which led to regulators in the US requesting increased disclosure of hedge fund activities from industry participants.

5.2.1 Hedge Fund Disclosure and Transparency Debate

The lack of information about the hedge fund industry before the GFC 2008 meant that a majority of academic researchers were unable to effectively determine specific requirements which would be useful in mandating transparency information and much of the initial work was carried out by governmental institutions and professional bodies in collaboration with fund managers and risk assessors. The first major actionable response to recommending mandated disclosure requirements of the hedge fund industry was tabled in the US by the Presidents Working Group on Financial Markets in its report entitled *Hedge Funds, Leverage, and the Lessons of Long-Term Capital Management* (PWG, 1999) after the collapse of LTCM and the ensuing investigations. The recommendations advised on the need for legislative actions to require hedge funds to improve transparency through enhanced disclosure to the public as a solution to enable market participants make better, more informed judgments about market integrity and the credit worthiness of borrowers and counterparties, stating that there was limited information available about the financial activities of hedge funds (PWG, 1999, p.32). In a section entitled “Enhanced Private Sector Practices for Counterparty Risk Management”, the PWG Report stated that:
A group of hedge funds should draft and publish a set of sound practices for their risk management and internal controls. Such a study should discuss market risk measurement and management, identification of concentrations, stress testing, collateral management, valuation of positions and collateral, segregation of duties and internal controls, and the assessment of capital needs from the perspective of hedge funds. In addition, the study should consider how individual hedge funds could assess their performance against the sound practices for investors and counterparties (PWG, 1999, p.37).

The motivations for these recommendations were mainly to improve public confidence as well as general market integrity and maintain stability within the financial system. However, there were no specific requirements provided on the level of depth in disclosure information and, hence, left to the discretion of hedge fund managers in a self-regulatory, voluntary disclosure model (PWG, 1999, pp.37-38; Horwitz, 2004, p.170-171). Subsequently, in response to the PWG findings and increasing debates on hedge fund disclosure, the Hedge Fund Working Group (HFWG), an industry representative body, submitted a report entitled, “Sound Practices for Hedge Fund Managers” (2000, p.22). In a section entitled “Disclosure and Transparency” the Working Group stated that:

Investors should receive periodic performance and other information about their hedge fund investments. Hedge fund managers should consider whether investors should receive interim updates on other matters in response to significant events. Hedge fund managers should negotiate with counterparties to determine the extent of financial and risk information that should be provided to them based on the nature of their relationship in order to increase the stability of financing and trading relationships. They should also work with regulators and counterparties to develop a consensus approach to public disclosure. Agreements and other safeguards should be established in order to protect against the unauthorized use of proprietary information furnished to outside parties.

The submission of the HFWG emphasized a similar rhetoric to the PWG recommendations but highlighted the reluctance of hedge fund managers in revealing proprietary data and the determination to protect their investment strategies, advocating a preference towards
industry self-regulation. This was further supported by members of the Investor Risk Committee (IRC), a subset of the International Association of Financial Engineers, another industry body representing counterparties within the hedge fund industry. On the issue of disclosure, the IRC\(^5\) stated; “IRC Members agreed that full position disclosure by managers did not always allow them to achieve their monitoring objectives, and may compromise a hedge fund’s ability to execute its investment strategy”. They expressed significant concerns over the harm that full position disclosure could cause for many common hedge fund strategies, for example macro and risk arbitrage (Horwitz, 2004, p.172).

The debate on increasing the transparency of hedge fund activities was subsequently addressed by the SEC in 2003 when it conducted a thorough investigation on hedge fund activities due to the sudden and increased growth of the hedge fund industry after the collapse of LTCM (Horwitz, 2004, p.172). In 2003, the SEC presented a Staff Report entitled “Implications of the Growth of Hedge Funds Report to The United States Securities and Exchange Commission” and emphasized that the lack of disclosure within the hedge fund industry was a cause of concern, stating:

> Hedge funds are not subject to any minimum disclosure requirements. Although hedge fund advisers generally provide investors with a private placement memorandum, and while we acknowledge that there are often a range of other communications between hedge fund advisers and hedge fund investors, we are concerned that investors may not always receive disclosure about certain fundamental information relating to the investment adviser and its management of a hedge fund. We are also concerned that investors may not receive information about material changes to an adviser’s management of a hedge fund on an ongoing and regular basis (SEC, 2003, p.83).

This view brought to attention the SEC’s increasing concerns about the risks which hedge funds pose to investors and the financial system due to a lack of disclosure but failed to mandate specific requirements. It stated that “hedge fund advisers may provide investors with a list of hedge fund securities positions and holdings or information about the risks associated with the hedge fund’s market positions. This information may be provided in full or in part and on a current or delayed basis” (SEC, 2003, p.49). More importantly, the potential of requiring hedge fund managers to register with the SEC was recognized for the first time in Chapter VII(A), of the report which stated, “the Commission should consider requiring hedge fund advisers to register as investment advisers under the Advisers Act, taking into account whether the benefits outweigh the burdens of registration” (SEC, 2003, p.89). However, the recommendations proceeded to provide assurances to hedge fund managers on its unrestrained stance of formally mandating disclosure by elaborating that:

Registration would not place any restrictions on hedge fund advisers’ ability to trade securities, use leverage, sell securities short or enter into derivatives transactions. Nor would registration under the Act require the disclosure of any proprietary trading strategy. In addition, registration would not result in hedge funds and hedge fund advisers being subject to any additional portfolio disclosure requirements (SEC, 2003, p.92).

The view taken by the SEC and related bodies in promoting guidelines to enhance transparency within hedge funds fell short of direct regulation, actions which were mirrored by other regulatory agencies globally. This was because the submissions were based on a voluntary disclosure model and subject to industry wide self-regulation, but eventually not implemented by the hedge fund industry at large to protect proprietary information. There were subsequent reports by hedge fund industry representative bodies such as the Managed Funds Association which issued annual ‘Best Practice’
guidelines for hedge fund managers but none of these reports substantially emphasized the need for increased disclosure and transparency of hedge fund activities until the GFC 2008. The aftermath of the GFC 2008 has identified exactly the same inconsistencies within hedge fund practices which have led to numerous hedge fund failures and collapses since 2008. These problems could have been mitigated should the supervisory bodies have implemented more stringent oversight on the industry after the collapse of LTCM.

The key to creating a more transparent hedge fund industry is to improve the quality of fund reporting which will better inform investors and invariably promote greater disclosure discipline. However, as the industry has historically been privately structured and one which services predominantly sophisticated investors, enforcement of disclosure requirements has been difficult, even though voluntary disclosure in itself may be beneficial to the reputation of hedge funds. A survey conducted by EDHEC-Risk and Asset Management Research Center entitled “Hedge Fund Reporting Survey 2008” showed that the quality of hedge fund reporting is perceived to be an important signal of a fund’s overall excellence and a crucial investment criteria used by investors. However, investors consider hedge fund disclosure inadequate, especially with the quality of information on liquidity and operational risk exposure. There is a conflict between the perceptions of relevant informational disclosure from the perspective of hedge fund managers as opposed to investors who demand more information and improved

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disclosure on operational risks and valuation policies and procedures. The idea of enhanced hedge fund transparency is not simply a matter of anticipating and meeting new regulatory obligations especially because in a market environment where investors are getting increasingly attuned towards risk management as they are towards achieving absolute returns, transparency has come to be seen as a critical differentiator for funds and those with a reputation for clarity, collaboration and transparency stand out and are prized by investors⁷.

5.2.2 (Risk) Transparency and Disclosure

Transparency in the context of hedge funds refers to the extent and frequency of disclosures about a fund or manager’s performance, operations and structure (Shadab, 2013, p.30). It is the ease of availability of information, especially in business practices and revolves around the need for reliable information to be made available to retail investors. Retail investors need to be aware of the risk they are undertaking when investing in a hedge fund and should not solely rely on the advice of financial managers and advisers who may be motivated by self-interest. They should be cautious in understanding how hedge fund managers allocate their investments and whether this allocation yields positive results, in particular the ability of a fund to generate absolute returns via arbitrage opportunities rather than taking on excessive risk and leverage (AIMA, 2012a, p.34). This has been a contentious issue within hedge fund investing as most hedge funds derive alpha

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from investment strategies which are devised through extensive research and conducted with the use of complex financial instruments, predominantly transacted through over-the-counter derivative markets.

The main objective of hedge fund reporting is to enable assessment of the risk and return profile of the hedge fund under consideration (Goltz and Schroder, 2010). However, risk transparency or the disclosure of risk attributes are only useful if the information is reliable and investors understand the information they are provided with. As pointed out by Fung et al (2008, p.1778), submitting performance returns and related information has been voluntary and, hence, there is bias in data available especially because of the lack of uniform reporting standards. A study carried out by Liang (2000) through two major databases containing hedge fund data noted that 465 hedge funds had significant differences in reported information including returns, inception date, net asset value, incentive fee, management fee and investment styles. The study also found that 5 percent of return numbers and 5 percent of NAV numbers of hedge funds analysed were dramatically different. Depicting the truth about fund performance with conflicting reporting data presents complications (Gerber et al, 2011, p.12). This mystery has prompted various studies in replicating historical hedge fund investment strategies in an effort to isolate the alpha generation capabilities from excessive leverage and risk taking strategies (Fung et al, 2008; Agarwal and Naik 2004; Hasanhodzic and Lo, 2007). Stulz (2007, p.185) found that hedge funds generally produce an annual alpha return of approximately 3 to 5 percent due to superior performance. Proponents of hedge funds point out that this superior performance is possible due to their lightly regulated status and
the ability to use unconventional investment assets and strategies (Dichev and Yu, 2011, p.248). However, there are also reasons for skepticism about hedge funds' actual investor returns. These superior returns have been disputed by studies which have found no actual outperformance or minimal alpha generation as hedge funds operate in highly competitive markets, where information and trading advantages are unlikely to be maintained (Fung et al, 2008; Amin and Kat, 2003; Divchev and Yu, 2011, pp.248-263). An important reason to the conflicting views identified above can be attributed to the lack of disclosure and transparency prevalent within the hedge fund industry.

5.2.3 Advantages and Disadvantages of Mandating Transparency
The debate over the benefits and drawbacks of mandating more transparency in information from hedge funds can be contested from two different perspectives, the views of hedge fund investors who would like more information about the performance of their invested capital and the perspective of hedge fund managers who are motivated by protecting their proprietary investment strategies. The advantages of advocating transparency within hedge funds is based on the argument that there are numerous uncertainties involved within the mandate of hedge fund investment strategies and the ability of fund managers to maintain consistency in superior performance. Transparency will enable risk monitoring and aggregation which would allow an investor to keep track of any changes in the investment profile of the invested fund and may provide information which indicates inconsistencies and fraudulent activities (Anson, 2002, pp.79-80). For example, position-level transparency can be an important enabler of risk monitoring and aggregation which allows investors to be alerted to strategy drifts (Jorion and Aggrawal,
Investors with transparent information can also manage their own portfolio and manage exposures to certain investments which the hedge fund manager makes. For example, should an investor be uncomfortable with a particular strategy executed by their hedge fund manager, the investor could choose to minimize against that risk by taking an opposing position through a derivative contract (Hedges IV, 2007, p.418). Although this would defeat the purpose of investing in a hedge fund and paying higher management fees, it may suit investors who are unable to withdraw their investments in volatile markets due to lock-up period restrictions. Furthermore, hedge fund managers can benefit from positive publicity by advocating transparency as it portrays faith in their investment strategies and research foundations. It can be an important message to investors where confidence within the fund is built through education and dialogue, thus creating a better a reputation amongst the investor community and building the foundations for long-term loyalty (Hedges IV, 2007, p.418).

The most popular reason for opposing more transparency by hedge funds has been the risk of loss of proprietary investment information. Hedge funds managers are reluctant to provide detailed investment strategies; fund managers fear that thorough disclosure of their portfolio holdings would enable other fund managers to ‘free-ride’ by replicating hedge fund portfolios rather than performing their own investment research (Schwarz and Brown, 2010, p.3). The pursuit of absolute returns requires hedge fund managers to dedicate a lot of time to research. Analyzing securities with high degrees of complexity and investing in illiquid environments subsequently leads to picking valuable securities not covered by mainstream analysts and would require funds to risk more capital to take up
larger positions to be profitable (Hedges IV, 2005a, p.31). Forcing public disclosure by hedge funds could allow others to infer their trading strategies and information, inducing mimicking trade which could erode the profitability of strategies (Easley et al, 2012, p.1). Additionally, the large scale of hedge fund positions means that any position adjustment imposes liquidity demands on the market. Knowledge of fund positions could allow others to exploit this need for liquidity, thereby also reducing the profitability of hedge fund trading (Easley et al, 2012, p.1). This fear is extended to proprietary computer programs developed by hedge funds which would contain an algorithm that generates buy or sell signals on securities. Traders often develop these systems after conducting intensive research on historical price trends, volatility and other technical relationships. If competitors have access to the trades that a manager makes, they may be able to reverse engineer the models being used (Hedges IV, 2005a, p.31). Thus, although hedge fund managers acknowledge that more efficient means of information dissemination would be a reputational boon for the industry, there is fear amongst managers that their transactions and positions become known by other managers, putting them at a competitive disadvantage, jeopardizing their viability and continued existence. Furthermore, as will be analysed in the subsequent sections, more transparency does not necessarily mean that investors will be more protected against hedge fund failure or fraud. The information provided must be consistently analysed and active due diligence conducted on the operations of a hedge fund.
5.2.4 Standard Disclosure Model?

Transparency can be a critical differentiator in investment decision making processes, however, the type of information disclosed and the level of complexity can also be a cause of much confusion for investors. The general consensus by hedge fund industry participants has been that enhanced transparency will be beneficial to the industry but this in itself is a difficult task due to the dynamism of the sector and complex investment profiles which span across multiple markets, strategies and fund structures. Developing an effective disclosure model to promote transparency is a more complicated approach than simply adhering to regulation set by authorities and industry bodies. An important part of the success of any hedge fund is the innovativeness of its investment strategy which is also an area where most of the fraudulent conduct can occur and hence the extent to which hedge funds disclose details about their investment portfolios can be influential in mitigating fraud and failure (Anson, 2002, p.79).

There are four main types of transparency information available to investors identified by Anson (2002, p.80); disclosure transparency, process transparency, position transparency and exposure transparency. Disclosure transparency relates to the details generally provided by hedge fund managers to investors as part of their product disclosure statements or offer documents. Hedge fund managers are not known for their ability to dictate information about their investment mandate and comparative benchmarks succinctly, possibly due to fear of loss of proprietary information. This argument has been the main issue behind the lack of transparency within the industry and hence the purpose of disclosure information has been widely considered as a ‘necessary evil’. The information
provided is either too complex, too long or irrelevant to investors and exposes an important vulnerability behind the purpose of such information (Hu, 2012, p.1609). This perceived lack of transparency blurs the distinction of accountability whereby, should a hedge fund manager neglect her responsibilities, there is no mandated information detailed enough for which she could be held accountable. Hence investors are usually left in the dark in relation to legal recourse. Process transparency relates to information that the manager should convey about her investment process (Anson, 2002, p.81). Hedge fund managers usually describe their investment process as skills-based, an opaque approach which does not identify specificity, especially when the fund manager has unlimited discretion in executing investment strategies (Connor and Woo, 2004, pp.7-8). This presumes that the method of getting to those portfolio positions is not transparent. Hence, a fund essentially refrains from disclosing their investment strategy for achieving portfolio positions, thereby protecting their proprietary positions (Black, 2007, p.333).

Position-level information can be used to understand and continuously monitor the nature of market risks the manager is undertaking and provide some safeguard against operational risks especially when compared to returns-based risk measures which are, in contrast, generally less effective because they fail to adapt to dynamic trading (Jorion, 2009, pp.924-925). However, taking into consideration the complexity of hedge fund investing strategies across multiple sectors and jurisdictions, this information would possibly be more of a hindrance than assist in helping investors understand and estimate risks, especially because it would require a complex risk management system. In general, most investors do not have risk management systems sufficiently robust to accumulate all
of the detailed position information that might be received from a pool of hedge funds (Anson, 2002, p.81). Schwarz and Brown (2010, pp.17-19) found that there is also a potential for traders to front-run disclosed positions and events because of position disclosure and use of private information for profit. This model of hedge fund risk information was initially submitted by the Investor Risk Committee as identified in section 5.2. There have been numerous representations made by various other governing bodies since then, but what is of more importance to this section was the stance by the Committee that full, daily position reporting by hedge fund managers was not a cost effective and efficient solution for increased transparency. This was substantiated by a number of negative externalities, that such disclosure may compromise a hedge fund manager’s strategy and that investors may not be able to handle or use effectively the vast amounts of daily information available. The Committee proposed that exposure reporting combined with delayed position reporting was sufficient for risk monitoring and management purposes (Anson, 2002, p.82).

Exposure transparency, which has been touted as an efficient method of relaying information to investors, is the reporting of summarized risk information as opposed to individual and detailed trading position by position reporting (Anson, 2002, p.82). Hedge funds could disclose information about the overall portfolio risk associated with their strategies without revealing proprietary information (Edwards, 2003, p.17). The information about a hedge fund’s exposure, usually known as ‘risk-buckets’, is the collation of aggregate investment positions held by the hedge fund into a summarized version which

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is meant to ease the understanding of this data. The practice of risk management is to measure and manage the aggregate risk exposures across a diversified portfolio and, hence, risk buckets accomplish this task by identifying the factors that most impact the value of an investment portfolio (Anson, 2002a, p.125).

It is almost impossible to definitively develop a disclosure strategy which would cater to the requirements of all stakeholders within the hedge fund industry. The arguments for and against increased transparency of hedge fund activities circle around the publication of information. The fact that hedge fund managers demand that their proprietary information be protected against competitors means that position-level information or process-transparency are not possible solutions because this would divulge too much information. Disclosure transparency on the other hand has been a practice within the hedge fund industry for a long time and its ineffectiveness can be shown by the numerous collapses of hedge funds due to fraud or simply excessive risk taking. For example, even with mandatory disclosure filing requirements introduced under the Dodd-Frank Act in the US, there are provisions which allow hedge funds to ‘opt out’ of disclosing information. In particular, Section 13(f) of the Securities Exchange Act requires institutional investment managers to disclose their quarterly portfolio holdings on Form 13F, with an exception. The exception to the rule provides confidential treatment of certain holdings which enables hedge funds to delay the disclosure of those holdings for usually up to one year (Agarwal et al, 2012, pp.739-740). The ‘delayed reporting’ provision creates opportunities for hedge fund managers to evade providing more transparent information of their investing activities. Finally, exposure level disclosure, although considered the best option, also has
its weaknesses because the collation of aggregate information, which will be left to the
discretion of the hedge fund manager, especially in the case of valuing illiquid assets, may
lead to risks of misrepresentation or the information being manipulated to portray much
more favorable results, thus defeating the purpose of mandating transparency. A possible
solution to eliminating these problems is through the mitigation of operational risks and
the following section analyses the causes of hedge fund failure which do not relate to
financial risk alone. The focus is on the operational risks within hedge funds which has
been a major contributor to investor losses and will assist in explaining the need for a
multi-layered approach to effective risk management of hedge fund activities.

5.3  Hedge Fund Failure

5.3.1 Sources of failure

The attrition rate within the hedge fund sector is substantially higher compared to any
other privately managed investment vehicles within the alternative investment industry
(Getmansky, 2012, p.34). A common cause identified is the use of extensive leverage and
riskier investment strategies. Whilst hedge funds’ leveraged investments are perceived to
have the ability to move markets, the extensive use of leverage in funds raises concerns
about their liquidity and solvency in times of market stress especially where volatility sees
extreme price swings in securities (Brown and Goetzmann, 2003). It may be contended that
a solution to these inconsistencies is the use of effective risk management models,
however, as identified in section 5.2, most of the standard risk management models which
have been used in the financial services industry are inapplicable to hedge fund investing.
The continued positive performance of hedge funds during the 1990s when financial markets were considerably more stable inflated confidence in the industry. This was assisted by stricter regulation of the other investment vehicles such as mutual funds and pension funds and encouraged a shift of investments into the unregulated shadow banking sector. Secrecy within the industry restricted an understanding of the manner in which absolute returns were generated and how hedge fund operations were conducted. Publicity on hedge fund collapses was minimal, predominantly restricted to high profile collapses such as LTCM, and thus, there was little consistent attention given to the risks which hedge fund operations posed. However, this has changed in the wake of the GFC 2008 with a constant stream of hedge fund failures which investors have begun to take into account as financial losses of investments within such funds increase. The increasing number of hedge fund collapses over the past five years has shown the unpredictable survivability of hedge funds and is contrary to the belief that hedge funds are designed and marketed on the basis that they are able to generate absolute returns while providing downside protection for investors in times of crisis, without excessive losses, let alone failure.

A majority of the research on hedge fund attrition has mainly focused on performance failures as a result of excessive financial risks (Liang and Park, 2010, Brown et al 2008, Amin and Kat 2003, Liang 2001). Bianchi and Drew (2006) examined return data on hedge fund attrition, biases and survivorship premium between 1994 to 2001 and found an estimated attrition rate of 9 percent per year, twice that reported by mutual funds. Brown et al (1999) state that the attrition rate for hedge funds is about 15 percent per year based on data from 1985 to 1989 and a large proportion of hedge funds do not survive more than
three years. Using a different dataset, Liang (2001, p.15) shows a lower attrition rate of 8.5 percent per year for data analysed between the years 1994 to 1999. Amin and Kat (2003) investigated the attrition rate of hedge funds from 1994 to 2001 and stated that the rate was not only high but showed a defined and increasing trend over the years analysed. Further, they state that lack of size and performance are important factors behind hedge fund attrition and that the attrition rate is much higher among hedge funds with lesser AUM as opposed to the larger, more prominent hedge funds. These significant results have not affected the growth of the hedge fund industry even though the causal impact of excessive risks resulting in losses affirms poorer performance, operational failure and an inability to accumulate sufficient assets under management. Hence, the level of hedge fund attrition does not necessarily mean that it is because of those hedge funds which have failed, although, hedge fund failure certainly contributes largely to its attrition rate.

Defining hedge fund failure can be a challenge because it is difficult to obtain detailed information on defunct hedge funds. Additionally, liquidation does not necessarily mean failure in the hedge fund universe. Liang and Park (2010, p.200) state that successful hedge funds can be liquidated voluntarily due to the markets, expectation of the managers or other reasons which does not necessarily mean failure or insolvency. For the purposes of the thesis, emphasis is placed on hedge fund failure as a result of operational risks and fraud which includes risks of misrepresentation, manipulation and misappropriation, an important problem which has been widely disregarded as a significant contributor to lack of survivability within the hedge fund industry.
The only substantive study on hedge fund failure as a result of operational risks was conducted by Kundro and Feffer (2003). They investigated 100 hedge fund liquidations and found that 54 percent of the failures had identifiable operational issues with nearly half of all fund failures due to operational risks alone. Of this number, 41 percent were caused by operational risks due to misrepresentation of investment performance, 30 percent involved misappropriation of funds and general fraud and 14 percent involved unauthorized trading and style breaches, 6 percent involved inadequate resources and 9 percent involved other operational issues. Kundro and Feffer (2003) also found that 38 percent of hedge fund liquidations could be attributed to investment risk only and the remaining 8 percent could be attributed to business risk or a combination of risks. This is further supported by a study on hedge fund failures by the United States Congressional Research Service which found three main reasons for hedge fund failure: unfavorable market moves depicting financial risks; operational issues, such as errors in trade processing or mispricing complex, opaque financial instruments; and fraud or misbehavior by fund management (Jickling and Raab, 2006, p.CRS3).

Brown et al (2009) found that operational risk was a major cause of hedge fund underperformance, particularly when there were conflicts of interest between managers, investors and other stakeholders. They also found an adverse relationship between the structure of management concentration and returns. The more concentrated a funds’ management, the lower the returns and even though a funds’ operational risk characteristics seemed to be understood by those providing leverage to the funds, this did not mediate the naïve tendency of investors to chase past returns despite having a negative
impact on investor returns. According to a 2012 industry survey\(^9\) commissioned by a law firm, Labaton Sucharow and the Hedge Fund Association from the US, nearly half (46 percent) of hedge fund professionals believe that their competitors engage in illegal activity, more than one third (35 percent) have personally felt pressure to break the rules, and about one third (35 percent) have personally felt misconduct in the workplace substantiating the need to investigate operational risks within hedge funds in an effort to mitigate collapses and the risks which could lead to systemic failure.

5.3.2 Operational Risks

Operational risk can be defined as losses that are neither due to market risk nor credit risk but rather arise from human error, internal and external failed processes, unlinked systems, megamergers and/or new technologies (Guizot, 2007, p.59). The advent of operational risks within hedge funds, if not circumvented, results in failure which can amplify system wide risk levels and has a greater potential to transpire into more harmful ways than many other sources of risk, given the size of leveraged positions and interconnectedness of the hedge fund industry (Jobst, 2010, p.47). The diversity and complexity of hedge fund investment management organizations means that investors cannot simply assume that a fund manager has an operational infrastructure sufficient to protect shareholder assets (Nahum and Aldrich, 2008, p.106).

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The International Association of Financial Engineers defines operational risk as losses caused by problems with people, processes, technology, or external events. More specifically, these include the risks of failure of the internal operational controls, and accounting systems, failure of the compliance and internal audit systems, and failure of personnel oversight systems, that is, employee fraud and misconduct (Brown et al, 2008, p.43). The Basel Committee on Banking Supervision state that operational risk is the risk of loss resulting from inadequate or failed internal processes, people, and systems, or from external events and excludes investment risks (BIS, 2011, p.3). Within hedge funds, operational risk is therefore the non-financial risks faced by an fund as a consequence of alternations in regular functions and is usually described as ‘risk without reward’ as it is the only risk that investors face that is not rewarded with potentially increased returns (Nahum and Aldrich, 2008, p.106). This attitude has led to complacency by investors where failure to place emphasis on the importance of operational risks controls has resulted in numerous frauds. Investors should appreciate that adequate and efficient operational risk management leads to positive overall returns as compared to a vulnerable, risky organisation.

The importance of operational risk management in hedge funds has been neglected historically for various reasons and has not been an area of importance which clearly affects investor decisions (Brown et al, 2012, p.223). Investors have always been more interested in the quantification of risk where analytical information can be derived through metrics and which is perceived as a more valuable indication of risk and performance. Academics have followed suit by focusing research in this area, utilizing risk management
models such as VaR and the Sharpe Ratio, substantiated by historical data which according to Lo (2001) may not capture many of the risk exposures of hedge fund investments. This quantification of risk has enabled financial professionals and investors to evaluate the correlation of their invested income and the risk profiles of hedge funds based on investment strategies with consistency but little consideration has been given to instances of exceptional circumstances such as tail risks and shifts in investment strategies, a common occurrence within the hedge fund industry and a notable cause of financial losses.

According to Grody et al (2008, p.142), accounting for operational risk exposure and accommodating the operational risk component into risk capital has been a challenge. The lack of any measure of operational risk exposure, the failure to incorporate the importance of data into risk measurement models and the lack of any cohesive mechanism to correlate operational risk exposure with historical operational losses has yet to be structured with an accepted model or methodology. This stance is supported by Holmes (2003) who outlined four reasons why operational risk quantification is a difficult task. The issues include a lack of position equivalence where it is difficult to construct a complete portfolio of operational risk exposures, loss data is affected by the continual change of organizations and the evolution of the environment in which they operate and lastly the difficulty in validating operational risk models (Sodhi and Holland, 2009, p.158). The inability to fully quantify operational risk will be an ongoing issue because the variables in question relate to, amongst other things, human behavior, an unpredictable component of any hedge fund investment management organization.
The operational and legal structure of a hedge fund opens it to conflicts of interest between the fund manager and its investors, something which can also arise with various counterparties in business relationships with the fund. For example, hedge fund managers are incentivized by performance fees and many hedge funds trade in complex financial instruments which often have greater valuation subjectivity, hence presenting them with the opportunity to structure asset values at their own discretion (Nahum and Aldrich, 2008, p.106). This unregulated principal-agent relationship means that the fund manager may not act in the best interests of the investors. Investors have to be aware of rogue and irresponsible fund managers who may conduct their investing activities recklessly, resulting in investment losses. Past manager behavior indicative of risks may include previous fiduciary decisions, as well as previous legal and regulatory actions taken against the manager, and any other variable that might be correlated with the propensity to make future illegal or unethical decisions in favor of the hedge fund manager's own interest at the expense of an investor, counterparty or other stakeholders (Brown et al, 2008, p.7).

Brown et al (2012, p.226) state that an important question for investors is whether a fund's operational controls compensate for any potential historical breaches of trust. Although corporate governance mandates such as internal controls and compliance procedures can be effective, the risk of fraud within a hedge fund is increased with opportunity and incentive in an operationally weak environment. In the context of a hedge fund where the limited partnership form facilitates the complete separation of control and ownership over invested funds, conflicts also arise in valuation methodologies, provision of side letters and in close broker-dealer relationships (Sklar, 2009, pp.3266-3267).
The ownership and organisational structure of a hedge fund may be an indication of possible operational risks problems as the ability for separation of responsibilities is reduced within a closed structure. Research by Brown et al (2008) found that funds with greater operational risks vulnerabilities have a “higher number of direct and controlling owners and that the number of direct owners in the form of non-individual domestic entities is higher for problem funds than it is for non-problem funds”. This suggests that funds which exhibit higher operational risk characteristics are more likely to structure the fund within a venture or partnership with another institution, allowing owners to obfuscate their direct effective ownership. The result of their findings indicates that a fear of expropriation will lead to the establishment of a more concentrated management structure. Operational risk factors are also correlated with lower leverage and concentrated ownership in hedge funds, suggesting that bank financial intermediaries tend to provide less leverage to funds with inherent operational risks problems and this can impact a funds’ creditworthiness (Almeida and Wolftenzon, 2006). Harvey et al (2004, pp.5-7) state that the ease of availability of external debt to hedge funds indicates a positive governance stance by lending institutions which translates into the effectiveness of an organisation’s governance mechanisms and, therefore, problem funds generally have lower leverage and less margin offered to them than non-problem funds.

Hedge funds employ third parties, especially prime brokers who execute the trades ordered by the hedge fund manager\textsuperscript{10} as well as providing financing and risk management.

facilities on transactions. Additionally, prime brokers act as marketing agents, raising capital for the fund by introducing the fund’s managers to some of the brokerages more important clients and are compensated by hedge funds based on the services rendered (Sklar, 2009, p.3269). The lack of separation between brokerage service and financing raises concerns of conflict of interest as to whether these prime brokers exercise independence or neglect their fiduciary responsibilities for self-interest while, at the same time, compromising the best interest of investors. For example, if the fund manager agrees to higher brokerage fees in return for additional services which will benefit them on a personal basis as opposed to the fund, the investors will stand to be disadvantaged. Hedge fund managers may also choose not to have brokers and operate solely for their own account which ultimately reduces independence. The processing of hedge fund trades is more complicated if the fund administrators responsible for shareholder registrations and fund accounting are located in offshore locations where technologies are difficult to integrate and more expensive to implement (Gizmot, 2007, p.61). Operational problems also arise from the lack of reconciliations between different parties involved in the reporting of risk exposures by brokers, hedge fund managers, and offshore operations (Gizmot, 2007, p.61).

Integrating hedge funds’ operations is also more complicated because their strategies are more innovative and original than those of traditional mutual funds (Gizmot, 2007, p.61). The use of side letters by hedge funds leads to favorable outcomes for certain investors and not others. Further, side letters may provide a large influential institutional investor with better investment terms than available to others, for example, reduction in fees, more
frequent or detailed disclosures, better withdrawal terms, reduced lock-up period (Collins, 2008, p.401). This discriminatory conduct while not illegal, could serve as an important red flag for investors that preferential treatment is afforded to certain investors at the overall cost of the funds' profitability. Such vulnerabilities within the operations of hedge funds directly eventuate in loss of returns for investors. This deceptive conduct has never been adequately addressed and, over time, a small percentage of losses usually results in high negative returns.

5.4 Valuation Risks and Fraud

5.4.1 Net Asset Valuation (NAV) Risk

The valuation process drives nearly every decision that a hedge fund manager makes, from risk management to how they will compensate themselves, which in turn will affect many aspects of the relationship between hedge fund managers and investors (Sklar, 2009, p.3298). The method with which a hedge fund manager values complex investments in the fund’s portfolio poses significant problems especially because there are no standards or rules that dictate valuation methods for hedge fund portfolios which are left to the discretion of the hedge fund manager (Gaber et al, 2004, pp.328-331). Investors’ base investment decisions on the performance of hedge funds and, hence, the motivation to maintain consistent growth poses significant risks to manipulation of financial performance, financial reporting, performance reporting and collateral requirements (Mangiero, 2006, pp.20-21). Moreover, the typical offer documents will grant the hedge fund manager the liberty of deviating from stated valuation policies and procedures when
it is deemed necessary, thereby further obfuscating the valuation process and making the potential conflicts of interest more pronounced (Sklar, 2009, pp.3268-3269).

The value of an investment in a hedge fund, known as a hedge fund’s NAV, should be based on quantifiable and unquantifiable variables that investors have to take into account in determining their investment and forecasting decisions (PWG, 2008, p.43). However, Poniachek (2008, p.26) state that the NAV of a hedge fund only comprises the net value of its investment positions, after fees and expenses, and this is used by stakeholders as the basis for all subscriptions, redemptions, and performance calculations (Kundro and Feffer, 2004, p.42). Factors such as the reputation of a hedge fund, the managers’ historical performance, track record and having adequate operational infrastructure are rarely included in determining the true value of the NAV because these unquantifiable variables are subjective and dependent on uncontrollable externalities even though they are an integral part of the equation. Furthermore, the value of securities within a hedge fund portfolio can also be subjective, predominantly based on market sentiment as opposed to its real value and has an impact on valuation methodologies and outcomes. To explain this Fishman and Parker (2010, pp.2-5) state that, in a credit boom all assets are traded and sufficiently funded. During a period of financial uncertainty where crisis occurs, there is a decline in trade, observed prices fall and real investment declines. The price decline occurs because unsophisticated investors leave the market and market power changes from one in which assets are in short supply to one in which the ability to conduct valuation is in short supply. There is a sort of flight to quality in two senses, only good assets are funded, and unsophisticated investors flee to the market opting to invest elsewhere (Fisher and Parker,
The scenario is further complicated with investing in the hedge fund industry where the fund manager has complete discretion over valuation methodologies. The success of hedge funds is based on proprietary knowledge protected by regulatory requirements which mandates that performance data be only provided to individual investors. As such, practices within the industry are extremely unstructured and inefficient (Horwitz, 2004, p.143). The issue pertaining to valuation in hedge fund portfolios concerns how to ensure that a fund uses fair and proper prices for positions that are held in a fund. Inaccurate or over-inflated asset valuations risk adversely affecting investors and investor confidence through incorrect redemption and subscription rates, and may also result in the payment of unjustified performance fees to hedge fund managers (McVea, 2008, p.131). The complexity and diversity of hedge fund portfolios and allocation into complex investments has resulted in significant efforts to formulate tools and processes for accurately valuing them (PWG, 2008, p.43). These efforts have not had the desired results, evidenced by the increasing cases of hedge fund fraud due to misrepresentation and manipulation since 2008. There have been various studies which have revealed that one of the primary cause of hedge fund failure due to fraud and misrepresentation is because of manipulation and deceptive conduct pertaining to the value of financial assets as well as resource problems resulting in an eventual inability to form an accurate price or risk within the funds book (Ingersoll et al, 2007; Agarwal et al, 2011, Bollen and Pool, 2011; Bollen and Pool, 2009; Jylha, 2011; McVea, 2008a). Furthermore, the compensation structure within hedge funds which focuses on attaining absolute returns and meeting high watermarks incentivizes managers not only to take on risks more aggressively but to
manage valuations and claim performance fees that are not in fact merited (Sharma, 2012, pp.4-5).

Some of the more prominent causes of hedge fund fraud are perpetrated when managers participate in misrepresentation and price manipulation, for example by disclosing inflated asset value unjustifiably, and resisting conservative estimates by administrators. The availability of leverage also enables managers to artificially move market prices on invested securities, inflating values and disregarding the potential of magnified losses (McVea, 2008a, p.133). Bollen and Pool (2011, p.15) state that fraudulent activities of hedge fund managers are more likely to be discovered during times of market downturns such as the recent financial crisis, where misappropriation, manipulation and fraud are revealed following an increase in investor withdrawal requests, since at that time it becomes clear that assets in the fund have been expropriated or valuations have been inflated. This is consistent with the view of Fisher and Parker (2010) who identified distinct variances in security prices between periods of excessive credit and that of financial uncertainty where crisis occurs. Moreover, in view of the emerging international regulatory consensus which emphasizes the monitoring skills of hedge fund counterparties in helping to moderate the risk-taking and general conduct of hedge funds, incorrect valuations are, as events in the recent subprime mortgage market debacle have shown, likely to result in a hedge fund’s total risk profile being mispriced (McVea, 2008a, p.131). In rapidly evolving financial markets, inaccurate valuations may quickly alter the implications for solvency and, more broadly, financial stability increasing the likelihood of financial losses borne by investors (IMF, 2008a, p.110).
5.4.2 Illiquidity and Return Smoothing

Assets comprising of illiquid and/or complex instruments, which do not have a ‘public screen price’ means that managers are more likely to be involved in helping to facilitate valuations by, for example, providing information and price quotes (FSA, 2005, p.48). These valuations are difficult for hedge fund administrators to challenge because the assets are intrinsically hard to value (McVea, 2008a, p.134). Complex and illiquid financial instruments are often ‘marked-to-model’ rather than being ‘marked-to-market’ which often results in inaccurate valuations\(^\text{11}\) (Crotty, 2008, p.28). By definition, these models rest on assumptions and thus may provide forecasts which are highly subjective. There is also the risk of what is known as autocorrelation. Typically, a financial instrument is valued on the basis of a chosen methodology which is applied on a regular basis over a given period of time and in the case of complex, illiquid assets, whose values will inevitably vary over time, the repeated use of the same methodology is likely to result in the volatility of returns associated with understated valuations and a tendency to distort fund returns (McVea, 2008, pp.10-11). Even in situations where valuation of thinly traded securities is substantiated by quotes from brokers and dealers, the methodology used would be affected by variations in assumptions. Kundo and Feffer (2004, p.42) claim that broker-dealer quotes for complex financial instruments such as mortgage-backed securities may vary by as much as 20 to 30 percent, the prices quoted are unlikely to be reliable estimates of real value and the ‘bid-ask’ spread, which is the difference between the quoted buying and selling prices of a security, will vary substantially because of the absence of an active market for traded securities (Deloitte Research, 2007, pp.12-15).

Given the nature of hedge-fund compensation contracts and performance statistics, managers have incentives to ‘smooth’ their returns by marking their portfolios to less than their actual value in months with large positive returns so as to create a ‘cushion’ for those months with lower returns (Fong, 2005 p.29). Lo et al (2004, pp.545-546) pointed out that managers participate in return smoothing, or the deliberate and fraudulent manipulation of portfolio, to optimize fund returns and state that the only types of assets for which a hedge fund manager has sufficient discretion and latitude to manipulate NAVs are those for which there may not be a well-established market price and where a hedge-fund manager has considerable discretion in marking the portfolio’s value at the end of each month to arrive at the fund’s NAV. Goetzmann et al (2007, p.1504) take a similar view and state that if investors use specific performance measures such as the Sharpe ratio to evaluate investable hedge fund managers, then the managers have an incentive to take actions to enhance these measures, including manipulation. They show how traditional measures can be distorted through simple manipulation strategies by focusing on trading strategies that are conducted to affect the return distribution of a fund in specific ways to manipulate standard performance measures (Bollen and Pool, 2008, p.6).

Cassar and Gerakos (2011, pp.1699-1701) investigated the extent to which hedge fund managers smooth self-reported returns by analyzing the mechanisms used to price a fund’s investment position and report the fund’s performance to investors as opposed to previous academic research which focused on the ‘anomalous’ properties of hedge fund returns, thus allowing them to differentiate between asset illiquidity and misreporting-based explanations. They find that using less verifiable pricing sources and funds’ that provide
managers with greater discretion in pricing investment positions are likely to have returns consistent with intentional smoothing. They state that the use of more reputable auditors and administrators is not associated with lower levels of smoothing as the primary responsibility of the auditor is in evaluating the fund’s annual financial statements as opposed to evaluating the fund’s monthly performance reports. Their findings suggest that overall, the reputation of those who calculate and review the fund’s financial statements and NAV play a relatively smaller role in the reduction of misreporting monthly returns than do the sources of prices and who prices the fund’s investment positions. Funds’ managing large risky portfolios with non-conventional strategies seek confidentiality more frequently. Stocks in those holdings are disproportionately associated with information-sensitive events or share characteristics indicating greater information asymmetry (Agarwal et al, 2013a, p.739). Together the evidence supports private information and the associated price impact as the dominant motives for confidentiality. Further, Bollen and Pool (2008) state that managers are motivated by an incentive to smooth losses to delay reporting poor performance, and an incentive to fully report gains in their competition for investor capital (Straumann, 2009). Thus, the ability of hedge fund managers to manipulate NAV by intentional smoothing increases the more illiquid the assets they hold, since the opportunity to exercise discretion exists only when recent trade prices are not available (Bollen and Pool, 2011, p.9). Marking-to-model and deliberate smoothing makes it difficult to identify a hedge fund manager’s intent without additional

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information as they both generate identical time series properties (Getmansky et al, 2004; Arnold, 2013, p.30).

5.4.3 Misreported Returns

The misreporting of hedge fund returns has been observed and analyzed in studies by Agarwal et al (2011), Bollen and Pool (2009), Cumming and Dai (2010) and Cici et al (2011). Hedge fund managers have varied motivations for misreporting returns for example, charging higher management fees, attracting future capital flows and wealth transfer. By overstating asset values and thus disclosing favorable performance of investment strategies, fund managers can charge a higher concurrent management fee, attract future investment flows, and hence higher future fees. Additionally, by overstating returns and hence asset values during periods of positive capital flows, a fund manager can overcharge new investors for their shares, resulting in a wealth transfer from new investors to old investors (Jylha, 2011, pp.2-4). Similarly, understating returns and asset values during negative capital flows will result in too little being paid out to the leaving investors, and hence a value transfer to the remaining investors (Jylha, 2011, pp.2-4). For example, Agarwal et al (2011, pp.3282-3284) using a comprehensive database of hedge funds show that funds manage their reported returns in an opportunistic fashion in order to earn higher fees. They focus on two types of incentives faced by hedge fund managers. The first one relates to the promise of rewards for good performance and second relates to the threat of penalties in the form of capital withdrawal by investors following poor performance. These incentives motivate funds to report better performance. Acknowledging that hedge funds are compensated annually, Agarwal et al (2011) research
indicates a spike in the December return results, leading to the conclusion that the spike is systemically related to the benefits and costs associated with returns management. Further, Bollen and Pool (2009, p.5) state that hedge fund managers have an incentive to report the most attractive returns possible to investors and that managers have discretion over trading strategies and reporting practices to affect the shape of the distribution of reported returns.

Recent research by Cici et al (2011, pp.3-5) on the valuation of equity positions by hedge fund managers found that managers with more pronounced valuation deviations show a stronger discontinuity in their reported returns. The research found evidence consistent with the Strategic Valuation Hypothesis\(^{13}\) suggesting equity valuation deviations are not random but could be manipulated. The conclusion suggested firstly that valuation deviations are related to suspicious irregularities in reported returns, specifically hedge fund managers with more pronounced equity valuation deviations show a stronger discontinuity in their reported returns. Secondly, the documented valuation deviations are more prevalent among advisers with characteristics suggesting a stronger presence of incentives to engage in pricing irregularities. In particular, hedge fund managers who self-report to commercial databases show more pronounced equity deviations. This is consistent with the analogy that managers use valuation as a tool in trying to impress potential investors that are exposed to the managers’ self-reported returns. In addition, they state that hedge funds domiciled in offshore tax havens also evidenced stronger

\(^{13}\) Valuation deviations reflect certain advisors strategically managing their equity position valuation to impress upon their potential or existing clients (Puetz et al, 2011, p.3).
valuation deviations with similar motivations due to greater discretion and possibly a lax regulatory environment. Lastly, they document a direct link between valuation deviations and past performance. More specifically, they show that hedge funds which show weak performance over “the last twelve months” the managers responded by marking up their positions. Conversely, when hedge funds show strong performance, managers respond by marking down their positions relative to standard valuations (Cici et al, 2011, pp.3-5). This evidence suggests that a component of the valuation behavior of hedge fund managers is directly driven by incentives related to performance considerations.

Put these natural, inherent difficulties in pricing complex or illiquid investments together with a powerful incentive to show strong or hide weak performance, and then situate these factors in an environment with minimal regulatory oversight, or without strict discipline and internal controls, and there is a potential for trouble (Kundro and Feffer, 2004, p.42). On the one hand, existing rules and procedures for investor protection should provide the basis for effective regulation in the hedge fund industry, but it is not clear how those rules can always be made compatible with the non-transparent environment in which hedge funds necessarily operate. It is an open question whether stronger governance rules should be introduced for those hedge funds indirectly collecting retail investors’ money, either through professional codes of conducts, market mechanisms reinforced by a rating process or more compulsory and binding regulations. It is a fallacy to assume that the exclusivity of hedge fund investment management organizations servicing high net worth individuals automatically means that fund managers will have the most advanced and efficient operational infrastructure in place to protect investors. Evidence from investigated hedge
fund collapses has shown that this is a widely neglected area in the industry. Investors may be blinded by the returns of hedge funds and shielded in understanding the true infrastructural and operational deficiencies and related risks they pose. However, it is also extremely difficult to quantify with appropriate models, the loss distributions attributable by operational risks. In this regard, the work of International Organization of Securities Commission (IOSCO) to develop a set of best practices for the valuation of hedge fund assets seems promising. In order to encourage hedge funds to apply them, financial market regulators and supervisors could take them into account in their requirements vis-à-vis prime brokers.

5.4.4 Best Practice Guidance

The failure and collapse of hedge funds and the impact of financial losses due to valuation discrepancies prompted reviews by industry groups, government bodies and various self-regulatory organizations to comment on and make recommendations to provide best practice guidance on valuation procedures. As shown above, the valuation problem within hedge fund investment portfolios has been a re-occurring challenge mainly due to the illiquid nature of securities invested within these portfolios.

The HFWG presented a report entitled “Hedge Fund Standards: Final Report January 2008” which provided guidance on disclosure advice to hedge fund investors motivated by a need to curtail loss of confidence in the industry. On the topic of valuation, the industry body stated that “it is important to recognize that investors need to be informed about the valuation process and have confidence in its breath and robustness” (HFWG, 2008, p.46).
Two particular issues highlighted which required greater scrutiny were the segregation of functions in valuation procedures and the problems associated with hard-to-value or illiquid assets. Its standard on segregation of valuation procedures recommended that a third party be responsible for valuing the funds’ assets and calculating the fees payable to the manager and emphasized the risks of conflict of interests in such circumstances where the hedge fund manager has a significant input in the valuation process (HFWG, 2008, pp.47-48).

However, the HFWG did recognize that in certain circumstances it would not be feasible to employ an independent valuation specialist who may have the required level of knowledge or competence to conduct these responsibilities and in such circumstances it would be unavoidable that the hedge fund manager participates in this process, thus, maintaining a neutral stance (HFWG, 2008, p.48). Further, the standard highlighted the use of side-pockets by a hedge fund manager and dictated that information on assets eligible for ‘side-pocketing’ should be disclosed in valuation policy documents (HFWG, 2008, p.52). Hedge fund managers should ensure that management fees for ‘side-pocketed’ assets, if charged, are calculated on no more than lower of cost or fair value, and that performance fees for these assets are paid only at realization event or if a liquid market price is available (Kaal, 2009, p.599). This stance of independence in valuation procedures was reinforced by the Chartered Financial Analyst Institute (CFA, 2010) in its policy document which recommended a professional code of conduct directly addressing performance and valuation problems applicable to hedge fund managers. The performance and valuation provisions of the code advise hedge fund managers to present performance information
that is fair, accurate, relevant, timely, and complete. Managers must not misrepresent the performance of individual portfolios or of their firm. Moreover, managers should use fair market prices to value client holdings, and apply, in good faith, methods to determine the fair value of any securities for which no readily available, independent, third-party market quotation is available (CFA, 2010, pp.3-7). However, there was no detailed guidance provided on appropriately verifiable methodologies in determining the ‘fair-valuation’ of illiquid securities.

The International Organisation of Securities Commission (IOSCO) committee provided a comprehensive, globally recognized set of benchmarks of good practice in valuing hedge fund assets as set out in its consultation report entitled “Principles for the Valuation of Hedge Fund Assets”. The report identified nine best-practice principles which included documenting policies and procedures for valuation of financial instruments with the proviso that there were ‘certain issues’ indirectly related to hedge fund portfolios not addressed, including requirements for the timely disclosure for a hedge fund’s NAV, valuation of a hedge fund portfolio as a whole as opposed to the valuation of particular financial instruments, the valuation of investments in other funds held by a fund of hedge funds and compliance issues in relation to the accounting of these instruments (IOCSO, 2007, p.6; Kaal, 2009, pp.600). The standard specified in broader terms that financial investments by hedge funds should be consistently valued according to policies and procedures and be reviewed periodically. It also recommended that the hedge fund governing body or compliance committee should ensure independence in the application of policies and procedures as well as a separation of responsibilities if the manager is
involved in the valuation process similar to the Hedge Fund Working Group recommendations. Recommendation 7 specifically identified ‘price overrides’ as a focal point in valuation procedures, a practice within the hedge fund industry where the value of an illiquid asset is disregarded if unfavorably quantified by an independent valuation specialist. It stated that the policies and procedures for price overrides should encompass a requirement for reporting to, and an appropriate level of review by, an independent party and that the reasons behind the override be documented contemporaneously, including evidence supporting the case for a proposed override (IOSCO, 2007, p.16).

These recommendations fall short of dictating exact procedures involved which has been left to the discretion to the hedge fund manager and related parties and hence leaves much to be desired. McVea (2008, p.24) stated that such measures are ultimately flawed as they stood and either ignore or gloss over important aspects of a valuation process. Particular conflict-of-interest problems arise with respect to managerial discretion with the valuation of ‘hard-to-value’ assets and the use of side-pockets, thus falling short of recommending any substantial policies to protect investors against fraud risks in valuation procedures.

The President’s Working Group on Financial Markets in the US submitted its report of the Investor’s Committee called entitled “Principles and Best Practices for Hedge Fund Investors” which developed guidelines that define best practice for the hedge fund industry using the PWG’s principles-based guidance. The Investor's Committee addressed in broad context the need for a hedge fund to have specific valuation policy, governance of the valuation process, valuation methodologies and controls with an overall emphasis on transparency,
independence and oversight (Kaal, 2009, pp.600-601). One significant point in the
recommendations was the committee’s specification of acceptable valuation methodologies
in relation to hard-to-value or illiquid securities. It advises hedge funds to utilise valuation
services in the case of less liquid securities such as loans or private placements. The use of
independent third-party sources such as capable hedge fund administrators to verify and
compare values assigned to particular securities as an alternative to valuation services was
strongly recommended. In situations where financial modeling is utilized or required due
to complexities in the securities, the valuation model should also be reviewed by an
independent party to substantiate appropriate methodology. Finally, should none of the
abovementioned methods be feasible and the hedge fund manager is ultimately the best
person to advise on the value of such illiquid securities, the fiduciaries of the hedge funds
will bear ultimate responsibility to verify the viability of the methodologies based on strict
rules of independence and transparency (PWG, 2008, p.46-47). These recommendations
reflect a similar stance by the other industry participants and regulators mentioned above
and are focused on verification and due diligence to negate conflicts of interest rather than
dictating specific methods or models to value hedge fund portfolios.

A common theme identified in these recommendations is the focus on the separation of
responsibility between the fund manager and the fund’s accounting and valuation process,
a need for greater transparency and a reoccurring point emphasized was the requirement
for “appropriate and independent valuation of hard-to-value assets”, an area which is
subject to uncontrollable variables, vulnerable to fraud and manipulation. The problem
here is that there is neither a standard model nor a requirement to disclose the precise
methodology used to value a hedge fund portfolio. These recommendations are flexible and the ultimate responsibility of valuation is left to the discretion of the hedge fund manager (Horwitz, 2007, p.145). Thus, it is in the best interest of the investor to comprehensively understand the valuation process. For example, the methods by which management and performance fees are calculated and the frequency of such calculations as this directly relates to the NAV of a fund. The expenses of a hedge fund should be scrutinized as well because discretionary spending without oversight often leads to abuse where even personal expenses could be charged to a fund. It is naïve to simply believe such activities will be conducted fairly. The key to managing risks to hedge fund operations and valuation fraud is effective due diligence. Operational due diligence can help address fundamental questions affecting investment decisions yet tends to be the least monitored of all hedge fund related risks as pointed out in the Capco White Paper (2003, p.9). Identifying a hedge fund that promotes transparency will enhance its reputation as a responsible investment entity which has the capacity to expand and hence maintain investor confidence and its continual survival.

The development of a custodian for hedge funds where effective due diligence can be conducted frequently is a move in a positive direction because the alternative of solely relying on regulation which is not far reaching and full-proof enables risks and vulnerability to fraudulent activities (Cheryl, 2011, p.639). The management of conflict-of-interest within these operational processes is crucial to maintaining independence. The collapse of Bernard Madoff Investment Securities (BMIS), a hedge fund run by Bernard Madoff (Madoff) is an example of outright fraud which occurred over a 20 year period by a
notable fund manager in New York and proves that regulation alone is not the answer, especially in protecting retail investors from fraudulent hedge fund managers. It highlights the operational risks and valuation vulnerabilities within the hedge fund industry and the manner in which secrecy has become an enabler of fraudulent activities. The USD$50 billion fraud was a very simple Ponzi scheme carried out over a 20 year period. If there was any case which could substantiate the need for transparency, more disclosure and stringent due diligence requirements, it would be the manner in which Madoff executed his Ponzi scheme relying on his reputation and taking advantage of the veil of secrecy prominent within the hedge fund industry.

5.5 Bernard Madoff Investment Securities (BMIS)

5.5.1 Mechanism of the Fraud

A majority of the research on hedge fund fraud and failure has highlighted misrepresentation, misappropriation of assets and unauthorized trading as three of the main causes. The effects of the GFC initiated a domino impact of hundreds of hedge fund collapses\(^\text{14}\), including more prominent ones like Bear Stearns Hedge Funds\(^\text{15}\), where the fund managers misrepresented valuation information and mislead investors, Yorkville Advisers LLC\(^\text{16}\), which was alleged by the SEC to have misled investors by failing to adhere to Yorkville's stated valuation policies, ignoring negative information about certain

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\(^{15}\) Bear Stearns High-Grade Structured Credit Strategies Fund and Bear Stearns High-Grade Structured Credit Strategies Enhanced Leverage Fund.

investments by the funds. The managers withheld adverse information about fund investments and performance from auditors which thus enabled Yorkville to carry some of its largest investments at inflated values. They misled investors about the liquidity of the funds, collateral underlying the investments, and Yorkville’s use of a third-party valuation firm. These allegations can be viewed as some of the more common methods used by hedge funds to carry out fraudulent activities. However, the cause of the Madoff fraud was not the consequence of any complex manipulation or misrepresentation but rather a Ponzi scheme.

McDermott (1998, p.158) explains a Ponzi scheme as a term generally used to describe an investment scheme which is not necessarily supported by any underlying business venture. The investment returns are derived from the principal sums paid in by newly attracted investors. Usually, those who invest in the scheme are promised large returns on their principal investments. The initial investors are indeed paid the sizable promised returns which invariably attracts additional funds. However, for the scheme to continue being operational, more and more investors need to be attracted into the scheme so that a percentage of the principal investments can be used to repay initial investors their promised returns. The person who runs this scheme typically uses some of the invested money for personal use. Typically when a Ponzi scheme collapses the investors tend to end up losing their principal investments (McDermott, 1998, p.158). A Ponzi scheme is often confused with a Pyramid scheme which has similar characteristics but, as pointed out by Bhattacharaya (2003 pp.3-5), a fundamental difference is that in a Ponzi scheme a promoter has considerable control over every aspect of the scheme, including when to terminate the scheme. This allows the promoter to make money from every round of
capital raising. The initiators of Pyramid schemes, on the other hand, do not have control and they make little money, if at all, after the first round. In a Pyramid scheme, a recruit is asked to give a sum of money, $x$, to a recruiter, and then is asked to enlist $n$ more recruits and collect $x$ from each one of them (Bhattacharaya, 2003 pp.3-5). It is through the control and secrecy of the Ponzi scheme which allowed Madoff to succeed in his USD$50 billion hedge fund fraud.

A point of contention is the profile of investors in this scheme. The regulatory requirements in the US which specified that only sophisticated investors were able to invest in hedge funds meant that all the individuals and institutions who committed capital with Madoff were substantially knowledgeable in their capacity to understand the risks they were taking on. However, they were deceived even with this acumen as Madoff managed to defraud them for a period of over twenty years. Three of the most important reasons why this was possible were his reputation, a unique investment strategy and the concurrent holding of several positions which facilitated the implementation of Madoff’s system.

**5.5.2 Madoff’s Reputation**

The success of Madoff’s hedge fund was largely related to his reputation on Wall Street and with the Jewish community where he was viewed as a charitable philanthropist. The perception he portrayed was one of a highly respected, well-established and esteemed financial expert. His reputation was bolstered by the fact that he helped establish the NASDAQ Stock Exchange and served as its Chairman, an institution which subsequently became one of the most successful stock exchanges globally and also helped him escape
numerous SEC investigations without any allegations being made\textsuperscript{17}. His credibility and reputation were two of the reasons cited to explain irrational behavior of the agents who based their investment decisions not on some scientific study but on the reputation of the fund’s manager (Clauss et al, 2009, p.4). Citing Charles Kindleberger (1989), Clauss et al explained the notion of “sheep to be shorn” where, in financial markets, confidence and reputation remain essential factors to understand the mechanisms of a fraudulent Ponzi scheme as well as those leading to the development of a speculative bubble.

\subsection*{5.5.3 Investment Strategy}

Madoff’s true strategy was to keep the risk officers of investment firms in the dark\textsuperscript{18}. He even advised risk officers on methods of dealing with the SEC should they be questioned, which was explicitly revealed in the 477-page report and transcripts in the SEC investigations of the Madoff fraud. Madoff was touted to pursue a split-strike\textsuperscript{19} conversion investment strategy, which involved taking a long position in a basket of stocks with a high level of correlation with the S&P 100 Index, buying out-of-the-money puts on the index and selling out-of-the-money index calls\textsuperscript{20}. However, in a letter to the US Securities and Exchange Commission in November 2005, fraud examiner Harry Markopoulos warned the total S&P 100 index listed call options outstanding was not enough to generate income on

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\textsuperscript{19} The split-strike strategy involves buying a basket of stocks, then writing call options against those stocks. The proceeds from writing the call options are then used to purchase put options. \textit{The R.W. Grand Lodge of Free & Accepted Masons of Pennsylvania v. Meridian Capital Partners Inc.}, Case No: 09-2430, U.S. District Court, Eastern District of Pennsylvania (Philadelphia), p.19, footnote 1.

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Madoff’s total AUM which would have to be more than 100 percent of the total S&P 100 put option open interest in order to hedge its stock holdings. He also noted it was unlikely the over-the-counter index options market would have been large enough to absorb all the trades necessary, given the size of the AUM and, importantly, the return stream was too smooth, coupled with lack of transparency (Clauss et al, 2009). Bernard and Boyle (2009) conducted back-testing on Madoff’s strategies and examined Madoff’s returns by analyzing the performance of Fairfield Sentry which was one of Madoffs feeder funds. They compared his investment performance with possible results which could have been obtained using a split-strike conversion strategy based on historical data and deliberately analyzed the split-strike strategy in general deriving expressions for the expected returns, standard deviation, Sharpe ratio and correlation with the market of that strategy and found that Madoffs returns were well outside their theoretical bounds and should have raised suspicions about Madoffs performance. Clauss et al (2009, p.4) ratify these findings by analyzing the performance of six of Madoff’s feeders funds from 1990 to 2008 comparing it to the S&P 500 Index and found “consistent ten per cent yearly rates of returns with low volatility and at least five times greater than the S&P 500” which proves that it was not possible for Madoff to sustain such returns in these market conditions.

5.5.4 Conflict of Interests

Madoff did not seek any management fees for his activities; he claimed that he earned his income on the trading deals via brokerage activities (Clauss et al, 2009, p.4). However, Madoff did not use a prime broker, nor did he borrow from banks or publish his returns and he never invested his clients’ money (Ionescu, 2010, p.244). The lack of operational infrastructure identified should certainly have been a red flag of operational risks which should have triggered investors’ cautionary attention but, as Arvedlund (2009, p.157) states, Madoff was able to exploit investors’ desire to “get in on the hedge fund craze” by offering low-risk, consistent returns year after year with no losses. His clients were so glad to be part of his fund that they did not bother to question the manner in which Madoff was able to generate the returns through his investment strategy, buying shares of large U.S. companies and entering into options contracts to limit the risk that no one else could duplicate. If Madoff was front-running and predicting market swings, no one seemed to care, if anything it confirmed his mystical prescience (Ionescu, 2010, p.244). The elaborate manner with which the Madoff fraud was executed presents a cautionary tale to all investors and market regulators on the ease with which deceptive conduct can be carried out, without the need of complexities popularly depicted as part of the sophistication inherent in the hedge fund industry. Bernard Madoff preyed on the greed of his investors, sold them a dream of wealth and manipulated these individuals successfully for over 20 years while regulators sat on the sidelines simply trusting in his reputation.
5.6 Conclusion

Active asset management requires active due diligence. Risk transparency is a positive step towards a safer hedge fund investing environment, however quantitative risk management models alone have proven insufficient, too complex and provide information based on historical data which is a subset of past performance. Historical performance in no way guarantees future results even if it is relied on as an indicator of trends. The development of a trend does not necessarily mean that future performance will be in congruence with the past and hence should not be explicitly relied upon. Valuation and the risk of NAV volatility can be a particular problem within a dynamic financial market as, for example, illiquid assets which have been valued based on marked-to-model may be faced with misrepresentation, a lack of demand and autocorrelation while, on the other hand, marked-to-market valuations may result in underestimation or be the target of insider trading and manipulation. The importance of accuracy in valuation directly impacts the quantification of portfolio returns for investors and fees to a hedge fund manager. Thus, it is imperative that an investor in a hedge fund considers the operational processes and controls relevant to obtaining such valuations and actively monitors these on an ongoing basis. This involves understanding the operational risks inherent in hedge funds.

The fraudulent activities of numerous hedge funds over the last decade and increasingly during the aftermath of the GFC 2008 have identified gaps within the global financial market supervisory system that cannot be filled solely by regulation. These gaps deal with human behavior and perception and reliance on the integrity of gatekeepers. The ‘caveat emptor’ nature of hedge fund investment profiles mandates that investors conduct
adequate due diligence inquires to mitigate the risk of fraud. Thorough due diligence requires innovative methods of utilizing available information more efficiently by applying quantitative information with qualitative information and mandating adequate performance disclosure. Investors should not be required to adhere to excessive lock-up periods where fund managers are availed full discretion on the allocation of assets under management. Gatekeepers should consider thorough background checks on potential managers, including the minute details of substantiated qualifications and resumé checks. One important red flag against investing in a hedge fund is previous criminal offences which is never available on investment agreements. Comparative analysis of the US and UK legislation and proposals in Chapter Four leads to a tentative conclusion that applicable regulation can and should prohibit hedge fund managers from simultaneously fulfilling custodial functions. Regulators should look into custodians and depositories who have day-to-day contact with hedge fund managers as an independent source of information on their activities, these measures could indeed be strengthened with better oversight on these custodians and depositories themselves.

The following chapter investigates the unique approach which Australia has adapted in the supervision and regulation of hedge funds which is entirely different from standard models globally and diverges from views in the US and the UK. This comprehensive study will analyse the Australian regulatory framework and the Managed Investment Scheme Act 1998, which was proven incapable of protecting investors against financial losses and resulted in one of the largest hedge fund fraud cases in Australia, the failure of Trio Capital Limited.
CHAPTER 6

HEDGE FUND REGULATION IN AUSTRALIA

“The sophisticated financial system of the 21st century was supposed to spread risk, but a lot of the risk ended up being concentrated on the books of highly leveraged institutions. High risk and high leverage proved to be a fatal combination. It always does.

Some significant questions arise from all this. The main one, put at its broadest and simplest, is whether something can and should be done to dampen the profound cycles in financial behavior, with associated swings in asset prices and credit, given the damage they can potentially do to the economy.”

Mr Glen Stevens, Governor of the Reserve Bank of Australia

6.1 Introduction

The Australian financial system was spared the worst of the GFC 2008, unlike that which has been experienced by financial markets in the US and the UK. There have been numerous reasons suggested for this resilience, including an effective financial market regulatory architecture, a stable political system and limited exposure to the sub-prime market and global financial system (Davis, 2011a, pp.301-303;335-337). The impact of devastating financial losses has also been cushioned by a higher than average rate of growth in the minerals and resources industry. However, as international asset managers begin, and continue, to shift their focus into the booming Asian region in search of yield, the

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Australian financial system which is a major contributor to the Asian economy will become increasingly exposed and linked globally.

The Australian funds management industry has one of the largest and fastest growing funds management sectors in the world. This growth has been underpinned by a government-mandated retirement scheme known as superannuation\(^2\), worth approximately AUD\$1.7 trillion. In recent years, the industry has become more sophisticated and the asset allocation of institutional and retail investors has diversified. The market has expanded into new innovative products which have created opportunities for fund managers investing in a varied range of financial products, executing complex investment strategies domestically and internationally\(^3\). This investment fund asset pool has also attracted some of the world’s largest hedge fund managers, primarily from the US and UK. What is often disregarded is that risks within the financial system have also increased. In the context of its regulatory environment, the Australian market economy is considered as one of the more mature when compared to some of its global counterparts. This has enabled the political system to formulate and implement an elaborate legal and regulatory framework within which the creation, distribution and trading of financial instruments is carried out. It facilitates the operation of markets by providing the legal infrastructure where private parties’ contract with each other and regulate operations by licensing market operators and financial intermediaries, imposing proscriptive and


prescriptive conduct rules on entities and individuals dealing in the market and mandating disclosure of information to the market (Baxt et al, 2012, p.4).

The main role of securities and market regulation in Australia is to eliminate the risks associated with fraudulent and deceptive conduct by certain market participants. Its purpose is to maintain market integrity and promote investor confidence through the development of a transparent and well-informed market where all types of investment securities could be freely available to both retail and wholesale investors. This approach has been the effect of over fifteen years of legislative reforms that began in 1998 with the introduction of the Managed Investments Act 1998, through which investment schemes operating within the Australian managed funds industry are uniformly regulated.

The impetus of these changes was the government’s response to deregulatory actions of financial markets and recommendations made in 1993 by the Australian Law Reform Commission and the Companies and Securities Advisory Committee in Report No. 65 (ALRC Report 65) entitled Collective Investments: Other People’s Money and the Final Report of the Financial System Inquiry. It found that collective investment schemes were a rapidly growing part of the Australian financial system and of considerable importance to the economy. The report concluded that policy should therefore ensure the twin objectives of encouraging business activity while ensuring that investors were adequately protected. In identifying the types of risk that collective investors faced, the report proposed that although the government should not intervene to reduce investment risk, it should

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intervene to reduce or control compliance and institutional risk. Despite the reforms heralded by ALRC Report 65 to promote efficiency, there have been a number of inquiries pointing to deficiencies in the current managed investment scheme provisions which have not kept up with the growth and changes in financial intermediation processes, for example a 2012 Discussion Paper by the Corporations and Markets Advisory Committee (CAMAC) entitled Managed Investment Schemes stated that:

The failure in recent years of a number of high profile managed investment schemes has highlighted the difficulties that can arise where this form of commercial structure suffers financial stress. From a broader perspective, they also reflect developments in recent years in the use of schemes, from their original predominant role as passive investment vehicles, to their increasing use as vehicles to conduct entrepreneurial activities with enhanced investor involvement. The failure of some entrepreneurial schemes has generated legal problems that were not anticipated when the current legal framework for schemes was developed.

The effects of regulatory gaps have led to numerous managed investment scheme collapses in recent years, for example TimberCorp and Great Southern in 2009 as well as the high profile fraud and misappropriation cases of Basis Capital and Opus Prime in 2008 and, more importantly, Trio Capital in 2009 (Steele, 2008, p.1132). In response to the enormous amount of monies misappropriated and loss of investor confidence, the Australian government and regulatory agencies launched extensive investigations and inquiries in

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order to mitigate future problems. These included actions by the Parliamentary Joint Committee on Corporations and Financial Services (PJC) whose *Inquiry into Financial Products and Services in Australia*\(^9\) in 2009 saw recommendations for an overhaul of financial advisory services in Australia through the enactment of the *Future of Financial Advice*\(^10\) reforms in 2010 and subsequently the *Inquiry into the Collapse of Trio Capital*\(^11\) in 2011. The *Future of Financial Advice* reforms focused on improving the quality of financial advice and enhancing retail investor protection which was meant to regain investor confidence and trust in the Australian financial services industry\(^12\). The results and actions of these investigations and inquiries has been less than effective for such fraudulent schemes are still being revealed and investors continue to lose their income and retirement savings. The recent liquidation of LM Investment Management\(^13\) on March 2013, a managed investment scheme which saw investor losses of approximately AUD$400 million\(^14\) due to

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The purpose of this chapter is to comprehensively review and critique the effectiveness of the regulatory framework governing hedge funds in Australia. Hedge funds have not been identified differently within the Australian regulatory framework, unlike the US and the UK, and there has never been any recognition for the need for focused regulation up until the recent collapse of Trio Capital due to fraud and misrepresentation. Regulating the activities of the alternative investments industry is not an easy task, especially because of interactions with cross jurisdictional funds flow through the shadow banking industry into unregulated tax havens. As will be disclosed in subsequent sections, these complications can lead to huge investment losses and the possibility of uncontrollable systemic risks which could have devastating impact on the Australian economy, especially its superannuation fund holdings. Section 6.2 provides a detailed analysis to the regulatory architecture of the Australian Financial System. It explains the approaches to regulation and supervision following the recommendations of the Wallis Report in 1998 and 'twin peaks' regulatory and supervisory structure with the establishment of the Australian Securities and Investment Commission (ASIC) and the Australian Prudential Regulation Authority (APRA) responsible for upholding financial market efficiency and integrity. Section 6.3 explains the key requirements of the Australian Financial Services (AFS) licensing regime and the responsibilities of hedge fund managers as financial service providers. This is extended in section 6.4 which addresses the relevant legislation applicable to hedge funds in Australia as regulated under the *Managed Investment Schemes*
Act 1998 and its related conduct and disclosure requirements. Section 6.5 is a comprehensive study of the collapse of Trio Capital and, in particular, investigates the activities of Astarra Strategic Fund (ASF) of which Trio Capital was the Responsible Entity (RE). Section 6.6 concludes with an analysis of the findings of this chapter.

6.2 Australian Financial Market Regulatory Architecture

The Australian financial market regulatory architecture has evolved from recommendations formulated by the Financial System Inquiry (FSI) in April 1997, hereinafter Wallis Report\textsuperscript{15}, tasked to examine the effects of deregulation in the Australian financial system. The regulatory mandate was developed based on principles of the efficient markets hypothesis theory, reflected in the Wallis Report\textsuperscript{16}, which stated that “[In] designing regulatory arrangements, it is important to ensure minimum distortion of the vital roles of markets themselves in providing competitive, efficient and innovative means of meeting customers’ needs”. The approach to financial market regulation was influenced by a series of statutes\textsuperscript{17} in 1998 which ultimately shaped the Australian regulatory and supervisory approach of the 21st century. The Wallis Report identified three specific purposes for mandating financial market regulation: ensuring efficiency and appropriate oversight pertaining to market operations; a focus on safety and risk management by prescribing standards or quality of service; and achieving social objectives of equity and


\textsuperscript{16} Wallis Report, 1997, p.15.

\textsuperscript{17} The Australian Prudential Regulation Authority Act 1998 (Cth); The Financial Sector Reform (Amendments and Transitional Provisions) Act 1998 (Cth); The Financial Sector Reform (Consequential Amendments) Act 1998 (Cth); The Financial Sector (Shareholdings) Act 1998 (Cth); The Payment Systems (Regulation) Act 1998 (Cth); and The Payment Systems and Netting Act 1998 (Cth).
fairness for market participants\textsuperscript{18}. Further, it recognized key principles for its regulatory approach which included competitive neutrality, cost effectiveness, transparency, flexibility and accountability\textsuperscript{19}. This was enforced by promoting a culture of disclosure and compliance while accepting that any action should take into consideration that more costs are not imposed onto financial market participants that would eventually lead to a reduction in efficiency, effectiveness and growth\textsuperscript{20}.

The FSI introduced a revolutionary approach to financial market regulation. It endorsed financial deregulation and administered its mandate to promote a light touch regulatory regime in the promotion of financial services\textsuperscript{21} (Serpell, 2008, p.330). It advocated a functional approach where separate regimes for securities and financial products would be replaced by a single regime for the regulation of ‘financial products’ in which a principles-based approach would ensure that functionally equivalent products be regulated in a similar manner to eliminate gaps and inconsistencies in the law (Saunders, 2010, p.36). For example, to promote informed decision-making, uniform transparency rules were mandated and investors disclosed information pertaining to risks and returns of financial products\textsuperscript{22}. There were also obligations imposed on financial services licensees to act with integrity, honesty and adequately manage conflicts of interest\textsuperscript{23}, maintain competence and professionalism\textsuperscript{24} and ensure that systemic risk is reduced through risk management.

\begin{footnotesize}
\begin{enumerate}
\item[22] Corporations Act 2001; Sections 1013D(1)(b)-(m).
\item[23] Corporations Act 2001; Section 912A(1)(aa).
\item[24] Corporations Act 2001; Sections 912A(1)(e)-(f).
\end{enumerate}
\end{footnotesize}
systems and the maintenance of adequate financial and operational resources. McCracken and Everett (2009, p.12) found that the recommendations of this inquiry changed the regulation of financial intermediaries in four major ways. Responsibility for regulation of the finance sector was apportioned according to function rather than its individual status as a bank, a building society, life insurer or other type of financial corporation. A single licensing regime for deposit-taking institutions carrying on the business of banking was introduced. The stability of the payments system was enhanced and prudential supervision of the finance sector as a whole was formalized and strengthened (McCracken and Everett, 2009, p.12).

The FSI determined that the Australian financial system warranted specialized regulation due to the complexity of financial products, the adverse consequences of breaching financial promises and the need for low-cost means to resolve disputes. That is, the underlying philosophy accepted that regulation is necessary to deal with factors that prevent the market operating efficiently, for example fraudulent conduct by market participants, information asymmetry and systemic instability. However, regulation should be the minimum necessary to respond to market failures. The report acknowledged that there are occasions where even disclosure may be inadequate to sufficiently make informed judgments as certain market participants may lack the necessary financial acumen or cannot efficiently obtain such information (Harper, 1997, p.296). In such circumstances, it may be desirable to obtain the opinion of a third party specialist who

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would have the resources necessary to attain required information\textsuperscript{28} (Harper, 1997, p.296). The report recognized that the largest part of the financial system comprises of financial intermediaries, broadly defined to include not only banks and insurance companies but also managed funds such as superannuation and managed investment schemes, and considered a number of approaches to the regulation and supervision of the Australian financial system (Weerasooria, 2000, p.4). These included: a statutory approach where specific and detailed laws are administered by a regulatory agency; a co-regulatory approach where legislation provides the general principles for conduct and protection and, transactions are regulated by codes of practices relevant to particular industries; and a self-regulatory approach where industry schemes are not backed by legislation (Pearson, 2009, p.21). It concluded that, as all three have advantages and shortcomings, a combination of these regulatory approaches or co-regulation would be best for a cost-effective conduct and disclosure regime (Pearson, 2009, p.21). The current structure of financial market regulatory supervision in Australia is a reconfiguration of this framework to promote competition and efficiency by providing consistent regulatory treatment for financial products and services.

The Wallis Report recommended changes to the structure of regulatory agencies within the Australian financial system with the establishment of the Council of Financial Regulators\textsuperscript{29}. This initiative subsequently paved the way for the establishment of three agencies responsible for financial market and services regulation in Australia, namely, the Reserve

\textsuperscript{28} Wallis Report, 1997, p.191.
Bank of Australia (RBA), the Australian Prudential Regulatory Authority and the Australian Securities and Investment Commission (Mitchell et al, 2008, p.10). The RBA is responsible for monetary policy and systemic stability of the financial system. It also has a mandate to promote the integrity of the Australian payments system but is not directly involved in regulating the financial market and intermediaries which is the sole mandate of APRA and ASIC (Serpell, 2008, p.330; McCracken and Everett, 2004, p.9; McLaren and Williams, 2004, p.17). This structure had the advantage of creating two highly specialized agencies with clearly defined regulatory roles. The regulatory model proposed in the Wallis Report, known as the ‘twin peaks model’, separated responsibility for market fairness, in the context of the prudential soundness of a business, from the protection of consumers and investors in terms of the financial integrity and viability of the business operation. APRA regulates the former aspect and ASIC the latter as summarized in Figure 6.1 (Serpell, 2008, p.330; McCracken and Everett, 2004, p.9; McLaren and Williams, 2004, p.17).

**Twin Peaks Regulatory Approach**

- Monetary policy
- Systemic stability
- Payments systems regulation
- Market integrity
- Consumer protection
- Corporations
- Prudential regulation of
  - Deposit-taking institutions
  - Life & General insurance
  - Superannuation

**Figure 6.1**

Source: Wallis Report, n.2 at Overview, Figure 1: Proposed Regulatory Framework, p.24
The development of such a supervisory approach was effective in addressing the growth of financial conglomerates and mitigating any risks which would have evolved as a result of inappropriate activities, within the regulated financial sector. However, the overlapping responsibilities and potential conflicts ensuable did not prepare market regulators for the growth of innovative financial instruments, complex organisational structures and the advent of the shadow banking industry whereby different regulatory perspectives and objectives meant that the possibility of important regulatory issues being overlooked and pose enormous risk. Thus, it is necessary to examine the roles and responsibilities of ASIC and APRA to gain an understanding of the twin peaks supervisory structure in Australia and analyse its effectiveness in tackling the innovative complexity which the hedge fund industry poses. This will also assist in understanding weaknesses within the structure which resulted in regulatory failures attributed to the collapse of Trio Capital.

6.2.1 Australian Prudential Regulatory Authority

The Australian Prudential Regulatory Authority was established under the *Australian Prudential Regulatory Authority Act 1998* in July 1998 as a response to the Wallis Report which dictated its functions with express powers of supervision provided in the *Banking Act 1959*. In the words of the Wallis Report:\(^{30}\):

> [P]rudential regulation adds an extra layer of oversight beyond regulation of disclosure and conduct but this should not constitute a guarantee. A prudential regulator is required to strike a balance between increasing the likelihood that financial promises are kept and being perceived as the underwriter of those promises (quoted in Rajapakse and Rajapakse, 2011, p.292).

The Wallis Report proposed that prudential regulation should occur according to the characteristics of the financial promise: “financial safety regulation will be required where promises are judged to be very difficult to honor and assess, and produce highly adverse consequences if breached and should encompass all institutions offering financial services that carry promises of similar intensity, regardless of their institutional label” (Pearson, 2009, p.28). One of the strongest arguments for the establishment of APRA was the dominance of financial conglomerates within the Australia financial services sector and the increasing number of financial products being offered within these groups which extended through various financial intermediaries (Shuetrim, 1999, p.26). The Wallis Report argued that the prudential regulator could focus solely on the role of prudential regulation and there would be no conflict of interest between the financial market regulators, whose own reputation may be affected by the failure of a supervised institution31.

APRA’s “Framework for Prudential Supervision” balances the need to take a structured methodological approach to the implementation of prudential requirements against the need to maintain sufficient flexibility to respond to new emerging risks32 within the financial system (APRA, 2010, p.4). This is set out in Section 8(1) of the APRA Act which states; “APRA is established for the purpose of regulating bodies in the financial sector in accordance with other laws of the Commonwealth that provide for prudential regulation or for the retirement income standards and for developing the policy to be applied to performing that regulatory role.” APRA’s primary mandate is the protection of policy

holders and depositors instead of financial institutions and hence its focus is more proactive, on prevention rather than enforcement through penalties (APRA, 2012, p.14). Its risk-based objectives focus on the risk management of institutions and upholding fiduciary duties to stakeholders by promoting soundness of financial institutions. APRA is faced with a balancing act of ensuring the continued viability of regulated institutions and that the Australian financial system remains competitive and innovative. To achieve this balance it must be able to identify financial risks early and intervene in a timely manner to effectively remediate these risks.

Prudential regulation is necessary as it ensures the viability of the whole financial system, protecting it effectively against systemic risks. Regulating this involves establishing a suitable policy framework and effective supervisory processes dealing with a variety of issues such as authorization criteria, regulatory solvency, valuation of liabilities, regulatory reporting, disclosure of risk information, and strong governance arrangements (Pearson, 2009, p.30). Thus, APRA developed an approach to prudential regulation that promoted the overarching goals of prudence and risk management without imposing a ‘one-size-fits-all’ set of prudential requirements on regulated institutions.

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6.2.2 Australian Securities and Investment Commission

The Australian Securities and Investment Commission was established in the same period as APRA as a statutory corporation enacted under Section 8 of the Australian Securities Commission Act 1989. Its functions are to administer laws in relation to the Australian Securities and Investments Commission Act 2001 (ASIC Act) and relevant provisions under the Corporations Act 2001 (Corporations Act) (Baxt et al, 2012, pp.212-213). Pursuant to Section 1(2) of the ASIC Act, in performing and exercising its functions and powers, ASIC is responsible for the maintenance, facilitation and consistent improvement of the performance of the Australian financial system and all financial intermediary participants, promoting confident and informed participation by investors and consumers in the financial system and administering rules and regulations effectively with minimal procedural requirements. This extensive mandate revolves around the requirement to maintain stability and efficiency within financial markets through effective enforcement. Importantly, the Wallis Report advocated specialized regulation for financial services and emphasized the regulation of disclosure rules for product issuers, financial advisers and brokers and dealers\(^{37}\). The objectives of the agency are to promote confident and informed participation by consumers in the financial system by ensuring that investors have information, there is vigilant oversight of the marketplace, consumers have access to redress systems and there is a flexible approach to business regulation to remove unnecessary impediments where consumer protection goals are not compromised (Pearson, 2009, pp.42-43).

\(^{37}\) Wallis, 1997, pp.75, 175.
ASIC administers and enforces a range of legislative provisions relating to financial markets, financial sector intermediaries and financial products, including investments, insurance, superannuation and deposit-taking activities\textsuperscript{38}. However, none of the statutes provide a complete statement of powers, leaving it to other legislation within the Corporations Act to confer express regulatory power in relation to particular financial institutions and corporations (McCracken and Everett, 2009, p.16). The approach to financial market regulation and supervision, though not without its critics, is perceived as resilient and reactive to changes in market conditions while maintaining equity and promoting efficiency. This proactive approach in the regulatory sphere has enabled Australia to be a pioneer in consolidating its regulatory agencies to focus on a functions-based approach to market supervision.

In addition to its regulatory role, ASIC develops policy and guidance about the laws that it administers, licenses and monitors compliance by participants within the financial system to provide comprehensive and accurate information on companies and corporate activity\textsuperscript{39}. It is also responsible for investigating suspected contraventions of, and enforcing compliance with, the unconscionable conduct and consumer protection provisions that apply to the financial sector\textsuperscript{40}. There is a licensing regime, a financial services disclosure regime; a requirement that financial services licensees have an internal dispute resolution


mechanism and belong to an approved external dispute resolution body; and a requirement of compensation arrangements for breaches of financial services licensee obligations (Pearson, 2009, p.44). To carry out these responsibilities, ASIC adopted a risk-based approach to compliance, that is, the systematic identification of important regulatory breaches such as patterns of non-compliance or emerging financial sector regulatory issues and engaging in collaborative partnerships with industry and consumers through a results-oriented approach. Thus, as a consequence of the changes advocated in the Wallis Report, the regulatory regime administered by ASIC aims to manage the balance between protecting investors and maintaining an efficient financial system designed to promote conduct and disclosure regulation. A very important mandate for ASIC is the regulation and supervision of the Australian financial services licensing regime in the supervision of financial services providers, including hedge funds.

6.3 Australian Financial Services License

The initial phase of incorporating a hedge fund in Australia and carrying out financial services within the jurisdiction is determination of the requirement to hold an Australian financial services license (AFS license) which authorizes a hedge fund manager to provide financial services. In particular, any individual in the business of providing financial services if they; (1) provide financial advice (s766B); (2) deal in a financial product (s766C); (3) make a market for a financial product (s766D); (4) provide custodial or depository service (s766E) and (5) operate a registered scheme under Chapter 5C, Corporations Act 2001, Section 766A.


42 An individual is considered to be in the business of providing a financial services if they; (1) provide financial advice (s766B); (2) deal in a financial product (s766C); (3) make a market for a financial product (s766D); (4) provide custodial or depository service (s766E) and (5) operate a registered scheme under Chapter 5C, Corporations Act 2001, Section 766A.
services especially to retail clients in Australia is required to hold an AFS license. Licensing is a way to safeguard who provides financial services and imposes standards so that financial promises are reasonable and adhered to (Pearson, 2009, p.104). Martin and Mason (2009, pp.3-4) identified four main threshold requirements in determining whether an AFS license is required. The individual must determine whether they are providing ‘financial products’ to investors defined broadly as securities, derivatives, interests in most managed investment schemes, insurance contracts, bank accounts and superannuation products. It must be determined whether she is providing ‘financial services’ in relation to a regulated financial product which in turn is dependent upon the individual providing financial product advice, or whether she makes a market for a financial product, operates a registered managed investment scheme, or provides a custodial or depository service. The third issue to consider is whether the person is carrying on a business of providing financial services in accordance with the common law indicators of the existence of a business which require the presence of system, repetition and continuity in a particular business endeavor. Lastly, Section 911D of the Corporations Act identifies a non-exclusionary stance pertaining to jurisdictional limitations in relation to requirements for an AFS license (Martin and Mason, 2009, pp.3-4). In particular, any individual considering carrying out a financial services business in Australia is required to hold an AFS license even if such actions are likely to have an effect in other jurisdictions as well. Thus, a no limitation rule pertaining to jurisdictions is applied. There are also numerous exemptions in Section 911A (2)(a)-(l) which generally do not apply to hedge funds incorporated in

44 Corporations Act 2001; Section 911D.
Australia and interested in servicing the retail client industry. Central to the AFS licensing regime are distinct statutory fiduciary obligations of conduct and disclosure which are intended to encourage accountability and instill investor confidence in the Australian financial services industry (McCracken and Everett, 2009, p.156).

Generally, an AFS licensee must do all things necessary to ensure that the financial services covered by its license are provided efficiently, honestly and fairly\(^\text{45}\). It must have in place adequate arrangements for the management of conflicts of interest which may arise in relation to the activities undertaken by the licensee or its representative\(^\text{46}\). An AFS licensee is required to comply with requirements of the license\(^\text{47}\) and relevant financial services law\(^\text{48}\), have available adequate resources\(^\text{49}\) and maintain competence\(^\text{50}\) to provide the financial services which it is licensed to provide. It is also to ensure that its representatives are adequately trained and competent to provide the financial services, has a dispute resolution system in place for retail clients\(^\text{51}\) and adequate risk management systems\(^\text{52}\) and have in place adequate arrangements for compensating retail clients for loss or damage suffered because of breaches of the AFS licensee obligations by the licensee or its representatives\(^\text{53}\). An AFS licensee who provides financial services to a retail client is also required to provide disclosure documents in relation to the issue, sale and purchase of financial products as an offer of interests in a managed investment scheme, other than

\(^{45}\) Corporations Act 2001; Section 912A(1)(a).
\(^{46}\) Corporations Act 2001; Section 912A(1)(a)(aa).
\(^{47}\) Corporations Act 2001; Section 912A(1)(b).
\(^{48}\) Corporations Act 2001; Section 912A(1)(c).
\(^{49}\) Corporations Act 2001; Section 912A(1)(d).
\(^{50}\) Corporations Act 2001; Section 912A(1)(e).
\(^{51}\) Corporations Act 2001; Sections 912A(1)(f)-(g).
\(^{52}\) Corporations Act 2001; Section 912A(1)(h).
\(^{53}\) Corporations Act 2001, Section 912B(1).
where the scheme is the “one-off 20 person only” scheme which by definition is not a financial product54 (Jessup, 2012, p.203).

The Corporations Act requires that a Product Disclosure Statement55 (PDS), Financial Services Guide56 (FSG) and a Statement of Advice57 (SoA) be provided to a retail client when the client receives or is to receive certain financial services (Hanrahan, 2007, p.127). These legal documents are intended to provide retail investors with sufficient information to make informed decisions in relation to the acquisition of financial products and services, including the ability to compare a range of products in the process of financial promotion (Pearson, 2009, p.152). Division 2 of Part 7.9, Corporations Act requires, in broad terms, that a PDS be provided to a person before they acquire a financial product, where the person is acquiring the product as a retail client (Baxt et al., 2003, p.185). The product disclosure statement needs to contain a wide range of information58 including: the benefits that the holder of the financial product will or may become entitled to; the risks associated with holding the product; information about the cost of the product; amounts payable in respect of the product after its acquisition; information with respect to fees, charges and expenses; as well as general information about significant taxation implications59 (Riley and Li, 2009, p.268). As well as the content of disclosure, the timing is also considered significant. Section 1012A(3) stipulates, that product disclosure statements must be given “at or before the time when the advice with respect to the product is given”.

54 Corporations Act 2001, Section 765A(1)(s).
55 Corporations Act 2001, Section 1013C(3).
56 Corporations Act 2001, Section 942B(6A).
58 Corporations Act 2001, Sections 1013C-1013L.
59 Corporations Act 2001, Section 1013D.
The FSG outlines information about the kind of services that are being provided and includes information about remuneration, benefits or other associations which may affect the quality of the service provided and information about rights that the client has under the requisite dispute resolution system\(^{60}\) (Kingsford-Smith, 2004, p.134). The SoA\(^ {61}\) must be given when the financial service is personal advice and may be either the advice itself or a record of the advice (Pearson, 2006, p.123). It must contain information about the personal advice so that the client can make a decision about whether to acquire the financial product advised or to otherwise act upon the advice (Kingsford-Smith, 2004, p.135). Pearson (2006, pp.123-124) states that personal advice involves the consideration, or reasonable expectation of the consideration of the client’s needs, may only be given if three things are done. The provider must discover the relevant personal circumstances of the retail client and inquire about these, the adviser must also make a reasonable investigation of, and give reasonable consideration to, the subject matter of advice in light of those circumstances and appropriate subsequent consideration of the matter of advice (Pearson, 2006, pp.123-124). The combined effect of these provisions is to establish a “point of sale disclosure system\(^ {62}\)” whereby crucial information pertaining to making investment decision is available to prospective investors before they decide to acquire a financial product or service to negate information asymmetry and maintain integrity within the system (Riley and Li, 2009, p.269). The Australian hedge fund industry is not regulated directly by a specific regulation. Accordingly, to understand the regulatory approaches to hedge funds in Australia, it is appropriate to analyse the more important

\(^{60}\) Corporations Act 2001, Sections 942A-942E  
\(^{61}\) Corporations Act 2001, Sections 947A-947E  
provisions within the *Managed Investment Scheme Act 1998* which gives effect to the conduct and disclosure rules enforceable as part of the Australian financial market regulatory architecture.

### 6.4 Managed Investment Scheme

#### 6.4.1 Statutory Definition

The regulatory framework governing the investment management industry in Australia does not define the term ‘hedge fund’ as a separate investment vehicle and such funds are not distinguished separately, unlike the US and the UK. The purpose of the framework is to set out arrangements to protect investors through conduct-of-business and disclosure obligations imposed on the fiduciaries of investment schemes regardless of its legal structure. Thus, regulatory definitions characterize hedge funds as similar to any other investment vehicle regulated under the *Managed Investment Scheme Act 1998* (Ali, 2001, p.419). A managed investment scheme can encapsulate different contexts and is used to describe a varied range of functions in financial services. The term broadly refers to the activities of specialist financial services that firms undertake, in return for a fee, to select and manage investments and to provide related administrative services to investors (Hanrahan, 2007, p.9).

The statutory definition of a managed investment scheme is contained in Section 9 of the *Corporations Act* which defines a managed investment scheme by its activities. In other

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words, in deciding whether an investment entity is a managed investment scheme, the
definition requires a look into the purpose of which the arrangement is entered into, rather
than the legal form that it adopts (Hanrahan, 2007, p.14). This approach is adopted in the
interest of allowing for flexibility and diversity in the funds management industry (Moodie
and Ramsey, 2003, p.44) The statutory definition is elaborated in Section 9 (a)(i)-(iii) of the
Corporations Act which states a managed investment scheme as having the following
features: people contribute money or money’s worth as consideration to acquire rights or
interests to benefits produced by the scheme. Any of the contributions are to be pooled,
or used in a common enterprise, to produce financial benefits, or benefits consisting of
rights or interests in property, for the members of the scheme who hold interests in the
scheme and the members do not have day-to-day control over the operation of the scheme
(von Nessen, 1999, pp.2-4). The importance of the definitional distinction means that the

64 In ASC v United Tree Farmers Pty Ltd [1997] 15 ACLC 957; ASIC v Chase Capital Management Pty Ltd [2001]
WASC 27 at [57], Douglas J in ASIC v Enterprise Solutions 2000 Pty Ltd [2000] QCA 452; Brookfield Multiplex
Limited v International Litigation Funding Partners Pte [2009] FCAFC 147.

65 In ASIC v Drury Management Pty Ltd [2004] RSC 68, the issue contended was whether the method in which
the Directors of Drury Management Pty Limited obtained investments constituted a managed investment
scheme. It was found that the Directors of Drury Management Pty Ltd had obtained loans from private
investors and promised returns of between 12% to 15% annually, raising approximately $8 million through
promissory notes from 118 investors. These funds were invested at the discretion of the Directors in various
financial instruments. Judge Jones concluded that because the funds were contributed from private investors
and pooled together to conduct investing activities which were substantially not in the control of the
investors, it had sufficiently satisfied the definition of a managed investment scheme under Section 601ED of
the Corporations Act. In Brookfield Multiplex Limited v International Litigation Funding Partners Pte Ltd [No 3]
[2009] FCAFC 450; The court held that the litigation funding arrangements between International Litigation
Funding Partners Pte Ltd and Brookfield Multiplex Limited constituted an unregistered managed investment
scheme. The findings indicated that the promise of a return on investment by shareholders to allow
International Litigation Funding a financial benefit at the successful resolution of their claims constituted a
contribution of money’s worth and the money was pooled together for the benefit of all associated parties.
Thus, it was held that the requirement for pooling of funds did not mean a physical pooling and could
constitute promises made by investors whereby such promises were made for a common purpose of
attaining a financial benefit through the activities of the scheme; InhouseLegal (Undated), “Compliance:
Theory and Practice in the Financial Services Industry”, Inhouse Legal Solutions, Part 10. Compliance,

Australian consideration of a managed investment scheme is a statutory construct\(^{67}\) as opposed to reference placed on entity type. As noted by Barret J of the NSW Supreme Court:

In the Corporations Act, "managed investment scheme", like "company", refers to a statutory construct. The Act also refers, in various places, to ‘association’ and ‘partnership’ but these, unlike ‘managed investment scheme’ and ‘company’, have a general law meaning as distinct from a statutory meaning, so that references to their formation (eg, Section 115) and dissolution [eg, Section 582(3)] are references to general law concepts rather than processes prescribed or contemplated by the Act itself (quoted in Jessup, 2012, p.16).

The definition of a managed investment scheme in the Corporations Act also sets out specific exclusions. ASIC\(^{68}\) has pointed out that, generally, only investments that are ‘collective’ are considered managed investment schemes and, thus, deliberately excludes a number of financial activities which do not carry out their commercial activities in accordance with the regulatory definitions of a managed investment scheme (Hanrahan, 2007, p.15). These include regulated superannuation funds, approved deposit funds and the direct purchases of shares or other equities\(^{69}\), including body corporates, insurance statutory funds, retirement village schemes and partnerships\(^{70}\). Although there has been considerable case law on the meaning of managed investment scheme, it is not always easy to reconcile some of the decisions. Nevertheless, despite the differences of opinion, what is

\(^{67}\) ASIC v Takaran [2002] NSWSC 834 at [36] per Barrett J.


apparent from the case law is that the definition is very wide (Jessup, 2012, p.17). Managed investment schemes are further subdivided into those that are required to be, and are, registered with ASIC in accordance with Chapter 5C of the Corporations Act and those that are not (Hanrahan, 2007, p.23; Battaglia, 2009, p.3). This all-inclusive approach for defining managed investment schemes complicates the manner in which organizations consider registration requirements and a key issue of concern to hedge funds in Australia is the applicability and impact of these requirements to their investment mandate.

6.4.2 Registration requirements

The standard in relation to registration requirements for managed investment schemes is based on specific conditions under Section 601ED (1)(a)-(c), Chapter 5C of the Corporations Act. A managed investment scheme which has more than 20 members\(^71\) and is promoted by a person in the business of promoting managed investment schemes\(^72\) is required to be registered. There is also a look-through provision\(^73\) whereby if there is a group of managed investment schemes invested in one scheme, but the total is less than 20 members, the fiduciary is required to look into the total number of members in all related schemes (Jessup, 2012, p.38; von Nessen, 1999, p.7). If that total number of related members exceeds 20, the registration requirements may be upheld subject to an ASIC determination through its discretionary powers in imposing or determining registration requirements\(^74\). This provision is to prevent entities or individuals from seeking to avoid

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\(^71\) Corporations Act 2001; Section 601ED(1)(a).
\(^72\) Corporations Act 2001; Section 601ED(1)(b).
\(^73\) Corporations Act 2001; Section 601ED(1)(c).
\(^74\) Corporations Act 2001; Section 601ED(3).
registration requirements by splitting the schemes into a number of different but related schemes with less than 20 members (Jessup, 2012, p.38; Broderick, 2006, p.186).

There have been a number of legal cases\(^\text{75}\) in which the question of registration requirements has been contended where there were less than 20 members. The Courts held with overwhelming majority that the requirements of Section 601ED had to be taken into consideration in distinguishing registration requirements, in particular whether the scheme was promoted by a person or an associate of a person who was in the business of promoting a managed investment scheme (Zhen Qu, 2004, p.72). For example, in *ASIC v Young & Others*\(^\text{76}\) it was held that the investment activities of a collective group of real estate agents in raising finance from and selling property to members in what was known as an ‘Investors Club’ constituted the operation of a managed investment scheme, which in this case was unlawful as it was not registered. The Court found decisively that the promotion of seven property developments as part of the ‘Investors Club’ was sufficient to mean that the schemes were promoted by a person in the business of promoting managed investment schemes and therefore registration was required even though they were less than 20 members. The meaning of the term promoter was also clarified, citing, *Whaley Bridge Calico Printing Co v Green*\(^\text{77}\), Bowen J said:

\(^{75}\) *ASIC v Young & Others* [2003] QSC 029 at [50]; *Tracy v Mandalay Pty Ltd* (1953) 88 CLR 215 at [19].

\(^{76}\) *ASIC v Young & Others* [2003] QSC 029.

\(^{77}\) *Whaley Bridge Calico Printing Co v Green* [1880] 5 QBD 109 at [111].
The term 'promoter' is a term not of law, but of business, usefully summing up in a single word a number of business operations familiar to the commercial world by which a company is generally brought into existence. In every case the relief granted must depend on the establishment of such relations between the promoter and the birth, formation, and floating of the company, as render it contrary to good faith that the promoter should derive a secret profit from the promotion. A man who carries about an advertising board in one sense promotes a company, but in order to see whether relief is obtainable by the company what is to be looked to is not a word or name, but the acts and the relations of the parties (quoted in Jessup, 2012, pp.38-39).

Further, hedge funds seeking to avoid registration with ASIC can elect to conduct their investing activities pursuant to Section 601ED(2) where the registration of a scheme will not be required if the scheme only makes excluded issues of interest to wholesale investors and where a Product Disclosure Statement is not required\(^78\) as per Division 2 Part 7.9 of the Corporations Act. Excluded offers include offers made to sophisticated investors, that is, where the minimum subscription for interests in the scheme is AUD$500,000, or where the investor has net assets of at least AUD$2.5 million or, for the last two financial years, a gross annual income of at least AUD$250,000\(^79\) (Haigh, 2006, p.192).

This provision is similar to exemptions available in the US and the UK in recognizing the financial acumen of sophisticated investors and high net-worth individuals. Therefore, if all of the persons who invest in the scheme fall within any of these categories then the scheme is not required to be registered as a managed investment scheme and availed exemptions

\(^78\) A PDS is not required to be given to a person if the person is not a retail client [CA, s1012A(3) and/or s1012B(3)]. For example, a person will not be a retail client in situation where; the person (referred to as a "wholesale client"): Invests more than $500,000 [CA s761G(7)(a) and Corporations regulations, reg. 7.1.18(2)] or is a business that is not a "small business" and the financial product is provided in connection with that business [CA 761G(7)(b)] or has provided a certificate by a qualified accountant not more than two years old that certifies that either: The person together with any company or trust controlled by that person have between them a total of net assets of at least AU$2.5m (CA, s761G(7)(c )(i) and (7A), as inserted by reg. 7.6.02AC with reg. 7.1.28(2) of the Corporations regulations. Corporations Act 2001; Section 761G(1)-(12); Corporations Act; Section 1012D.

\(^79\) Corporations Act 2001; Section 708(8).
from disclosure and stricter fiduciary obligations. There is, however, a powerful economic incentive under the Corporations Act for the registration of exempt schemes. Registered schemes are prohibited from investing in unregistered managed investment schemes and considering a bulk of investment income in Australia originates from registered schemes\(^{80}\) such as superannuation funds, a hedge fund manager will need to carefully consider whether the regulatory burden consequent upon registration outweighs the disadvantages flowing from reducing the potential pool of investors in the hedge fund (Ali, 2001, p.420). Another important consideration for a hedge fund manager intending to carry out business activities in Australia is the manner in which the fund is structured which will directly impact its fiduciary obligations as per requirements of the Corporations Act.

### 6.4.3 Structure

In Australia, hedge funds are usually structured as trusts\(^{81}\), although company structures, typically unlisted and domiciled in offshore tax havens are also used\(^{82}\). Hanrahan (2011, p.288) states that although the managed investment scheme laws do not mandate a particular legal structure, schemes that hold assets for investment purposes are incorporated as trusts. In its simplest form, a trust exists when the trustee is required to hold or invest property on behalf of another (Woodward et al, 2001, p.18). The essence of a

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80 Corporations Act 2001; Section 601 FC(4).

81 Heydon, J.D. and Leming, M.J. (2006), *Jacobs Law of Trust In Australia*, p.1 [101]. “A trust is an institution developed by equity and cognizable by a court of equity. A trust is not a juristic person with a legal personality distinct from that of the trustee and beneficiary, nor is it merely descriptive of an equitable right or obligation. Instead, it is a relation between trustee and beneficiary in respect of a certain property. More particularly, a trust exists when the owner of a legal or equitable interest in property is bound by an obligation, recognized by and enforced in equity, to hold that interest for the benefit of others, or for some object or purpose permitted by law.

trust is the separation of legal and equitable ownership that is achieved by imposing an obligation on the trustee to hold the trust property on behalf of and for the benefit of the beneficiaries (Heydon and Lemming, 2006, pp.8-9). The investment trust splits this trust obligation into the custody and the management of the trust corpus which effectively creates a tripartite relationship between manager, trustee and beneficiary that is governed by trust law (Loxton and D'Angelo, 2013, p.148). In modern times, the basic trust structure has evolved to become a popular commercial vehicle for investment and financing purposes because of its ability to be flexible in design and to be structured to meet the demands as a tool for commerce (Goonetilleke, 2011, p.421). Hedge funds that are structured as trusts are regulated as managed investment schemes principally under the Corporations Act; Chapters 5C and 7. The respective rights and obligations of the hedge fund, its officers, and the investors are determined by a combination of contract, equity and trust law, company law, financial services regulation, financial product regulation and prudential regulation (Hanrahan, 2007, p.5). These various sources of law overlap and interact to determine the responsibilities and liabilities of a hedge fund and its officers for the conduct of its investing activities and for the provision of funds management services to retail and wholesale clients (Hanrahan, 2007, p.5). In all instances, the manager of a hedge fund must be an Australian financial service licensee, with the consequent obligation to comply with the duties imposed on such licensees, or must attract the operation of an exemption or relief from the need to be licensed (Martin and Mason, 2009, p.3). If a hedge fund is structured as a registered managed investment scheme, there are added obligations whereby the fund will be required to appoint a Responsible Entity consistent with the requirements of the Managed Investment Scheme Act 1998. Eventhough many hedge funds
in Australia generally seek to be exempt from registration and hence there would be no obligation to the appointment of a RE, it would be appropriate to analyse the roles and responsibilities of an RE for completeness. This will also assist in attaining a better understanding of failure within regulatory infrastructure which contributed to the collapse of Trio Capital which will be analysed in section 6.5.

### 6.4.4 Responsible Entity

A key requirement of a registered managed investment scheme is that it has a single Responsible Entity (RE), also known as the scheme operator, responsible for the operation of the scheme and who is to perform the functions conferred to it by the constitution of the scheme which it is required to establish, and relevant provisions of the Corporations Act\(^{83}\) (Jessup, 2012, p.46; Goonetilleke, 2011, p.425; Pearson, 2009, p.330; Zhen Qu, 2004, p.74). In registered managed investment schemes, the RE holds legal title to the scheme property, unless a custodian is employed, and the equitable or beneficial legal title is held by the scheme members in proportion to their share of the individual assets of the scheme (Battaglia, 2009, p.4). As such, there is a trust relationship between members of the scheme and the RE\(^{84}\). The RE is subject to the statutory fiduciary duties set out in Section 601FC and the duties imposed by equity on trustees generally (Ranero, 1999, p.423). Section 601FC(1)(a)-(m) specifies the duties of the RE which include the obligation to act honestly; to act in the best interest of members, to ensure all payments out of scheme property are made in accordance with the scheme’s constitution, and to ensure the scheme property is valued at regular intervals appropriate to the nature of the property (Zhen Qu, 2004, p.74).

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\(^{83}\) Corporations Act 2001; Section 601FB(1).

\(^{84}\) Corporations Act 2001; Sections 601FC(1)(a)-(m).
A fiduciary obligation is one of undivided loyalty where a fiduciary may not act in any other way than in the best interest of the persons to whom the duty is owed\textsuperscript{85}. Fiduciary duties are primarily used to protect economic and proprietorial interests and as such, attached to this obligation are two negative duties, a duty to avoid conflicts\textsuperscript{86} and a duty not to profit (Dal Pont and Chalmers, 2007, p.93; Donald, 2009, pp.53-54). The duty to avoid conflict of interest disallows a fiduciary to engage in any conduct or activity which would directly affect those whom she has obligations to protect and a fiduciary is barred from using her position to obtain a benefit to herself or a third party (Dal Pont and Chalmers, 2007, p.93; Zhen Qu, 2004, pp.78-83; Battaglia, 2009, pp.7-8).

In addition, an RE is required to appoint a Compliance Committee which can be either the board of the RE or a separately established committee and a compliance plan through which compliance procedures of the managed investment scheme are established (Pearson, 2009, p.330; Zhen Qu, 2004, p.74). The Compliance Committee is intended to serve as a monitoring and reporting intermediary between the area performing the primary compliance functions and the board of the RE (Moodie and Ramsey, 2005, p.170). The role of the Compliance Committee is to monitor the operation of the scheme, assess the adequacy of the compliance plan, and report real or suspected breaches or non-compliance to the responsible entity and, if there is no remedy, then to ASIC (Pragnell, 1998, p.55). The scheme’s compliance plan must adhere to requirements as established in the Corporations

\textsuperscript{85} Beach Petroleum NL v Kennedy [1999] 48 NSWLR 2 at 46–47; Gibson Motorsport Merchandise Pty Ltd v Forbes (2006) 149 FCR 569 at [107].

\textsuperscript{86} Wilden Pty Ltd v Green [2009] WASCA at [38].
Act and signed by the directors of the responsible entity\textsuperscript{87}. The directors are required to sign the compliance plan to show that they accept responsibility for the measures to ensure compliance by the RE with its constitution and the law in general (Jessup, 2012, p.133; Ali, 2001, p.420). The directors of an RE, as fiduciaries, are required to take all steps that a reasonable person would take, if they were in the position of an officer\textsuperscript{88} and to ensure that the responsible entity complies with the schemes compliance plan\textsuperscript{89}. These obligations place the onus of responsibility of any wrongdoing directly onto the directors and the RE. The Corporations Act is not strictly prescriptive as to what is required to be dictated in a compliance plan but the overriding requirement is that the compliance plan must set out adequate measures that the RE is to apply in operating the scheme. Thus, an RE is required to undertake a structured and systematic process which considers the RE’s obligations under the law and the scheme constitution; identify risks of non-compliance; and establish measures designed to mitigate those risks\textsuperscript{90}. These measures include arrangements ensuring that all scheme property is clearly identified as scheme property and held separately of the RE and property of any other scheme and details concerning a compliance committee which must be established if less than half the directors of the RE are external directors\textsuperscript{91} (Moodie and Ramsey, 2005, pp.173-176). There must also be arrangements to

\textsuperscript{87} Corporations Act 2001; Sections 601EB(1)(f) and (g).
\textsuperscript{88} Corporations Act 2001; Section 601FD(1)(f).
\textsuperscript{89} Corporations Act 2001; Section 601FD(1)(f)(iv).
\textsuperscript{91} The Compliance plan must set out the arrangements the responsible entity has in place in relation to the following matters: (a) In order to ensure that the scheme property is clearly identified as scheme property and is held separately from property of the responsible entity and property of any other scheme, in accordance with the statutory duty to do so, the compliance plan must contain the measure for ensuring all scheme property is clearly identified as scheme property and held separately from property of the responsible entity and property of any other scheme; (b) If the scheme is required to have a compliance committee (which it will be required to have if less than half of the directors of the responsible entity are
ensure that scheme property is valued at regular intervals as appropriate given the nature of the property and that compliance with the plan is verified and audited accordingly, which requires that adequate records of the scheme’s operations are kept (Martin and Mason, 2009, p.11). The RE is permitted to amend the compliance plan\(^{92}\). Indeed, the practice of ASIC is to require regular reviews of the compliance plan and to make amendments where appropriate (Jessup, 2012, p.133). Thus it can be interpreted that the RE is ultimately responsible to investors and is bound by requirements under the Corporations Act to uphold its fiduciary obligations with utmost integrity.

It is common for a RE who is responsible for the operation of a scheme to appoint an agent to carry out investment or operational management functions\(^{93}\) if the responsibility for the delegation is assumed by the RE (Battaglia, 2009, p.4). One example is to enlist the expertise of specialist firms to carry out valuation and due diligence functions of the scheme. There is a risk of conflict of interest and attenuation of liability by the RE whereby agents are appointed in a position of trust to carry out activities which are crucial to the operations of the scheme. As such, the compliance plan must contain the measures for ensuring that

\(^{92}\) Corporations Act 2001; Section 601HE(1).

\(^{93}\) Corporations Act 2001; Section 601FB(2); Corporations Act 2001; Sections 601FC(1)(a) – (m).
viability of a scheme. However, there is legislation\textsuperscript{94} which provides for indemnity if the responsibilities of an agent are not upheld as a result of negligence or wrongful and deceptive conduct and distinct conditions for the purpose of liability to members of a managed investment scheme. There is a second level of recourse where a sub-agent who is appointed to carry out authorized activities of the RE and treated in exactly the same manner as agents hence ensuring the RE holds ultimate responsibility\textsuperscript{95}. According to the Explanatory Memorandum to the Managed Investment Scheme Bill 1997\textsuperscript{96}, the effect of this provision is to ensure that the RE is ultimately liable to the members for any act or omission in relation to the affairs of the scheme (Jessup, 2012, p.47). The onus is placed on RE to make good to scheme members any losses suffered by a scheme as a result of the conduct of persons engaged by the RE in relation to the scheme\textsuperscript{97} and where the scheme is structured as a trust, this provision will override any inconsistent provisions in the State and Territory trustee legislation (Jessup, 2012, p.48).

The RE may also be required to appoint a custodian to hold the legal title to assets under management and is particularly common where the managed investment scheme is structured as a trust (Hanrahan, 2007, p.34). The Corporations Act defines custodial services in Section 766E(1) as an arrangement where a financial product, or a beneficial interest in a financial product, is held by the provider on trust for, or on behalf of the client, in the case of managed investment schemes, the RE. The purpose of such an appointment is

\textsuperscript{94} Corporations Act 2001; Sections 601FB(3)(a)-(b).
\textsuperscript{95} Corporations Act 2001; Sections 601 FB (4)(a)-(b).
\textsuperscript{96} Explanatory Memorandum to the Managed Investments Bill 1997 at para 8.7.
\textsuperscript{97} Explanatory Memorandum to the Managed Investments Bill 1997 at para 8.6.
to segregate the trust assets from the RE’s proprietary assets. The role of a custodian is to hold the assets managed by the RE as bare trustee and to act on proper instructions from the RE in respect of those assets (Goonetilleke, 2011, p.430). However, in *Corumo Holdings Pty Ltd v C Itoh Ltd*, it was pointed out that as a matter of strict logic almost no situation could be postulated where a custodian in some circumstances does not have active duties to perform by, for example, being immediately bound to transfer the trust property to the beneficiary who was absolutely entitled (Heydon and Leeming, 2007, p.48). Thus, the motivations behind custodial requirements is to counter-balance in the interest of investor protection whereby an independent custodian should hold scheme property and such an arrangement would be more effective in preventing any fraudulent or deceptive conduct by the RE which may result in the misappropriate of the scheme’s funds (McLaren and Williams, 2004, p.110; Goonetilleke, 2011, pp.431-433).

These regulatory mandates have been effective in the supervision of the managed funds industry during a period where the influence of financial innovation was low and the shadow banking industry was non-existent. The progress of financial markets and its interconnectedness globally has enabled efficiency within the funds flow process but this has also enhanced risk levels which such a regulatory system was not designed to cope. The

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100 *Corumo Holdings Pty Ltd v C Itoh Ltd* [1991] 24 NSWLR 370 at [398].
following analysis on the collapse of Trio Capital Limited and the gaps within the regulatory system which enabled the fraud to materialize proves that significant changes to the regulatory architecture need to be made to cater to the growing influence of hedge funds and the shadow banking industry in the Australian financial system and tougher preventive measures are required to protect the ever growing Australian superannuation funds industry.

6.5 The Collapse of Trio Capital Limited

The collapse of Trio Capital has been sighted as the largest fraud in the history of the Australian funds management industry with approximately AUD$176 million in investments lost from two managed investment schemes, AUD$123 million from the Astarra Strategic Fund (ASF) and AUD$53 million from the ARP Growth Fund (ARP). Investigations into the collapse of both funds were still ongoing at the time of writing but it has been established that ASF was a fraudulent investment vehicle while there are questions about the legitimacy of ARP. The investment scheme central to this analysis is ASF which was used to deceptively transfer investment funds into overseas tax havens and defraud investors. The case involving the fraudulent conduct of ASF provides significant insight into the disregard of operational risks within managed investment schemes and potentially the broader funds management industry in Australia. Trio Capital was licensed as a superannuation fund trust and the responsible entity of various managed investment

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103 PJC (2012), p.16, para 2.5.
schemes with complex structures incorporated in Australia and linked to tax havens in various jurisdictions including British Virgin Islands, Anguilla, St Lucia, the Cayman Islands, Belize, the Cook Islands and Nevis\(^{104}\) (Goonetilelke, 2011, p.421). Figure 6.2 details the relationship between the numerous entities within its fund structure.

**Figure 6.2: Astarra Group Structure**

![Diagram](image)

Provides Trustee Services
- Astarra Personal Pension Plan
- Astarra Pooled Superannuation Trust
- Astarra Superannuation Plan
- Employees Federations of NSW Superannuation Plan
- My Retirement Plan

Provides Responsible Entity Services
- **Astarra Strategic Fund (ASF)**
  - Astarra Australian Equities Pool (AAEP)
  - Astarra Conservative Fund (ACF)
  - ARP Growth Fund (AGF)
  - Astarra Diversified Fixed Interest Pool (ADFIP)
  - Astarra Cash Pool (ACP)
  - A&T First 200 Fund (ATF200)
  - Advantage Diversified Fund (ADF)
  - Advantage Fund/Equities/Emerging Markets (APE)
  - Advantage Fund/Fund of Funds (AF)
  - Astarra Australian Covered Call Fund (AACC)
  - Astarra Balanced Fund (ABF)
  - Astarra Capital Protected Pool (ACPP)
  - Astarra International Covered Call Fund (AICCP)
  - Astarra Overseas Equities Pool (AEEP)
  - Astarra Portfolio Services (APS)
  - Astarra Wholesale Property Fund (AWPF)
  - MillhouseAC Private Equity Fund (MIPEF)
  - MARQ Capital Diversified Property Fund (MCDPF)
  - My Growth Plan (MGP)
  - My Income Plan (MIP)
  - Regional Land Property Fund (RLPF)
  - TIC Currency Fund (TCF)
  - TIC Currency Wholesale Trust (TCWT)
  - TIC Diversified Property Trust (TDPF)
  - TIC Diversified Wholesale Property Trust (TDPT)

Source: PPB Report To Creditors Pursuant To Section 439A of The Corporations Act 2001; Trio Capital Limited Formerly Known As Astarra Capital Limited, Dated 8 April 2010


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Wright Global Asset Management (WGAM) and Astarra Fund Management (AFM) were the ultimate holding companies of all the schemes associated with Trio Capital in Australia and the funds were layered with a series of cross-investments between superannuation funds and registered managed investment schemes. The investments of ASF were ultimately managed by Astarra Asset Management\textsuperscript{105} (AAM), its appointed investment manager, and a company which was also an associate of Trio Capital\textsuperscript{106}. There were approximately 6090 Australian investors in Trio Capital who lost their life and retirement savings\textsuperscript{107}, 5400 of those investors had invested in Trio Capital through superannuation funds which were regulated by APRA and received financial compensation based on provisions for losses as a result of fraudulent conduct or theft, provided in accordance with Part 23 of the \textit{Superannuation Industry (Supervision) Act (1993)} (SIS Act). It has to be pointed out that the uniqueness of such a provision contributes to moral hazard within the superannuation fund industry which can mislead retail investors, financial advisers, custodians and auditors into taking an inactive approach in money management and due diligence with the belief that any financial losses due to fraud can be easily recuperated, placing the onus of responsibility on the government and ultimately the tax-payers. The worst causalities of this debacle were approximately 690 investors who were ineligible for compensation, 415


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of them were direct investors while 285 invested in Trio Capital through their self-managed superannuation funds (SMSF)\(^{108}\).

The gravity of the financial losses highlighted significant vulnerabilities within the Australian funds management industry and weaknesses in its twin-peaks model of financial market supervision and regulation. The failure of gatekeepers with the responsibility to protect investors and provide assurance on the validity and viability of investments emphasizes faults within various segments of the regulatory framework. Ineffective due diligence, conflict of interests and poor internal controls simply enabled the fraud to carry on as long as it lasted. More importantly, the ease in which investment funds were transferred to offshore tax havens through custodians and the ability of its directors to invest globally in risky financial instruments at their own discretion evidences inherent misinterpretations in the motivations of appointing RE’s as the ultimate gatekeepers of managed investment schemes. The question of whether this was a government failure or regulatory failure remains to be answered as investigations into this complex web of manipulation continue.

The events leading up to the revelation of fraudulent conduct within Trio Capital and its related entities can be construed as one which was carefully planned to fraudulently transfer investor funds into overseas tax havens. This bold statement was emphasized by Justice George Palmer\(^{109}\), in his statement of facts, which stated:


A large proportion of the Scheme funds have not been used to acquire readily identifiable assets located in easily accessible jurisdictions. Rather, the funds have been invested in purchasing from an entity whose substance is impossible to ascertain an unsecured promise to deliver assets. Those assets comprise interests in investments whose existence, nature and value are, likewise, impossible to ascertain by any convenient means because they are managed or administered by companies incorporated in the British Virgin Islands, Anguilla, St Lucia, the Cayman Islands, Belize, the Cook Islands and Nevis. Anyone even slightly acquainted with the commercial world knows that if one wants to conduct financial operations as far away as possible from the scrutiny of tax authorities, investment regulatory authorities and investors themselves – in short, if one wants to conduct financial operations dishonestly or illegally – then it is to those jurisdictions that one goes to incorporate puppet companies with puppet directors in order to operate fraudulent schemes and to move money around the world in secrecy.

The Parliamentary Joint Committee on Corporations and Financial Services *Inquiry into The Collapse of Trio Capital*\(^\text{110}\) revealed significant weaknesses within the Australian financial system and it was of the view that a key element of the scheme was to move the funds of Australian investors overseas which made it much harder for Australian auditors and others to verify the existence of the funds, for Australian liquidators to recover any remaining funds, and for Australian regulatory authorities to investigate and to pursue those who have carried out criminal conduct\(^\text{111}\). Most critically, these weaknesses highlighted a lack of transparency within the hedge fund industry in Australia. This is amply confirmed by Mr. Shawn Darrell Richard (Mr. Richard) a Director of Trio Capital, in his response to claims by the PJC where he stated that "upon reflection, the establishment of the Astarra Strategic Fund as fund of hedge fund may have allowed my employees to


take advantage of the lack of transparency that comes with dealing in the hedge fund industry”\textsuperscript{112}. More importantly, it identifies the lack of oversight and understanding by regulators of the intricacies associated with the shadow banking industry which has thus far become a prominent part of the Australian financial system.

### 6.5.1 Astarra Strategic Fund (ASF)

ASF was heavily invested by all the other schemes within the Trio Capital portfolio with a mandate to mirror the investment performance of “various overseas hedge funds\textsuperscript{113}” the details of which are vague. Trio Capital was the responsible entity of the ASF managed investment scheme and purported to provide investors with “consistent long-term capital appreciation in both rising and falling market conditions aiming to produce returns closely matching equity markets with less volatility”\textsuperscript{114}. In accordance with the terms of the investment management agreement, Astarra Asset Management (AAM) was appointed as Trio Capital’s agent and investment manager with specific requirements, amongst other things, to invest and manage all property of ASF, including identifying investment opportunities in the hedge fund market within the investment guidelines as set out in ASF’s product disclosure statement\textsuperscript{115} and provide Trio Capital with regular reports in writing\textsuperscript{116}. According to Mr. Richard, once the management agreement was concluded, the first investment as well as every other investment was executed without requiring any further

\begin{itemize}
\item \textsuperscript{112} Mr Shawn Darrell Richard, \textit{Answers to questions on notice}, received 27 April 2012, p.1.
\item \textsuperscript{113} \textit{Trio Capital (Admin App) v ACT Superannuation Management Pty Ltd & Ors} [2010] NSWSC 286, 16 April 2010, Palmer, J, at [28].
\item \textsuperscript{114} Timothy Steven Frazer, WHK Audit & Risk Assessment, Enforceable Undertaking, \textit{Australian Securities and Investment Commission}, paragraph, 5.2, p.4.
\item \textsuperscript{115} David O’Bryen, Enforceable Undertaking, \textit{Australian Securities and Investment Commission}, paragraph, 5.2 (a), p.3.
\item \textsuperscript{116} David O’Bryen, Enforceable Undertaking, \textit{Australian Securities and Investment Commission}, paragraph, 5.2 (b), p.3.
\end{itemize}
discussions with the RE$^{117}$. The RE was in breach of its fiduciary obligations. It did not participate in investment decisions crucial to fulfilling its obligations in the best interest of investors apart from acting as a ‘bare fiduciary’ and carrying out AAM’s instructions to the custodians. For example, the process for sending monies to overseas hedge funds was for AAM to e-mail the RE an instruction to invest in a particular fund which they then forwarded to the custodian for execution on the same day without appropriate verifications$^{118}$. The RE compromised the interest of the investors by acting in the interest of the promoter and carried out its duties without adequate independence, a requirement implicit in the single responsible entity regime ushered in by the Managed Investment Scheme Act 1998$^{119}$.

ASF purchased financial exposures to various offshore hedge funds domiciled in tax haven jurisdictions$^{120}$ and significant monies from these schemes were invested in the British Virgin Islands in hedge funds controlled by a Hong Kong based American lawyer, Mr. Jack Flader$^{121}$ (Mr. Flader). These financial exposures were committed under Deferred Purchase Agreements$^{122}$ (DPA) signed by the directors of Trio Capital, ASF and related hedge funds.

$^{117}$ Mr Shawn Darrell Richard, Answers to questions on notice, received 27 April 2012, p.2.
$^{118}$ Mr Shawn Darrell Richard, Answers to questions on notice, received 27 April 2012, p.2.
$^{120}$ Timothy Steven Frazer, WHK Audit Risk Assessment, Enforceable Undertaking, Australian Securities and Investment Commission, paragraph 5.2, p.4.
$^{121}$ PJC(2012), Chapter 2, Paragraph 2.10, pt.18.
$^{122}$ A Deferred Purchase Agreement (DPA) is a warrant listed or unlisted retail investment product offered by financial institutions with the following features: (a) an investor enters into an agreement to purchase a number of assets (Delivery Assets) from the issuer; (b) the value and number of Delivery Assets is determined at a specified future date (Maturity Date), typically 3 to 5 years after the date of contract; (c) Delivery Assets comprise a number of a nominated security, which is typically a share or unit listed on the
As shown in Figure 6.3, there were complicated contractual relationships between the schemes, ASF and hedge funds, identified as ‘Underlying Funds’, to receive financial assets known as ‘delivery assets’ pursuant to the DPA which subsequently operated under a Master Deferred Purchase Agreement (Master DPA).

Figure 6.3: Contractual Agreements of the DPA Structure of the ASF

Australian Securities Exchange (ASX); (d) the number and value of securities that is delivered to the investor is dependent on the performance of an nominated share market index or basket of indices (Reference Indices) from the date of contract until the Maturity Date; (e) soon after the Maturity Date, the issuer satisfies its obligations under a DPA warrant by effecting a transfer of the Delivery Assets to the Investor; (f) the value of the Delivery Assets is based on the DPA warrant’s ‘Maturity Value’; (g) the Maturity Value is worked out by increasing or decreasing the investor’s initial investment by the percentage change in the performance of the Reference Indices from the date of contract until Maturity Date; and (h) the number of the securities comprising the Delivery Assets is equal to the Maturity Value divided by the market price per security at the Maturity Date or such later date stipulated in the DPA warrant. A DPA warrant may also have the following features: (a) a capital guarantee ensuring that at Maturity Date, the Maturity Value will be at least the initial amount invested; (b) the investor may receive a right under the DPA warrant to receive coupon payments during the investment period (coupon payments are assessable under section 6-5 of the Income Tax Assessment Act 1997 (ITAA 1997)); and (c) a facility under which, after taking delivery of the Delivery Assets, the investor can appoint the issuer to sell those assets on the investor’s behalf. 

A DPA is a structured product where an investor agrees to purchase from the DPA issuer a nominated delivery, typically, listed securities or managed investment products. The investors pay the purchase price to acquire the delivery products at the time they enter the DPA but the delivery products are not delivered until the maturity date, being at least 12 months after the date of the initial DPA agreement.\(^\text{123}\)

The legal relationship established meant that under the DPA structure, ASF used investors’ funds to acquire contractual rights from EMA International Limited (EMA), a company also incorporated in the British Virgin Islands.\(^\text{124}\) Those rights required EMA to, in the future, deliver to ASF certain delivery assets, the value of which related to the performance of units in the underlying funds purportedly purchased by EMA.\(^\text{125}\) EMA appointed Global Client Services Limited (GCSL) to administer EMA’s operations under the DPAs (See Figure 6.3 above). AAM, EMA and GCSL provided valuations to Trio Capital for the investments made by ASF through the DPA structure which was invariably used by Trio Capital to determine the unit prices for ASF.\(^\text{126}\) Trio Capital accepted the valuations received from these entities at face value, despite there being no market for the rights acquired by ASF under the DPA structure, and no other means of readily ascertaining the value of these rights contrary to industry practice applicable to the valuation of illiquid assets.\(^\text{127}\) Further,

the DPA structure did not provide AAM as investment manager for ASF, Trio Capital as responsible entity of ASF or the custodian appointed by Trio Capital any legal or beneficial interest in any units in the Underlying Funds which may have been purchased by EMA with funds provided by ASF. The counterparties to the Master DPA were AAM as the investment manager for ASF and EMA. EMA was assumed to be performing investing activities in connection with the Master DPA which was in the best interests of Trio Capital investors where EMA was contractually obligated to AAM, as investment manager for ASF, to deliver assets commensurate with the returns of the hedge funds overseas. Figure 6.4 explains the funds flow arrangements of the DPA structure of ASF where investor funds were transferred from Australia through the National Australia Bank (NATL) Custodian Accounts to the Standard Chartered bank account held by EMA in Hong Kong.

Figure 6.4: Funds Flow Arrangements of the DPA Structure of the ASF

Source: Parliamentary Inquiry Into the Collapse of Trio Capital: Submissions Annexure D

These funds were subsequently transferred into a GCSL bank account in Hong Kong and related hedge funds in several tax havens.

The fraudulent transactions were out of the control and any influence of the RE as soon as such transference was made from Australia by the custodians. The published balance sheet of ASF included in the 2009 financial report showed that almost all of ASF’s assets for the financial year ending 30 June 2008 and 30 June 2009 were made up of investments in offshore global markets, specifically hedge funds. It showed that investments in the underlying offshore based hedge funds as at 30 June 2009 totaled approximately AUD$114.691 million representing 96% of total AUM of AUD$118.997 million and as at 30 June 2008 totaled AUD$42.015 million representing 98% of total AUM of AUD$43.016 million. This was a substantial proportion of its AUM and in contravention of its investment mandate. The biased portfolio allocation should have raised concerns and prompted further investigations by its fiduciaries for lack of portfolio diversification.

EMA had vested interests in five underlying funds namely, Exploration Fund Limited, Tailwind Investment Fund, SBS Dynamic Opportunities Fund Limited Pacific Capital Markets Cayman LDC and Atlantis Capital Markets Cayman LDC. All these funds had characteristically similar structures and incorporated in tax havens with a majority of the funds domiciled in the Cayman Islands with separate administrators and investment

129 Timothy Steven Frazer, WHK Audit & Risk Assessment, Enforceable Undertaking, Australian Securities and Investment Commission, paragraph 5.8, p.5.
managers, spread across different jurisdictions\textsuperscript{131}. Investigations found that the investments of ASF linked to EMA and the underlying funds were a fraudulent scam with non-existent investments, questionable officers and directors, misrepresented and manipulated financial and disclosure information\textsuperscript{132}.

The maze of fraudulent transactions carried out by ASF was a result of the lack of transparency within shadow banking industry in Australia. The level of due diligence conducted was insufficient to substantiate the existence of transactions and accepted by the RE without appropriate verifications. This was also inherent in the valuation methodologies of financial assets and unit prices of investments within ASF. There was little evidence that conflicts of interests were managed by Trio Capital with the degree of caution in which a responsible fiduciary would exercise in discharging its obligations even with mandated compliance and governance frameworks. Thus, the establishment of ASF as a fund that invests in other overseas hedge funds resulted in the standard due diligence and assurance becoming significantly diluted once investment monies left Australia, the main contributing factor which resulted in the Trio Capital fraud\textsuperscript{133}.

### 6.5.2 Fraud and Regulatory Failure

The fraud in itself was complex and involved the schemes investing in numerous hedge funds based in tax havens enabled by misrepresentation, manipulation and collusive

\textsuperscript{133} PJC (2012), "Appendix 3, Responses from Mr Shawn Darrell Richard", p.170, paragraph 7.
conduct between the perpetrators. There were a number of failures by the gatekeepers within the Australian financial system: the regulators, ASIC and APRA and the Officers of Trio Capital. The auditors who verified its financial statements without checking the existence of its assets, and the financial planners who inappropriately recommended Trio Capital’s risky investment strategy to their clients contributed to this failure. In his response to the PJC Inquiry, Mr. Richard identified specific weaknesses within the Australian financial services regulatory framework. In his statement, it was explicitly stated that “there was simply a lack of understanding in of the hedge fund industry in Australia and the complexities of its different structures and investment strategies\textsuperscript{134}”. Hedge funds were exempt from being required to disclose any form of transparency as compared to other asset classes within the managed fund industry and effective due diligence requirements inherently non-existent\textsuperscript{135}. For example, hedge funds were not required to disclose their overall investment methodology when selecting 3\textsuperscript{rd} party fund managers and there was an overall neglect in attaining a significant understanding of the investing activities of hedge funds which directly resulted in an inability to detect any fraudulent and dishonest conduct\textsuperscript{136}. The question which remains unanswered even after extensive forensic investigations is who was ultimately responsible for the failure of the Trio Capital as a result of fraud?

Trio Capital had a fiduciary and statutory responsibility to maintain independence while acting in its capacity as an RE. It was the responsibility of its officers, namely Mr. Shawn

\textsuperscript{134} PJC (2012), “Appendix 3, Responses from Mr Shawn Darrell Richard”, p.171, paragraph 8.
\textsuperscript{135} PJC (2012), “Appendix 3, Responses from Mr Shawn Richard”, p.171, paragraph 8.
\textsuperscript{136} PJC (2012), “Appendix 3, Responses from Mr Shawn Richard”, p.171, paragraph 8.
Darrell Richard, Mr. Cameron Anderson and Mr. David Millhouse to maintain independence while acting in their capacity as directors. Figure 6.5 shows the complex maze of incorporated structures utilized by Trio Capital and the interaction of investments which led to failures in the compliance and corporate governance mandates between related parties and organisational structures associated with Trio Capital.

The investments by Trio Capital in funds controlled or operated by Trio Capital's directors, senior management team and associated entities and individuals created conflicts of interests.\(^{137}\) Under Section 601FD(1)(f)(iv) of the Corporations Act, the officers were required to take all reasonable steps that a reasonable person in the position of the officer would take to ensure that Trio Capital complied with provisions of the ASF compliance plan in relation to the selection and performance of fund managers, including to ensure that Trio Capital's investment committee undertook a quarterly review and reported its finding to the board\(^ {138}\) in the best interest of its investors. This was evidently not the case. The responsible officers had substantially failed to carry out their duties and responsibilities to investors and all related stakeholders in a web of deceit and collusive conduct led by Mr. Richard.

For nearly four years between November 2005 and September 2009, Mr. Richard as Director of AAM, and other related entities of Trio Capital, had dishonestly operated the business in a way which was designed to, and had the effect of, diverting monies which

Figure 6.5: Interaction of Investments and Founding Directors of Trio
were invested in superannuation funds in Australia into overseas funds located in tax havens domiciled in the Caribbean. The overseas funds were of questionable value and were wholly inappropriate superannuation investments. This was made possible particularly because of the various directorships and board positions held by Mr. Richard in related entities of Trio Capital\textsuperscript{139}.

There were conflicts of interest\textsuperscript{140} which arose from Mr. Richard’s company AAM acting as ASF’s investment manager between 26 August 2005 and 22 December 2009 in circumstances where WGAM a company also controlled by Mr. Richard acquired all the shares in AFM, the parent company of Trio Capital, in 2003\textsuperscript{141}. Mr. Richard was a director of Trio Capital and a member of Trio Capital’s Investment Committee at the time AAM was appointed\textsuperscript{142}. Mr. Richard was, at various times during AAM’s engagement, concurrently a director of parent companies, AFM and WGAM\textsuperscript{143}. ASF investing, through AAM, in Tailwind, one of the underlying funds related to Mr. Flader when AAM was also the investment manager of Tailwind\textsuperscript{144}. The underlying funds being controlled by individuals who were associated with Mr. Richard, had previously held roles with Trio Capital or its parent companies, or held roles with EMA and GCSL\textsuperscript{145}. Mr. Richard deliberately falsely


\textsuperscript{140} Rex John Phillpott, Enforceable Undertaking, \textit{Australian Securities and Investment Commission}, paragraph 8.28 (a), p.6.

\textsuperscript{141} Rex John Phillpott, Enforceable Undertaking, \textit{Australian Securities and Investment Commission}, paragraph 8.28 (i), p.6.

\textsuperscript{142} Rex John Phillpott, Enforceable Undertaking, \textit{Australian Securities and Investment Commission}, paragraph 8.28 (ii), p.6.

\textsuperscript{143} Rex John Phillpott, Enforceable Undertaking, \textit{Australian Securities and Investment Commission}, paragraph 8.28 (iii), p.6.

\textsuperscript{144} Rex John Phillpott, Enforceable Undertaking, \textit{Australian Securities and Investment Commission}, paragraph 8.28 (b), p.6.

\textsuperscript{145} Rex John Phillpott, Enforceable Undertaking, \textit{Australian Securities and Investment Commission}, paragraph 8.28 (c), p.6.
represented himself to investors and other stakeholders, including regulators, that he was a director and owner of AAM and Wright Global Investments’ (WGI) holding companies as well as controller of Trio Capital, WGI and AAM\footnote{Shawn Darrell Richard Enforceable Undertaking, \textit{Australian Securities and Investment Commission}, paragraph 2.2.8, p.3.}. These false representations were substantiated by the fact that Mr. Flader was the ultimate controller of these entities and the business of all entities related to Trio Capital\footnote{\textit{Regina v Shawn Darrell Richard} [2011] NSWSC 866, at [29].}. From July 2004 onwards, Mr. Richard knowingly put into effect Mr. Flader’s instructions in relation to the operation of a scheme whereby Mr. Richard used his positions in respect to AAM, Trio Capital, WGI and AFM, to arrange the transfer of Australian investors’ monies from managed investment schemes and superannuation funds\footnote{Shawn Darrell Richard Enforceable Undertaking, \textit{Australian Securities and Investment Commission}, paragraph 2.2.2, p.2.}. Trio Capital was either the trustee or the responsible entity to overseas funds controlled by Mr. Flader namely; Exploration Funds Limited, Pacific Capital Multi-Arbitrage Fund Limited, SBS Dynamic Opportunities Fund Limited, Sierra Multi-Strategy Fund Limited\footnote{Shawn Darrell Richard Enforceable Undertaking, \textit{Australian Securities and Investment Commission}, paragraph 2.2.2, pp.2-3.} (Flader Controlled Funds). This was carried out to purchase shares in US companies from foreign companies controlled by Mr. Flader (Flader Vendor Companies) at prices which realized significant profits for the Flader Vendor Companies\footnote{Natasha Beck, Enforceable Undertaking, \textit{Australian Investment and Securities Commission}, paragraph 8.24(c), p.14.}. The GSCL Group of which Mr. Flader was the Chief Executive Officer and Chairman, was the custodian of the assets of the Flader Controlled Funds at all material times. In addition, the GSCL Group, provided administration services to EMA\footnote{Shawn Darrell Richard Enforceable Undertaking, \textit{Australian Securities and Investment Commission}, paragraph 2.2.2, p.2.}. Mr. Richard used his positions of trust in AAM, Trio Capital, WGI and AFM to arrange for investments to be transferred to
hedge funds controlled by Mr. Flader and this was subsequently used to purchase high-risk securities in US companies linked to Mr. Flader at manipulated and inflated prices\textsuperscript{152}. More importantly, the securities purchased were over-the-counter, highly risky in an unregulated environment and were vulnerable to share price manipulation, thus deliberately exposing investors in Australia to significant financial losses.

A large proportion of profits received by Flader Vendor Companies as a result of returns from investments into Flader Controlled Funds were subsequently used to provide funds back into Trio Capital, WGI, AFM and AAM by way of loans\textsuperscript{153} from other companies controlled by Mr. Flader where Mr. Richard falsely represented to auditors of Trio Capital, WGI, AFM and AAM\textsuperscript{154}, a form of Ponzi scheme. Further, Mr. Richard falsely represented to Trio Capital and ASF investors that he was diversifying the portfolio. In August 2006, the directors of Trio Capital became concerned about exposure to a particular Flader Controlled Fund, namely the Exploration Fund. Mr. Richard subsequently participated in the creation of new offshore funds for Trio Capital to invest in, all of which were still under the control of Mr. Flader\textsuperscript{155}. Between April 2007 and October 2009, Mr. Richard was aware that there were questionable and risky derivative transactions obtained through Flader Companies which were not disclosed\textsuperscript{156}. This was also the case in regards to his

\hspace{1cm}\textsuperscript{152} Shawn Darrell Richard Enforceable Undertaking, \textit{Australian Securities and Investment Commission}, paragraph 2.2.2, p.2.
\textsuperscript{153} Shawn Darrell Richard Enforceable Undertaking, \textit{Australian Securities and Investment Commission}, paragraph 2.2.6, p.3.
\textsuperscript{154} Shawn Darrell Richard Enforceable Undertaking, \textit{Australian Securities and Investment Commission}, paragraph 2.4.1(g), p.5.
\textsuperscript{155} Shawn Darrell Richard Enforceable Undertaking, \textit{Australian Securities and Investment Commission}, paragraph 2.2.10, p.3.
\textsuperscript{156} Shawn Darrell Richard Enforceable Undertaking, \textit{Australian Securities and Investment Commission}, paragraph 2.2.12, p.3.
relationships with Mr. Flader and related network of companies and investment funds. The financial advantage that he gained from these manipulative activities has not been evidenced as all these funds are considered unrecoverable.

The valuation of financial assets invested by Trio Capital was misrepresented and the directors of Trio Capital were negligent in their duties as officers to ensure valuation was conducted with adequate due diligence. For example, in his role as an non-executive director of Trio Capital and Chairman of its Risk and Compliance Committee, Mr. David O'Bryen was not aware of the methodology which formed the basis of the valuation of ASF unit price and made no enquires to ascertain the methodology\textsuperscript{157}. He did not ask for independent valuations to be undertaken for ASF\textsuperscript{158}, a crucial responsibility within risk management and compliance. He made no inquires in relation to whether the unit price reports were in accordance with relevant provisions of ASF’s constitution and compliance plans\textsuperscript{159}, and did not conduct any due diligence, monitoring or supervision of agents and external service providers to ASF\textsuperscript{160}. ASF’s investment structure was set up and continued to operate without any due diligence or monitoring by Trio Capital as was required by the ASF Compliance Plan. Trio Capital did not, nor did Mr. Jack Phillpott\textsuperscript{161} during his directorship, take any steps to ensure that Trio Capital obtain or have available any due

\textsuperscript{157} David O’Bryen, Enforceable Undertaking, Australian Securities and Investment Commission, paragraph, 8.4 (a) p.6. 
\textsuperscript{158} David O’Bryen, Enforceable Undertaking, Australian Securities and Investment Commission, David O’Bryen, paragraph, 8.4 (b) p.6. 
\textsuperscript{159} David O’Bryen, Enforceable Undertaking, Australian Securities and Investment Commission, paragraph, 8.4 (c) p.7. 
\textsuperscript{160} David O’Bryen, Enforceable Undertaking, Australian Securities and Investment Commission, paragraph, 8.4 (d) p.7. 
\textsuperscript{161} (1) Chief Executive Officer,(2) Director; (3) Company Secretary and (4) member of the Risk and Compliance Committee, Enforceable Undertaking, Australian Prudential Regulatory Authority, p.2, paragraph 6(a)-(d), 29 August 2011.
diligence reports relating to the ongoing monitoring and supervision of AAM, EMA and its associates either as investment manager in AAM’s capacity or perform any obligations under the Master DPA and Supplemental Agreements in relation to EMA\textsuperscript{162}. ASIC’s investigations revealed that Mr. Phillpott should not have permitted transactions whereby ASF’s funds were invested under the DPAs when there was no or inadequate information as to the valuation and value of the rights under the DPAs, the fund managers or the underlying funds\textsuperscript{163}.

The Committee found that APRA and ASIC had failed in carrying out their responsibilities as prudential and market regulators, especially in the slow response to the fraud. As identified in sections 6.2.2 and 6.3 earlier, a key responsibility of ASIC is to oversee the registration of managed investment schemes and the issuance of AFS License to financial service providers. These requirements mandate that ASIC carry out appropriate due diligence to account for the integrity of licensees and viability of managed investment schemes. ASIC had issued an AFS License to Mr. Richard of Trio Capital which was in turn a registered managed investment scheme. This would have invariably misled investors to believing that Mr. Richard was of good character and hence would not pose a significant risk, placing their trust in him of their investments. However, it was identified during the proceedings\textsuperscript{164} of the PJC Inquiry that Mr. Richard had numerous previous convictions of securities fraud in the US and Canada prior to the AFS license being granted by ASIC and

\textsuperscript{162} Rex John Phillpott, Enforceable Undertaking, \textit{Australian Securities and Investment Commission}, paragraph 8.15 (a)-(f), pp.11-12.

\textsuperscript{163} Rex John Phillpott, Enforceable Undertaking, \textit{Australian Securities and Investment Commission}, paragraph 8.12-8.13, pp.11-12.

\textsuperscript{164} Mr Nicholas McGowan, \textit{Committee Hansard}, Thirroul, 6 September 2012, p.7.
such important information should have been identified as a red flag to Mr. Richard's character, warranting greater scrutiny. Further, APRA had conducted five prudential reviews between 2004 and 2009 but no enforcement action was taken while ASIC only conducted investigations after a tip-off from a member of the public in October 2009. Both authorities had proven less than effective in market surveillance and the length of response time which resulted because of a lack of communication between ASIC and APRA was emphasized. As stated in the PJC Report:

It seems that APRA had not communicated to ASIC its request for Trio Capital to provide information. As a result, when ASIC commenced its active surveillance of the hedge funds in June 2009, it did not seem aware that Trio Capital was not providing the prudential regulator with basic facts about the existence of assets and their value. This information should have been communicated.

The inherent failure of the ‘twin-peaks’ regulatory model and regulators in carrying out their duties as gatekeepers of the Australian financial system brings into question their readiness in adapting to an ever changing globalized financial system. The regulators had missed key events in the fraudulent conduct which was being perpetrated, in particular the activities of AAM which included misrepresentation with respect to incorrect disclosures made in the ASF Product Disclosure Statement, providing misleading information regarding a research report about ASF and hiding where ASF investment money would ultimately be placed.

165 Mr. Greg Brunner, Actuarial Market and Insurance Risk Services, Australian Prudential Regulation Authority, Committee Hansard, 4 April 2012, p.9.
166 Mr Glen Unicomb, Senior Executive Leader, ASIC, Committee Hansard, 6 September 2011, p.10.
A review of the role of auditors, custodians and research houses showed that there were significant gaps of what was expected by stakeholders and the actual responsibilities of relevant parties, statutory and otherwise. For example, the Committee stated that auditors’ approval of financial statements did not necessarily mean that the actual assets underlying the financial statements existed, neither did the auditor’s assessment of Trio Capital’s compliance plan nor the work of the compliance committee implicitly imply that the investment scheme was viable but rather that these procedures existed. This is contrary to the belief of investors and financial advisers that effective due diligence was being carried out. Furthermore, ASIC’s investigations revealed that with respect to the 2008 Audit and 2009 Audit of Trio Capital and related entities, the Principal Auditor, Mr. Timothy Frazer (Mr. Frazer) of WHK Audit and Risk Assessment, failed to carry out or perform adequately and appropriately, the duties of an auditor within the meaning of Section 1292(1)(d)(i) of the Corporations Act. He did not, as lead auditor of the 2008 Audit and the 2009 Audit, ensure that each of the audits was conducted within the requirements of Australian Auditing Standards because he had failed to ensure that sufficient and appropriate audit evidence was obtained in relation to the existence and valuation of investments. Nor did he attain a sufficient understanding of ASF and its environment, including the operations of EMA and GCSL and the investments they made, in order to identify, assess and respond to risks of material misstatement. For example, EMA appointed a Hong Kong based auditor to audit EMA for the period from its incorporation.

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171 Timothy Steven Frazer, WHK Audit & Risk Assessment, Enforceable Undertaking, Australian Securities and Investment Commission, paragraph, 6.2 (i), p.7.
172 Timothy Steven Frazer, WHK Audit & Risk Assessment, Enforceable Undertaking, Australian Securities and Investment Commission, paragraph, 6.2,(ii) p.7.
from 3 January 2006 to 30 June 2009. Within the investments of EMA was a major investment in Exploration Fund Limited (EFL). EFL in turn appointed a US based auditor to verify the fair value of its investments as at 30 June 2009 and to report to EMA. As at 30 June 2009, EMA's Hong Kong based auditor was responsible for verifying the existence and valuation of the investments held by EMA. Mr. Frazer relied on the work of the Hong Kong based auditor in relation to the existence and valuation of EMA's investments. The Hong Kong based auditor also appeared to have relied on the US based auditor of EFL, as to the existence and valuation of approximately AUD$74.907 million out of the total investments of EMA as at 30 June 2009 of approximately AUD$114.567 million. At the time of signing the 2009 Audit, Mr. Frazer had a draft completion memorandum by EMA's Hong Kong based auditor which noted that the US based auditor had not completed its audit of EFL. Mr. Frazer had received correspondence from EFL’s auditors confirming that nothing had come to their attention regarding further adjustments in reference to the carrying value of EFL’s investments and did not pursue the matter with adequate due diligence. In respect of the 2009 Audit, there were concerns by ASIC that Mr. Frazer failed to ensure that sufficient work was performed to adequately consider the professional competence of the other auditors upon whom the principal auditor relied on in the context

173 Timothy Steven Frazer, WHK Audit & Risk Assessment, Enforceable Undertaking, Australian Securities and Investment Commission, paragraph 5.9, p.6.
174 Timothy Steven Frazer, WHK Audit & Risk Assessment, Enforceable Undertaking, Australian Securities and Investment Commission, paragraph 5.9, p.6.
175 Timothy Steven Frazer, WHK Audit & Risk Assessment, Enforceable Undertaking, Australian Securities and Investment Commission, paragraph 5.11, p.6.
176 Timothy Steven Frazer, WHK Audit & Risk Assessment, Enforceable Undertaking, Australian Securities and Investment Commission, paragraph 5.12, pp.6-7.
177 Timothy Steven Frazer, WHK Audit & Risk Assessment, Enforceable Undertaking, Australian Securities and Investment Commission, paragraph 5.12, p.6.
178 Timothy Steven Frazer, WHK Audit & Risk Assessment, Enforceable Undertaking, Australian Securities and Investment Commission, paragraph, 5.12, pp.6-7.
of the specific assignment\textsuperscript{179} and that the work of other auditors was adequate for the principal auditor’s purposes in the context of the specific assignment\textsuperscript{180}. A disclaimer of opinion was expressed on account of the work of the other auditors upon whom the audit relied in relation to the existence and valuation of investments which had not been concluded as at the date of issuance of Mr. Frazer’s opinion\textsuperscript{181}. Further, Mr. Frazer as principal auditor, failed to ensure that each audit was planned and performed with an attitude of professional skepticism\textsuperscript{182} and did not carry out his responsibilities adequately.

The financial advisers of Trio Capital investors also played a contributory role in the loss of investor funds by providing financial advice without performing adequate due diligence in breach of their fiduciary responsibilities. More importantly, there were inherent conflicts of interest as the financial advisers received generous commissions for advising investors to invest in Trio Capital. The role of custodians in a managed investment scheme is generally limited to that of a ‘bare trustee’ which acts under the instructions of the RE. Generally, custodians are required to undertake regular valuations of their clients’ assets and report the details of these assets to the client as per requirements of the respective custody agreements. However, they are not required to confirm the existence of the underlying assets\textsuperscript{183}. Hence, the custodian was not responsible for the protection of investor funds.

\textsuperscript{179} Timothy Steven Frazer, WHK Audit & Risk Assessment, Enforceable Undertaking, Australian Securities and Investment Commission, paragraph, 6.3,(i) p.7.
\textsuperscript{180} Timothy Steven Frazer, WHK Audit & Risk Assessment, Enforceable Undertaking, Australian Securities and Investment Commission, paragraph, 6.3, (ii)p.8.
\textsuperscript{181} Timothy Steven Frazer, WHK Audit & Risk Assessment, Enforceable Undertaking, Australian Securities and Investment Commission, paragraph, 6.3.2, (iii)p.7.
\textsuperscript{182} Timothy Steven Frazer, WHK Audit & Risk Assessment, Enforceable Undertaking, Australian Securities and Investment Commission, paragraph, 6.4, p.8.
\textsuperscript{183} PJC (2013), “Statutory Oversight of the Australian Securities and Investments Commission: The Role of Gatekeepers in Australia’s Financial Services System”, Parliamentary Joint Committee on Corporations and...
neither was it required by law to independently verify transactions before transferring money offshore. This is also true in the case of research houses and in this case, Morningstar, which relied on information provided by Trio Capital in formulating its ratings and recommendations. The RE is ultimately responsible for providing information and acting with diligence and responsibly and hence, if this line of defense is broken the entire system fails.

6.6 Conclusion

The PJC Inquiry heading the investigations on the collapse of Trio Capital concluded by recommending greater disclosure benchmarks and principles for hedge funds to improve investor awareness of the risks associated with hedge fund investing activities. It is believed that such actions will improve the conduct of gatekeepers for managed investment schemes, strengthen the regulatory requirements applying to hedge funds and in turn assist in the earlier detection of fraud\textsuperscript{184}. In its statement\textsuperscript{185} it stated; “It seems likely that had the regulators and gatekeepers had information about the underlying assets of the Trio Capital funds, the significant delay in APRA’s requests for information in 2009 would not have occurred.” Although increased disclosure provides more information to all stakeholders including retail investors, there will remain a gap in understanding such


\textsuperscript{185} PJC (2012), Chapter 7, 7.55, p.136.
information. The degree of complexity involved in the investing activities of hedge funds can even baffle the most sophisticated of investors. If this was not the case we would not be experiencing continued financial crises. Research conducted on the acceptability and understanding of financial information by retail investors found that retail investors are generally unengaged by financial matters without the right level of education to understand and analyze financial information and rely on advice which they expect is true and fair in their best interest (Hung et al, 2008, p.20). There may be arguments that seek to promote the use of finance professionals such as auditors and financial planners in providing assurance to less sophisticated investors to mitigate this problem. Although this has a certain degree of merit, the issues revealed from the investigations of the Trio Capital fraud point to expectation gaps and failure of responsibilities, conflicts of interest and a general lack of knowledge in understanding the complexities associated with hedge fund investing activities by such trusted individuals.

In the US and the UK, only investors who are considered HNWI and institutional investors are allowed to invest in hedge funds based on the ‘sophisticated investor rule’ which recognizes the net worth of such investors as opposed to educational qualifications in determining financial acumen. In Australia, the approach is not as stringent and retail investors are not restricted from investing in hedge funds, especially through SMSFs. The regulatory approach to managed investment schemes which encapsulates all forms of investment vehicles such as managed accounts, private equity firms and hedge funds, places the onus of responsibility on the fiduciary obligations of REs through mandated disclosure requirements and conduct-of-business rules to ensure that investors are
adequately protected. The implementation of conduct and disclosure obligations does not necessarily mean that they will be adhered to if not strictly enforced. Indeed, in many cases of fraud and collapses, this has been the case. Although managed investment scheme structures do have their benefits to retail investors, as they offer expertise, economies of scale and a level of diversification that an individual portfolio would not be able to easily attain, a disclosure based regime which emphasizes a self-regulatory method of safeguarding financial assets does not negate the possibility of misleading and deceptive conduct and the omission of information. Unfortunately, these fraudulent practices and the risks which still remain, five years after the GFC of 2008, will not fade away even after the implementation of extensive regulatory oversight. There will always be loopholes in the regulatory architecture and financial system susceptible to fraudulent activities.

The most recent financial debacle within the funds management industry in Australia is that of managed investment scheme LM Investment Management, a Gold Coast based fund manager with approximately AUD$400 million in funds under management. As of the 20\textsuperscript{th} March 2013, the fund is under administration for failure to meet creditor obligations. Investigations carried out highlight possible fraudulent conduct within the fund and by its directors. The allegations suggest inherent conflict of interest between the directors and investors, misappropriation of the scheme’s invested capital and misrepresentation of its PDS in contravention with the scheme constitution. A substantial proportion of investments by retail investors will not be recoverable\textsuperscript{186}. Deceptive conduct cannot be

easily traced if regulatory agencies have a light-touch approach to supervising these investing activities. In the past five years from 2007 approximately AUD$10 billion\textsuperscript{187} have been lost in dubious investment schemes due to failures in regulatory enforcement and protecting retail investors in Australia. This was the case in the Trio Capital fraud and indeed as investigations are carried out there is a possibility that this will also be evident within LM Investment Management. As the Australian population ages and many investors look into managed investment schemes to increase the net worth of their retirement income, the risks to the superannuation industry will also increase significantly.

A key problem is that discrepancies in the valuation methodology of investments and gaps in regulatory oversight have contributed significantly to such frauds. A recent US Senate Permanent Subcommittee on Investigations substantiates this point. A report on the “JPMorgan Chase Whale Trades” provides a startling case history of how synthetic credit derivatives have become a multi-billion dollar source of risk within the U.S. banking system\textsuperscript{188}. Subcommittee Chair Senator Carl Levin identified\textsuperscript{189} how vulnerable the global financial system still is, going on five years after the GFC 2008, stating:


Our investigation brought home one overarching fact: the US financial system may have significant vulnerabilities attributable to major bank involvement with high risk derivatives trading. The four largest US banks control 90 percent of US derivatives markets, and their profitability is invested, in part, in their derivatives holdings, nowhere more so than at JPMorgan.

The investigations revealed significant fraudulent practices which were inherent within JPMorgan. The executive summary in the report190 stated that:

Inadequate derivative valuation practices enabled traders to hide substantial losses for months at a time; lax hedging practices obscured whether derivatives were being used to offset risk or take risk; risk limit breaches were routinely disregarded; risk evaluation models were easily dodged or stonewalled; and derivative trading and financial results were misrepresented to investors, regulators, policymakers, and the taxpaying public.

Finally, as a case in point, it has to be stated that economies based on transnationalism are always vulnerable to fraud. There is approximately USD$600 trillion worth of outstanding derivatives contracts within the global financial system compared to a total Global GDP of USD$60 trillion. This translates to 10 times more debt on a nominal basis and the growth in financial liabilities far outstrips that of underlying real economic output191. The risks to future financial crises are increasing at a rapid pace and so is the exposure of investors to fraudulent conduct by rouge financial professionals who take advantage of unsuspecting individuals in uncertain times. One solution is increased regulatory oversight, but this will be fruitless if enforcement is not expanded.


CHAPTER 7

CONCLUSION

“It is inconceivable that anyone will divulge a truly effective get-rich scheme for the price of a book. There is ample opportunity to use wealth in this world, and neither I nor my friends, nor anyone else I have ever met, has so much of it that they are interested in putting themselves at a disadvantage by sharing their secrets”.

Victor Niederhoffer, US Hedge Fund Manager and Statistician

7.1 Introduction

The concluding chapter reintroduces the main research issues that this thesis set out to explore. The argument is that the light touch regulatory approach taken in Australia towards supervision of hedge funds exposes retail investors and the superannuation industry at large to tremendous risks which can be exacerbated into system wide risks should fraudulent conduct be large enough to result in a contagion impact on counterparties. The risk of fraudulent conduct by rogue hedge fund managers is further substantiated by the findings of the case analysis on the collapse of Trio Capital due to misrepresentation, manipulation and misappropriation.

The Australian financial regulatory architecture is uniquely different, a system which does not distinguish hedge funds as separate investment vehicles and where retail investors are not restricted from investing in hedge funds so long as such funds are registered, have the

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relevant AFS licenses to conduct financial services and adhere to regulatory requirements as provided under the *Managed Investment Scheme Act 1998*. The collapse\(^2\) of LM Investments in early 2013 due to fraud proves that these risks are an ever increasing threat to the integrity of the Australian financial system. The chapter begins with a summary of the findings of this thesis and moves to distinguish future research perimeters.

### 7.2 Financial Market Regulation, Intermediation and Risk: The Rise of the Shadow Banking Industry

Financial market regulation is a construct of disclosure mandates and conduct-of-business rules bound together as tools to empower regulators tasked with the responsibility of protecting economies against irresponsible and reckless behavior by certain market participants. The role of maintaining the integrity of financial markets is onerous and the ever expanding range of financial products and services along with complex financial intermediation processes extending into the unregulated shadow banking sector has exacerbated the difficulties in sufficiently monitoring financial systems and protecting investors. The tools and regulatory approaches currently available to financial market regulators sufficiently cater to the traditional form of financial intermediation where the most complex of structures have been financial conglomerates which participate in commercial and investment banking activities within a regulated environment. In these structures, market supervision strategies have generally been effective and the approaches, be it the functional, institutional or twin peaks regulatory structure, have

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enabled regulators in the US, UK and Australia to sufficiently supervise as well as facilitate growth. However, the evolution of complex financial linkages extending into the unregulated shadow banking sector has undermined this approach and become a significant cause of impediments to the effective operation of traditional financial supervisory models as the boundaries of jurisdictional oversight becomes increasingly blurred. Further, making a choice between a rules-based or principles-based regulation fails to address the dynamism in financial systems of the 21st century and its enforcement requisites.

Financial commitments can now be packaged and repackaged into securities of value through credit intermediation and risk transformation processes which have been developed to converge with traditional funds flow channels within the unregulated sphere of financial systems where the majority of business dealings are conducted over-the-counter. These financial contracts are subsequently transacted by non-bank financial institutions such as hedge funds and in turn funded by private investors and banks investing in a myriad of risky derivative instruments currently valued at approximately USD$600 trillion dollars globally. The risk transference strategies have resulted in an exacerbation of risks within the global financial system where one risky asset is managed by another, comparable to what may be construed as a Ponzi scheme3. Financial market regulators are in turn charged with the responsibility to manage this complex maze with outdated enforcement tools and strategies formed for a system within closed economies.

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which are not reactive to the evolving nature of financial innovation in a constantly developing global financial system.

Regulatory approaches in the modern financial market system require an appreciation of the functional dynamics of financial intermediation and the funds-flow processes and, indeed, the acceptance by market regulators that financial transactions extend into the shadow banking sector. Hedge funds have become an integral part of this intermediation process and the cases of irresponsible, risky and fraudulent conduct by hedge fund managers have been detrimental to the financial well-being of economies and investors. The risks which hedge funds pose remain the same as they were during the collapse of LTCM in 1998 and then BSAM in 2008 which contributed to the GFC 2008, although the forms and methods may change. The subsequent collapse of Madoff LLC in the US and Trio Capital in Australia during 2009 confirms the above assertion. Excessive leverage, reckless investment strategies and lax due diligence are amongst the issues which will continue to influence investor wealth as will fraudulent and deceptive conduct if enforcement is not sufficiently mandated. An overall objective of supervising the hedge fund industry should emphasize a flexible, network integrated supervisory approach which enables regulators to react instantaneously in this constantly evolving environment while maintaining adequate controls through private monitoring.

7.3 Hedge Fund Regulation, Disclosure and Transparency

Hedge funds in the US and UK have historically been able to escape direct regulatory oversight by taking advantage of exemptions within provisions of securities legislation or
subject to light-touch regulatory supervision, structured as privately managed investment vehicles. In early 2010, as a reaction to the excessive risk-taking by hedge funds before the GFC 2008 and in an effort to restore investor confidence, regulators in the US and the EU including the UK, took actions to clamp down on the hedge fund industry. The introduction of the *Dodd-Frank Consumer Protection and Wall Street Reform Act 2010* in the US and the *Alternative Investment Fund Managers Directive* in the EU and the UK have been touted as solutions to protecting financial systems against the risks posed by hedge funds, an effect which has also been aimed at legitimizing the availability of hedge fund investment vehicles as an option to retail investors.

The Dodd-Frank Act paved the way for the elimination of the ‘private adviser exemption’ from registration requirements which hedge funds in the US had previously relied upon. Hedge fund managers with AUM of USD$150 million or more will now be required to adhere to strict rules and registration requirements which were formerly non-existent. An important mandate within these new provisions is actions taken to increase transparency of hedge fund activities which will require hedge fund managers to keep and disclose to the SEC certain specific information. This includes, information pertaining to the amount of assets under management and use of leverage including off-balance sheet leverage, counterparty credit risk exposure, trading and investment positions, valuation policies of the fund, types of assets held, side letter arrangements and the fund’s trading practices. The submission of records and reports in relation to a hedge fund’s investing and operational activities has been stated as necessary for the purposes of assessing the systematic risk posed by a hedge fund, subject to a requirement that the FSOC maintain confidentiality of
such information, in particular, any proprietary trading information and investment strategies of the hedge fund manager. The provision of this requirement seeks to subdue the long-standing fear within the hedge fund industry of revealing proprietary information which could be detrimental to the viability and profitability of hedge funds.

The enactment of the Dodd-Frank Act saw amendments to the definition of an ‘accredited investor’ and ‘qualified client’ to address discrepancies in the sophisticated investor rule and net worth standard which has not kept up with inflation and growth in disposable income. However, there was no mention of any requirement for HNWI to be financially sophisticated or have sufficient knowledge about finance as criteria to be identified if investors are to take the opportunity to invest in hedge funds. This gap remains a crucial point of contention as the onus of responsibility for financial losses is ultimately borne by the investor and, hence, requiring the need for investors to have a sufficient level of financial knowledge and recognizing the complexities of hedge fund investing would be useful for effective decision making. There is also the argument that financial advisers play a crucial role in filling this gap. However, there needs to be sufficient oversight and assurances that financial advisers are held accountable should they not act in the best interest of their clients or relay the wrong financial advice and that there is no conflict of interest in carrying out their duties. An in-depth understanding of hedge fund investment strategies and the risks they pose is crucial to any investment decision and without actions mandated on adequate financial literacy for investors this problem will remain as a point of dispute, especially in times of fraud, financial crises or ‘black swan’ events.
The Dodd-Frank Act also provided exemptions from registrations under the Advisers Act for ‘foreign private advisers’ and mid-sized hedge funds with assets under management of between USD$25 million and USD$100 million. The ‘foreign private adviser’ exemption will leave US regulators with significant obstacles to obtaining the data necessary to identify which foreign hedge funds may add to systemic risk and would frustrate the ability of US regulators to fulfill their legislative charge to manage systemic risk (Overmyer, 2010, p.2227). There is also a risk that hedge funds will deliberately incorporate and structure themselves with smaller AUM to maintain exemptions from registration requirements and continue with their investing activities under the purview of regulators.

The EU response to the regulation of hedge funds was the enactment of the AIFMD. The aim of the AIFMD was to harmonize the regulatory framework governing hedge fund managers who conduct business activities within the EU. It captures open-ended and closed-ended funds with minimum exceptions available to fund managers for example, a *de minis* exemption for managers with AUM less than the €100 million threshold. The introduction of the AIFMD will see increased regulatory and compliance obligations for hedge funds and their managers similar to actions in the US, including mandated capitalization thresholds and the requirement to appoint an independent depository or custodian to hold the fund’s assets. There are specific disclosure requirements which will require information in relation to detailed risk and liquidity management obligations. The AIFMD has also dictated compensation guidelines for the remuneration of employees which will see such compensation be paid over a period of time, as opposed to immediately, as a measure to discourage excessive risk taking and financial exuberance. This is intended to curtail
misrepresentation and manipulation of portfolio investments which may result in a temporary performance enhancement (Farrell et al, 2013, p.29). There will be ‘passporting’ arrangements in place whereby authorized hedge funds and their managers will be able to market and provide financial services across EU authorized jurisdictions as a measure to improve harmonization within the EU and encourage growth.

The differences in hedge fund regulations in the US, and the EU, which directly affects hedge fund managers in the UK, will have greater negative externalities because they create legal uncertainty and significant transactional and compliance costs while exposing the markets to regulatory arbitrage. These actions may also be construed as protectionist and retaliatory actions may be encountered by funds outside the supervised regions. If hedge fund managers are subject to stricter rules in one jurisdiction while competing for clients and profit margins with funds in jurisdictions that impose less restrictive rules, they could be placed at a comparative disadvantage and, hence, seek alternative structures or more favorable jurisdictions to conduct their investing activities. There is the potential for large scale migration of hedge funds into tax havens because of stricter regulation and disclosure requirements elsewhere, affecting financial services industries in regulated jurisdictions.

The one consistency between future legislation of both the US and the UK to be enforced is the mandate to increase transparency and disclosure of information on hedge fund activities, which although a step in the right direction, do not totally negate the risks of fraudulent conduct, a problem arising from the operational activities of a hedge fund. Disclosure is designed to solve the informational asymmetries that exist between hedge
funds, investors and regulators. The logic is that by arming investors with information, mandatory disclosure promotes informed investor decision making and market efficiency. Once they are empowered with information investors are then said to be able to protect themselves against corporate abuses and mismanagement, while regulators can effectively monitor and provide oversight to maintain market integrity (Parades, 2003, p.418). However, the disclosure of information does not necessarily mean that it will be accurate, a problem which will be difficult to address and enforce by regulators. The idea of hedge fund transparency is not simply a matter of anticipating and meeting new regulatory obligations but one which has to include constant monitoring in congruence with the actively managed and dynamic investment activities of hedge funds.

Hedge fund risk transparency is presented as a positive approach towards a safer investing environment and can include the provision of information such as portfolio positioning, operational reports, asset pricing and reconciliation, stress-test analysis, portfolio volatilities, correlations and counterparty exposures⁴. However, quantitative risk management models and information alone have proven insufficient, too complex and provide information based on historical data which is a subset of past performance. The assessment of historical performance in no way predicts future results even if it is relied on as an indicator of trends, for the development of a trend does not necessarily mean that future performance will be in congruence with the past and hence should not be explicitly

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relied upon. This statement is supported by Owyong (2011, p.126) who asserts that hedge fund managers often adapt their trading strategies in response to changing market conditions and so past realized returns may not sufficiently reflect their current actions or performance. Furthermore, there is also a risk of information overload. That is, the risk that investors will actually make less accurate decisions in the face of more information as they adopt less complicated decision strategies in an effort to simplify their investment decisions (Parades, 2003, pp.483-484).

The one important issue that has never been adequately addressed in the detection of fraudulent conduct is the operational risks within hedge funds. This includes issues related to middle and back office functions such as its trade processing, accounting and, more importantly, valuation and reporting. Valuation and the risk of NAV volatility can be a particular problem within a dynamic financial market as, for example, assets which have been valued based on a marked-to-model may be vulnerable to manipulation, a lack of demand and autocorrelation while, on the other hand, marked-to-market valuations may result in underestimation, incorrect pricing and misrepresentation or be the target of insider trading or trading outside of the hedge fund's operating mandate. The importance of accuracy in valuation directly impacts the quantification of portfolio returns for investors and fees to a hedge fund manager. Thus, it is imperative that an investor in a hedge fund considers the operational processes and controls relevant to obtaining such valuations and actively monitors these on an ongoing basis. This involves understanding the operational risks inherent in hedge funds’ and encouraging the employment of
independent fund administrators who are proficient in forensic accounting analytics and able to actively detect fraud risks.

7.4 Hedge Fund Regulation in Australia: The Independent Forensic Fund Administrator

The Australian approach to regulating hedge funds has not been as direct as the US and the UK. Hedge funds have not been uniquely recognised by the Australian regulators as separate investment vehicles but rather regulated uniformly under the provisions of the Managed Investment Scheme Act 1998 and the Corporations Act 2001. One example of the different regulatory approach is the ‘sophisticated investor rule’ recognition in the US and the UK which restricts retail investors from investing in hedge funds, recognizing the risky nature of such investment vehicles and the inability of retail investors to sustain financial losses. In Australia, the approach has not been as stringent and retail investors have not been substantially restricted from investing in hedge funds especially indirectly through their superannuation fund holdings.

The regulation of managed investment schemes encompasses all forms of investment vehicles such as managed accounts, private equity firms and hedge funds and places the onus of responsibility on the fiduciary obligations of Responsible Entities through mandated disclosure requirements and conduct-of-business rules to ensure that investors are adequately protected. Although managed investment scheme structures do have their benefits to retail investors as they offer expertise, economies of scale and a level of diversification that an individual portfolio would not be able to easily attain, a disclosure
based regime which emphasizes a self-regulatory method of safeguarding financial assets does not negate the possibility of misleading and deceptive conduct and the omission of information. The implementation of conduct-of-business and disclosure obligations does not necessarily mean that they will be adhered to if not strictly enforced and indeed in many cases of fraud and failure, for example, the collapse of Trio Capital in 2009, this has been the case.

The fact that hedge fund investment activities have not been considered riskier in Australia is itself a cause for concern while the collapse of Trio Capital substantiates the need for more stringent and careful oversight by regulators and promoting the use of independent hedge fund administrators with requisite skill. The interim recommendations of the PJC Inquiry heading the investigations on the collapse of Trio Capital, which was ongoing at the time of the writing of this thesis, concluded by encouraging greater disclosure of portfolio assets as a means to provide more information to investors. However, there will remain a gap in the ability of stakeholders in understanding such information attributed to the complex investment strategies of hedge funds. The lessons from the collapse of Trio Capital proves that even with a substantial level of monitoring and protection by regulators, auditors, financial planners and custodians, the fraud risks still remains.

The fraudulent activities of hedge funds analysed in this thesis identified gaps within the financial market supervisory systems of the US, UK and Australia that cannot be filled solely by regulation. These gaps deal with human behavior and perception and reliance on the integrity of gatekeepers. Regulating risk within a complex financial system is an
onerous task for regulators who have to dig into the depths of financial transactions to
distinguish activities and conduct which may eventuate in fraud. In turn, it is this task of
‘controlling the uncontrollable’, the ‘unknown, unknowns’, that has precipitated the rise of
excessive risk taking and the utilization of derivatives and complex financial instruments.
Investors are often misled to believe that the best investing strategy is as simple as finding
a successful hedge fund manager who has a solid investment track record. The financial
media in turn, advances this view by featuring the managers of top-performing funds.5
Requiring greater disclosure from hedge funds is only a first step. Individual investors
should make it their own responsibility to analyze the information carefully rather than
just rely on authorities to monitor and regulate hedge funds.

A key finding of this thesis is that active asset management requires active due diligence
and that thorough due diligence in turn requires innovative methods of utilizing available
information more efficiently by applying quantitative information with the more
qualitative and mandating adequate risk taking and performance disclosure. These efforts
which can be heightened by the use of forensic accounting analytical tools will enhance the
ability of hedge fund administrators in providing investors with the required information
and protection to achieve their desired investment goals without compromising the risks of
financial losses as a result of fraud, manipulation or misrepresentation.

7.5 Implications of this Study for Future Research

The introduction to this chapter established three main contributions this thesis makes to the literature of hedge fund fraud and regulation. Two empirical contributions which have not been explored before were an investigation on the fraud risk posed by hedge funds through the analysis of prominent cases of hedge fund fraud and failure while demystifying the mandate for increased disclosure and transparency as a solution to circumventing fraud. A comparative analysis of the approaches to hedge fund regulation in the US, UK and Australia was carried out and the research applied a cross-disciplinary approach which included the fields of Law, Economics, Finance and Forensic Accounting in its examination. This material has not been analysed before in any study of hedge fund regulation nor has it been the object of much academic interest in forensic accounting. This thesis, therefore, can be seen as an original contribution to the studies of hedge fund regulation and forensic accounting. The need to promote an investor protection mandate in the regulation of hedge funds was supported throughout the thesis by the public interest theory of regulation. This section briefly analyses implications of these contributions for future research.

The major contribution of this thesis for future research is the recognition that it has given to the governance of hedge funds which emphasize operational risk management in a global and interconnected financial system. The thesis has argued that the growth of the shadow banking sector leaves current regulatory approaches ineffective and more needs to be done to stem such risks. By critically engaging with the disclosure mandate currently being implemented in financial markets globally and the ineffectiveness of this in mitigating fraud, this thesis has shown the need to propose private monitoring through
independent fund administrators who are proficient in forensic accounting analytical tools which can be designed to identify red flags as a proactive measure to mitigate fraudulent practices by rogue hedge fund managers and its implications for the future. Future research will focus on extending the findings of this thesis into the discipline of forensic accounting analytics by collating hedge fund fraud cases and collaborating with industry participants working within the forensic accounting movement through interviews on best possible approaches to identifying red flags, investigating hedge fund fraud and analyzing the myriad of hedge fund investment strategies paying particular attention to risky, illiquid investment models. This thesis can also be seen as an attempt to foster cross-disciplinarily cohesion between the neighboring fields of forensic accounting and law. Major implications for future research are expected to come from the comparative analysis of critical perspectives in Finance, Economics and Forensic Accounting Analytics.

In conclusion, the future of the hedge fund industry has changed tremendously with the onset of stricter rules and regulatory oversight. The flexible nature in which hedge funds operated before the GFC 2008 is no longer a viable option and hedge funds globally will be required to adhere to increased compliance requirements and transparency rules. Reputational risks have taken center stage and a hedge fund which is perceived with a positive governance mandate by investors will attract confidence and growth. This is the future of financial markets in a globalized environment and will be that of the Australian financial system as we move forward into the 21st century. Exemplary governance, a good reputation and innovative investment approaches will be the investment philosophy of the future.


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**Trio Capital Inquiry - Submissions and Enforceable Undertakings**


