The Impact of a Speculative Stock Market on Institutional Investors

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by

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Abstract

Modern Finance literature persistently ignores the systemically destabilizing effects of financial bubbles. As a result, periodic speculative excesses, which hugely deviate from the rational models of mainstream finance, are largely unexplored, especially with regard to institutional investors’ behaviour in financially euphoric environments. My main objectives are to expose the premises, which the speculative bubble was built on, and the factors affecting institutional investors’ investment decisions, objectives and risk attitude in speculative bubbles. Using a series of semi-structured interviews with fund managers that worked during the Cyprus bubble of 1999, this thesis aims to contribute to the limited literature regarding institutional investors’ speculation. I draw from Abolafia and Kilduff, Kindleberger, Minsky, and Galbraith in order to provide a descriptive framework of speculative bubbles, in which institutional investors appear to be purposive, contrary to and at the expense of retail investors and the systemic stability.

The empirical data suggest that the roots of speculative bubbles are set by an event with perceived real economic consequences, which is seen to improve economic conditions and shift investors’ expectations. Afterwards, the rising share prices keep inviting an increasing number of speculators who create a new reality by replacing reason with what appears to be misinterpretation and misunderstanding. In this environment, regulatory failure, rumours and ‘strange friendships’ appear on the scene. Additionally, there is strong evidence suggesting that the institutional investors’ understanding of risk in speculative markets, contrary to the conventional wisdom, is particularly problematic; a phenomenon I call ‘risk paradox’.

The implications of speculative bubbles and institutional investors’ risk attitude are crucial in understanding the limitations of rational models that prevail in finance. This thesis argues for situating investment activity within its social, and frequently, speculative context. It contributes to understanding the behaviour of institutional investors in speculative markets and calls attention to their irrational investment behaviour.
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This journey would have never been completed without the persistent guidance, support and encouragement of various people.

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Last but definitely not least, I would like to thank my wife Elena and my son Christos for being a source of inspiration and support throughout my studies.

This thesis is dedicated to my mother. The most genuine and tireless fighter I have ever met in my life. Although she has been struggling against the odds throughout her difficult life, she remains proudly standing. Her strength of character and personality has helped me to appreciate and respect life even more.
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Chapter 1: Introduction

1.1. The scope of the research

“The greed prevailed over fear during the bull market, and even at the first phase of the bear market the fear was absent. It was a tremendous rationalisation. They were justifying actions with which were psychologically attached. However, the relationship between greed and fear was changing with the decline of the market; the more the decline, the more the portion of fear. However, it should be exactly the opposite, because the higher the decline the higher the bargains and the discounts in the market. However, this did not happen. Nevertheless, at the highs of the bubble the professionals instead of selling because of the fear, they were greedy, with the exception of the best. In the same vein, at the bottom instead of being greedy they were fearful. Again with the exception of the very few, the reverse applied.” (Christos V Interview)

Although irrational speculative bubbles and their associated deviations from the established Efficient Market Hypothesis proposed by Fama (1965; 1970) have been a recurrent phenomenon for centuries (Galbraith, 1994; Mackay, 1995; Chancellor, 2000; Kindleberger, 2000), unfortunately, they have not received the necessary attention by the academic community. As a result, our poor understanding of a complex financial phenomenon such as the irrational speculative bubbles, costs the national economies that fall victims of speculative bubbles trillions of dollars and millions of unemployed, as demonstrated by the current credit crunch (Angelides, 2011). Part of the blame, according to Nyberg (2011) who examined the causes of the property bubble in Ireland that pushed the country in the hands of the International Monetary Fund, the European Central Bank and the European Committee that orchestrated a bail out, is traced to the belief of both regulators and investors to the Efficient Market Hypothesis; a belief that totally ignores the existence of speculative bubbles (Kindleberger, 2000).
In the same vein, the speculative bubble in Cyprus Stock Exchange (CSE) in 1999 caused unprecedented losses to the investing public, the institutional investors and most importantly the financial institutions. Evidently, all the public institutions that were supposed to protect investors, safeguarding stock market’s smooth operation, failed to do so¹ (Christodoulos interview; Loizos interview). For example, according to the interviewees, the report prepared by the Parliamentary committees (2002) and the Report of the Investigative Committee for the CSE (2004) examining the consequences of the bubble and its burst, all the market participants were involved in the formation of the bubble. The regulators failed spectacularly, the institutional investors and the banking system behaved at least irresponsibly, the investing public was surrendered to mass hysteria and the insiders strategically exploited the investing public (see Abolafia and Kilduff, 1988) by forming “strange friendships” (Loizos interview).

From the analysis of the data generated for the speculative bubble and its subsequent burst, a number of themes that remained largely unexplored emerged. For instance, the ‘accelerator event’ is a corporate event, which with its publicity and success promotes the stock market as a riskless investment with exceptional returns, causing hysteria among the investing public. Although it is present in speculative bubbles, it is not specifically discussed in the finance literature. In the same vein, the phenomenon of ‘risk paradox’, which originates from Minsky’s (1992) pro-cyclical credit appetite, has not been conceptualised yet. The concepts that underpin the ‘risk paradox’, such as the ‘suppression of contrary voices’ (Galbraith, 1994; Nyberg, 2011), the ‘collective trauma’ and the ‘risk detestation’, which have all emerged from the data generated and seem to be present in the classic accounts of speculative episodes presented by Galbraith (1992; 1994), MacKay (1995) and Kindleberger (2000) are

unexplored by the finance literature. Similarly, ‘rumours’, although always make the front page during speculative bubbles, they have not received the required attention by the finance scholars.

1.2. A brief history of the Cyprus Stock Exchange

In this chapter, I present the background and historical information that although is not directly linked to the research questions and objectives of my thesis, is necessary to the reader in order to understand the context in which the speculative period in question developed. I give the chronology of the Cyprus Stock Exchange, commending on events that according to the interviewees marked the speculative period under examination.

The Cyprus Stock Exchange was established as a regulated market in 1996, 29 March, based on the legislation voted by the House of Representative in 1993 and 1996. Actually, the regulated market replaced the over the counter market or the ‘unofficial’ trading meetings that started in 13 June 1979 under the auspices of the Cyprus Chamber of Commerce and Industry. During the inaugural meeting that took place in Hilton Hotel, the first rules of trading were agreed. Gradually, the meetings were organised at shorter intervals and often were accompanied by the development and enrichment of the trading rules. Progressively, the trading meetings were organised three times per week and on 14 December 1992 the brokers started trading on a daily basis. When the Cyprus Stock Exchange officially opened on 29 March 1996, trading was based on the open outcry system, which according to MacKenzie and Millo (2003: 110) is, “Trading by voice and/or hand signals within a fixed arena.” Subsequently, the open outcry system does not involve only the physical presence of the

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2 Report of the Committee on Development Plans and Public Expenditure Control and the Committee on Development Plans and Public Expenditure Control (2002) Problems, Prospects and Responsibilities from the Operation of the Cyprus Stock Exchange. All the numerical information provided in this section is drawn from this report, unless otherwise stated.
brokers (Christodoulos interview) but, most importantly, “The negotiation of prices was direct between the brokers and involved a paper war (Louis interview). This is particularly important in understanding the problems created by the partial automation of trading, which leads us to one of the themes that strongly emerged from the data generated, namely, the ‘regulatory failure’. As recalled by Louis, before the partial automation of trading “The trading session lasted for two hours and the executed trades were in the range of 1,000 to 1,200 trades on average.” (Louis interview). That means that from a highly personal procedure, such as the open outcry system, which in terms of clearing, produced a manageable number of trades, the brokers were asked, without their consent or preparatory work, to be semi-transferred to the world of electronic trading, which intensified the paperwork burden, as mentioned by Louis (Louis interview). The Cyprus Stock Exchange announced on February 1999 that on the 7 March of the same year, the partial automation of the trading system will be implemented. Actually, although the term ‘trading’ commonly refers to the execution of trades only, technically, it involves settling and registering the transaction, as well, with both of these phases to be under the umbrella of clearing.

The event that sparked the regulatory failure, by providing an investment environment that was fostering misconduct by financial institutions, listed corporations and investors, was the decision of the Cyprus Stock Exchange Council to automate only the trading (transactions), leaving the other two parts, that is the settlement and registration of the securities, manual. While the transactions multiplied with the introduction of the electronic trading system, registering an increase of 608% in 1999 compared to 1998, the capacity of the brokers to

---

3 Actually, during 1998 the average number of trades per day was 300. March with 501 trades per day was the month with the highest average daily transactions. The transactions surpassed the 1,000 threshold during May. The month of 1999 with the highest average daily transactions was November with 5,699 trades per day (CSE, 1999, Fact Book).

4 For a detailed account on the culture and socialization of the pits’ communities see MacKenzie and Millo (2003). For a more specialised work on the differences/indifferences of the open outcry system and the electronic trading see MacKenzie (2002).
settle the transactions and the listed companies to register the new owners remained restricted by the manual procedures. This resulted in thousands of unsettled transactions, which in turn, restricted buyers from having access to their securities, thus, materially contributing to the manipulation of supply. The ‘regulatory failure’ is part of the first research question, which asks, ‘How was the speculative bubble formed?’ This question is critical in understanding the formation of speculative bubbles, which are accompanied by devastating consequences to investors and regulators (see Galbraith, 1992, 1994; MacKay, 1995; Chancellor, 2000; Kindleberger, 2000). The data generated through the semi structured interviews supports the view that the extent of speculative activity would have never been of the magnitude observed, having the regulators not failed (Loizos interview).

The most notable aspects of regulators’ failure were, firstly, their decisions to partially automate trading. Secondly, their refusal to suspend trading for as long as necessary in order to provide time to the brokers and listed companies to settle and to register the transactions. The fact that the brokers were not consulted or heard by regulators made the successful implementation of the partial automation of the trading system even more unlikely. It should be noted that the Cypriot Brokers Association on the 9 March 1999, sent a letter to the Council of the CSE regarding the problem of the uncleared trades and delaying documents. After the introduction of the partial automation of trading, the problem of the uncleared documents got out of proportions. As a result of the mismatch between the transaction capacity created by the automation of the trading system and the manual clearing procedures, the uncleared transactions on 22 June of 1999 stood at 15,000, meaning that the securities bought through these transactions could not be sold on the market, because they were neither settled by the brokers nor registered by the listed companies’ registrars. The situation was getting worse, with the passage of time, and the delayed documents from the uncleared...
transactions on the 2nd of August mounted to 52,138, reaching 82,000 on the 30 of August. In the meantime, the CSE Council postponed trading firstly on 26 and 27 of July and then again from the 9th to the 13th of August in order to allow time to the brokers to processed the delayed documents. It should be stressed that since the introduction of the electronic trading system, the Cypriot Brokers Association kept requesting for suspension of trading for as long as it was necessary, in order to process all the delayed documents from the uncleared transactions. The brokers even fiercely opposed the decision of the CSE Council to suspend trading for remarkably short periods. They asked for substantially lengthier periods of trading suspension. They even managed to meet with the president of Cyprus, Glafkos Klerides, on 27 August, in order to promote their demands for a lengthier suspension of trading. Finally, the CSE Council decided to suspend trading from 6 to 24 September 1999 in order to provide the necessary time needed by brokers and registrars in order to settle and register all transactions. The suspension of trading was soon extended to the 27 of September. However, because of the severity of the problem, both the brokers and the registrars were unable to process all the delayed documents by the 27th of September. As a result, the CSE extended the suspension of trading anew. Trading now would resume on the 4th of October. The new extension was decided because the brokers estimated that they had 5,000 delayed documents from previous transactions that they had to be settled, before starting trading again. In the same vein, the registrars estimated that, by the 27th September, 40,000 transactions would be unregistered, with many of the documents being problematic, meaning that they had to be sent back to the brokers for the necessary corrections. Finally, trading resumed on the 4th of October, with thousands of earlier transactions still being unsettled and unregistered. Subsequently, thousands of securities’ owners could not sell their holdings.
Additionally, the Council of the CSE decided that, after the recommence of trading, the brokers should execute a sale order only if the seller either has the certificate of the shares she wants to sell or the shares have been purchased by the broker asked to execute the sale over the last 10 days. Actually, this rule gave a ten days window to buyers in order to sell their shares. After the period of ten days from the day of purchase, the investors had to wait for the certificates to be issued in order to sell. Actually, the refusal of the CSE Council to suspend trading promptly, in order to prevent the chaos created by thousands of delayed documents from the uncleared transactions, is the second premise of the ‘regulatory failure’ that was observed in Cyprus during the speculative market of 1999, which helps to explain how the speculative bubble was formed.

The third premise of the ‘regulatory failure’ is the decision of the CSE to limit the number of daily trades to 2,000 only in order to match the transaction with the clearing capacity. This decision, according to the interviewees, created a frenetic appetite for investments in the stock market. Because the limit on the number of trades allowed each day, the investors asked the brokers to buy at the preopening at any price. As a result, the stocks were limit up on a daily basis. The investors knew that if someone wants to be among the 2,000 daily transactions, he should bid, at the preopening, the highest price permitted. As a result, during the rule of the 2,000 transactions prices were frequently hitting the limit up.

The results from the denial of regulators to respond promptly to the issue of uncleared transactions, in combination with the partial automation of trading and the rule of 2,000 daily transactions, created a chaotic environment in which speculators and speculation flourished alike.
Graph 1: Cyprus Stock Exchange price chart with key dates
Table 1: Key events that marked the course of the CSE general index

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 29, 1998</td>
<td>The Cyprus government announced that the S-300 missiles will not be launched in the Island.</td>
</tr>
<tr>
<td>March 9, 1999</td>
<td>The Cypriot Brokers Association sent a letter to the Council of the CSE regarding the problem of the uncleared trades and delaying documents.</td>
</tr>
<tr>
<td>May 7</td>
<td>Commence of Partial automation of trading.</td>
</tr>
<tr>
<td>June 22</td>
<td>The uncleared transactions on stood at 15,000</td>
</tr>
<tr>
<td>July 26 and 27</td>
<td>The CSE Council postponed trading for the first time.</td>
</tr>
<tr>
<td>August 2</td>
<td>The uncleared transactions mounted to 52,138</td>
</tr>
<tr>
<td>August 3</td>
<td>Louis Cruise Lines first trading day</td>
</tr>
<tr>
<td>August 9 to 13</td>
<td>The CSE Council postponed trading again.</td>
</tr>
<tr>
<td>August 30</td>
<td>The uncleared transactions reached 82,000</td>
</tr>
<tr>
<td>September 6 to October 4</td>
<td>The CSE postponed trading again. Initially from September 6 to 24, then extended suspension to 27 September and eventually extended suspension anew, to 4 October.</td>
</tr>
<tr>
<td>September 30</td>
<td>76,594 trades still uncleared</td>
</tr>
<tr>
<td>October 12</td>
<td>The Central Bank of Cyprus sent a circular to all banking institutions, asking them to stop providing investors with new ‘trading accounts’ and ‘investor accounts’ that were used by investors as credit facilities for their speculative activities in the stock market. Additionally, access to these accounts for stock market investments should be curtailed.</td>
</tr>
<tr>
<td>October 15 - 29</td>
<td>Limiting the number of trades allowed per day to 2,000 trades</td>
</tr>
<tr>
<td>November 24</td>
<td>The Central Bank of Cyprus sent a new circular with which prohibited all new credit facilities for stock market investments</td>
</tr>
<tr>
<td>November 29</td>
<td>The Central Bank of Cyprus sent a clarifying circular letter to all banking institutions, asking them to terminate leverage facilities to all accounts for stock market investments within six months, with gradual steps.</td>
</tr>
<tr>
<td>November 29</td>
<td>The last day of the bull market. The market travelled from 90.63 points that stood at the first trading day of 1999, January 4, to 849.30 points on November 29. An astonishing return of 837% in 11 months.</td>
</tr>
<tr>
<td>December 31</td>
<td>18,951 trades still uncleared</td>
</tr>
</tbody>
</table>

1.3. Flow of the research questions and objectives

The Impact of a Speculative Stockmarket on Institutional Investors

How was the speculative bubble formed?
To understand and explain how the seeds of speculation were set

How is the risk attitude of institutional investors transformed during the speculative bubble under consideration?
To expose the risk attitude of institutional investors during the speculative bubble

How are institutional investors affected in speculative bubbles?
To examine the fallacies affecting institutional investors in speculative markets

What are the institutional investors’ objectives in speculative bubbles?
To reveal the institutional investors’ objectives in speculative markets

Findings and Conclusions
1.4. Thesis overview

In chapter 2, ‘Literature review’, I build my conceptual framework, which will set the theoretical foundations of my thesis and inform the reader about the most significant and relevant research on my topic. Through a critical discussion of the most relevant and fundamental concepts and theories I highlight their contributions to the understanding of the speculative bubbles and their limitations, positioning my thesis on the map of the pertinent literature. My conceptual framework draws extensively on the works of Minsky (1982; 1992; 2008), Abolafia and Kilduff (1988), Galbraith (1994) and Kindleberger (2000).

Chapter 3, ‘Research methodology’, which discusses the methods and assumptions underpinning the generation and analysis of my data, is split into two sections. In the first section, ‘The incompatibility between normative methodologies and positive sciences’, I consider the ontological and epistemological assumptions of my research. I explain why the ontological assumptions of normative approaches are not appropriate for financial phenomena, which are formed and shaped by the participants’ interactions. The second section presents and justifies my choices regarding the practical aspects of my methodology, namely, ‘Research methods’. In this section, I mainly discuss how I generated my data and the method of analysis. For the generation of my data, I interviewed ten fund managers employed during the period under consideration, using semi-structured interviews.

Chapter 4 consists of the data analysis and discussion. I present my data under the relevant themes and I explain what it means and how it relates to the existing body of knowledge. The chapter is split into four themes. In chapter 5 I draw this thesis to a close by providing a summary of the findings in relation to the research questions underpinning this project.
Chapter 2: Literature Review

2.1. Introduction

This chapter aims to provide the theoretical and conceptual substance of the research questions under consideration. That is to inform the readers about the existing theoretical frameworks supporting my thesis, which draws mainly from the works of Minsky (1982; 1992; 2008), Abolafia and Kilduff (1988), Galbraith (1994) and Kindleberger (2000). Their works incorporate the social interaction between market agents, standing in direct opposition to the informational efficiency of Fama (1965, 1970) which assumes rational investors. This chapter provides “the foundation on which [my] research is built.” (Saunders, et al., 2007: 57). Additionally, the review of the “most relevant and significant research” (ibid) on my topic will help me to present the significance of my thesis “and where it leads.” (Bryman and Bell, 2007: 95). In simple words, I use this chapter in order to explain why this research is important, for academics and practitioners, as well, and how it is informed by and feeds into the existing body of knowledge.

I begin with a review of literature on institutional investors. Firstly, I discuss how they are defined by academics and practitioners. Then, I trace their development and I present data, arguing for their importance to the contemporary marketplace. Afterwards, I move on to the concept and practice of speculation as it has been discussed by pivotal figures of political economy, including Adam Smith, Keynes and Schumpeter. I conclude the first section of this chapter with the characteristics of contemporary institutional investors. The second section provides a critique of the Efficient Market Hypothesis (Fama, 1965, 1970). It discusses the concept of noise and the attempt of Black (1986) to provide a broader and more operational definition of market efficiency. Afterwards, I discuss how the encouragement by regulators of large scale speculators hinders market efficiency and what the implications are for
practitioners. Then, I offer a critical discussion of the concepts and frameworks that offer an alternative view to the efficient market hypothesis. I begin with a review of Minsky’s Financial Instability Hypothesis, which was brought to light by the current credit crunch. Next, I visit the concepts of herding and positive feedback followed by a synthesis of the reflexivity theory of Soros (2003, 2008) and the self-fulfilling prophecy of Merton (1948). In the same vein, the next subsection includes a critical discussion of the concept of rumours and how it leads to self-fulfilling prophecies in the financial markets. The section concludes with a critical discussion of Minsky and Kindleberger’s model of financial crises. The last section, before conclusions, of this chapter offers a critical evaluation of Abolafia and Kilduff (1988) model of financial bubbles, which although they materially draw from the work of Minsky and Kindleberger, they present financial bubbles as the “unintended consequences” (Abolafia and Kilduff, 1988: 182) of strategically organised actions of powerful self-interested market players rather than as the outcome of the irrational behaviour of the crowd.

2.2. Institutional investors and speculation

2.2.1. Institutional investors: definition and historical development

According to the account provided by Ferguson (2009), the establishment of the first institutional investor can be traced to Scotland in 1748, in what is known today as the sector of life insurance. The ministers Robert Wallace and Alexander Webster, with the help of Collin Maclaurin, Professor of Mathematics in Edinburgh, in their effort to protect the widows and children of deceased ministers launched the “Fund for a Provision for Widows and Children of the Ministers of the Church in Scotland”. Their objective was the social contribution that could be made by financially protecting a disadvantaged social group: the widows and children of deceased ministers. The fund grew successfully, initiating a
proliferation of similar funds that constituted the skeleton of what are collectively known today as institutional investors.

Paradoxically, even today, there is no official definition of institutional investors in the European Union. The term is used rather intuitively, indicating large pools of funds managed by professionals. The HM Revenue and Customs\(^5\) department recognises that

“There is no definition of ‘institutional investor’ in the EC recommendation, nor ... any definition within European case law.” Hence, for tax purpose Revenue and Customs “take the view that ‘institutional investor’ ... means an institution whose purpose is to make a significant number of investments as the essential character of its business.” on behalf of a number of smaller investors in such a way that there is an essential pooling of their investments.”

In the same vein, an operational definition that deals only with the size of investments and the discretion of the investment manager is provided by the Securities Exchange Act 1934 in USA. It defines institutional investment managers as firms or individuals that

“... exercise investment discretion with respect to accounts holding equity securities” with “aggregate fair market value on the last trading day in any of the preceding twelve months of at least $100,000,000"\(^6\).

The definition has been provided in order to classify the professionals that have to report to the Security and Exchange Commission in the attempts made in the aftermath of 1929 speculative abuses and crash. The objective was to increase transparency and protect smaller investors, who rely on the professionals. As with the definition of Revenue and Customs, it is rather loose, making no reference to the time frame of investments which in the case of

\(^5\) http://www.hmrc.gov.uk/manuals/cirdmanual/cird92200.htm (accessed on 07/03/2009)
\(^6\) http://www.law.uc.edu/CCL/34Act/sec13.html (accessed on 08/03/2009)
institutional investors had traditionally been seen to be biased over the long term; an assumption that has rapidly changed over the last decade (see Minsky, 1996).

Keynes (1974: 157) in his classic contribution to political economy “The General Theory of Employment, Interest and Money” aligned the role of institutional investors with the long term horizon and the public interest. It seems that he was affected by the likes of the “Fund for a Provision for Widows and Children of the Ministers of the Church in Scotland” which were established solely on public benefit grounds. He specifically stated that,

“it is the long-term investor, he who most promotes the public interest, who will in practice come in for most criticism, wherever investment funds are managed by committees or boards or banks.” (ibid)

However, he accepted that long term investments carry higher risk because “of our ignorance to the future” (ibid), arguing that there is no evidence supporting that the long term socially advantageous investments are the most profitable for the institutional investors undertaking them. It seems that contemporary institutional investors share Keynes concerns about the long term profitability prospects.\(^7\)

From a text book perspective, Davis and Steil (2001: xxiii) took a more strict view on institutional investors’ definition than the Revenue and Customs department or the Security and Exchange Commission. The definition provided by Davis and Steil (2001), which echoed the view of an earlier work of Davis (1996), encompasses “specialized financial institutions that manage savings collectively on behalf of small investors toward a specific objective in terms of acceptable risk, return maximization and maturity of claims.” Their definition, although it is along the same lines with Keynes, is more specific, since it is provided in a

textbook specifically written on institutional investors. Contrary to Keynes, they completely omitted the element of social contribution and they accepted any time horizon as long as it is explicitly stated to investors. According to Davis (1996), their objective is to pool the money from smaller investors, in order to reduce the trading cost and provide investments diversification, achieving a better risk/reward ratio than could be achieved by individual investors alone.

All the definitions examined so far share the element of investment pools that are managed by professionals. This suggests, probably contrary to the will of Keynes who sought from professional investors the social benefit through long term investments, that hedge funds, which sometimes take an extremely short term view on the markets confined to milliseconds, should uncomplicatedly be considered as institutional investors, as well. Traditionally, institutional investors consist of insurance companies, investment banks, pension funds, mutual funds, investment companies, commercial banks and other saving institutions.

2.2.2. Importance of institutional investors

The importance of institutional investors is enormous in the contemporary marketplace. On average, institutional investors hold 65.4% of the Dow Jones Industrial Average\(^8\), which includes the “30 blue-chip stocks that are generally the leaders in their industry”\(^9\) and heavily influence all other stock market indexes all over the world. In Europe, according to a report prepared by the European Fund and Management Association (2009), the total funds under institutional management were 102% of GDP, with UK funds under management standing at 4,595 trillion, accounting for 224% of UK GDP. Effectively, it means that for every 1 pound

\(^8\) The data are provided by http://www.nasdaq.com/reference/ownership.stm and are based on the last regulatory filings of institutional investors on 13-F form with the Security and Exchange Commission as of 30/09/2009 (accessed on 27/02/2010)

produced within the UK boarders, there are 2.24 pounds managed by institutional investors. On a global scale, at the end of the same period, the funds under management amounted to 40 trillion. The development of institutional investors has been impressive and is expected to be even more buoyant over the years to come. And looking at individual cases of institutional investors the numbers are even more impressive.

At the private spectrum, PIMCO, which is the largest institutional investor in the world with $1.282 trillion under management\(^\text{10}\), exclusively focuses on the debt market. Its size, reputation and its closely followed views on the markets can exercise tremendous pressures, especially in sovereign debt markets. Of course, I have no intention of suggesting that they did or they intend to exercise their enormous influence in order to manipulate prices. I would like only to point to the fact that the size of the funds under their management is significantly greater than those of small European nations.

For example, the Sovereign Wealth Funds (SWFs) have drawn considerable attention because of their sizes and the suspicion surrounding their investment objectives. Additionally, there are transparency issues, which provoke strong criticism from those suggesting that some of these funds do not invest solely based on financial criteria. A political agenda may influence their investment decisions, as well, critics argue. For example, China’s three biggest SWFs amount to $782.4 billion\(^\text{11}\) with plans to inject immediately $250 billion\(^\text{12}\) more.

Although there are no data available on the intentions of the Chinese officials regarding their intervention in the management of the funds under the direct control of the state through the

\(^{10}\) http://www.pimco.com/EN/OurFirm/Pages/OurFirmOverview.aspx (accessed on 01/06/2011)
\(^{11}\) http://www.swfinstitute.org/funds.php (accessed on 25/02/2010)
\(^{12}\) http://online.wsj.com/article/SB10001424052748703427704575052303975503216.html (accessed on 25/02/2010)
SWFs, there is ample evidence regarding the involvement of USA officials in the investment decisions regarding the USA’s private institutional investors. Nobody can ignore the fact that during the peak of the current crisis, from October 2009 to March 2009, the Federal Reserve and the Treasury orchestrated a number of bail outs of failed financial institutions in order to support market prices. Though their actions were beneficial to the markets over the short and medium term, they constitute price manipulation attempts. I mainly refer to the case of the Bank of America, which bailed out Merrill Lynch under the instructions and pressure from the Federal Reserve and Treasury high ranking officials.

From the emails that leaked to the financial media, it is evident that USA officials forced the Bank of America to bail out Merrill Lynch. The former was the biggest bank and the latter the biggest broker of the world. According to the emails’ content, the objective of the Federal Reserve and Administration’ Officials was to use two of the bigger institutional investors in the world in order to manipulate market prices.

According to Mildenberg (2009), who had access to Bank of America directors’ e-mails that were sent to the House Oversight Committee, Bank of America’s Chief Financial Officer Joe Price in a December 29 e-mail that fully reflects the intentions and promises of the Federal Reserve Chairman Ben Bernanke, informed the other executives, including Chief Executive Officer Kenneth Lewis, “The chairman of the Federal Reserve indicated [the transaction] it would be structured in a manner such that BAC stock should go up when announced”. In simple words, when the directors of BAC, decided to cancel the acquisition of Merrill Lynch, because of the Merrill Lynch’s staggering losses of $15 billion, the Federal Reserve Chairman lured the directors of Bank of America to proceed with the acquisition because it
would be structured in such a way that on its announcement it would push the share price of the Bank of America higher.

Mildenberg’s (2009: par. 4) article includes exacts from a second email sent by Jeff Brown, Bank of America Treasurer, to Price, Chief Financial Officer of Bank of America saying that,

Fed and Office of the Comptroller of the Currency officials “assign high probability the market will ‘attack us’ after learning of the ‘government assistance’ to us,” [To remind you that although] “1) they forced us into this position and 2) they had provided every assurance of a positive market response to any action from their chairman to our chairman. They just got silent.”

The ‘They just got silent’ phrase is explained by an email circulated between regulators and administrators, on 22 December 2008, which was presented by the Committee on Oversight and Government Reform. The sender, whose identity was not revealed, informed the recipients about a conversation he/she just had with Bank of America CEO Ken Lewis. The following exact from the email is indicative of the impact of the institutional investors on the markets, and the treatment they may receive from government officials.

“He had a question which I will address to Scott (also Deborah). He said he now fears lawsuits from shareholders for NOT invoking the MAC, given the deterioration at ML. I don’t think that is very likely and said so. However, he still asked whether he could use as a defence that the govt [sic] ordered him to proceed for systemic reasons. I said no.”

Although after the details received the public and lawmakers’ attention, the Federal Reserve and Treasury officials consistently denied that they either forced or they ordered Bank of

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America to bail out Merrill Lynch, the details included in e-mails between the various actors suggest differently. They are representative of the treatment key institutional investors receive from government officials across the world. Subsequently, worries about the SWFs, which are among the biggest institutional investors in the world, especially those controlled by countries with poor disclosure records, are not without merit.

2.2.3. The concept of speculation

Although speculation has been included in the works of and defined by leading writers on political economy such as Adam Smith, Keynes and Schumpeter, it is still covered with mystery and controversy. Not surprisingly investors’ opinions regarding its impact largely depend on market conditions (see Gibson, 1889; Galbraith, 1994). In stable or rising markets, speculation is considered desirable since it provides liquidity and the opportunity to everybody to envision enormous fortunes. On the other hand, in bear markets it is anathema, not only for investors who lose their capital, but for the regulators and administrators, as well, who observe their popularity to decline in proportion to the stock market. For instance, although almost everybody was speculating before the crash of 1929, including the institutional investors, as well (Galbraith, 1992; Chancellor, 2000), after the crash, the Glass-Steagall Act 193315 was introduced in order to curb unbridled speculation, which was blamed for the great depression. Likewise, although during Greenspan’s era, speculation was praised and promoted by low cost credit and deregulation, currently excessive speculation is targeted by the Obama administration through financial reform and it is universally accused of the crisis. In the following section, I discuss the definitions provided for the concept of speculation by leading figures of political economy in order to establish its theoretical

framework and development. Such will facilitate the development of a strong link between the theory of speculation and its practice, as reflected in the observable phenomena.

2.2.4. The speculator of Smith
The first scholarly attempt to define the concept of speculation is found in the ‘Wealth of Nations’ of Adam Smith (1998). Not surprisingly, the concept did not cover a distinctive part or even chapter and it was not extensively discussed in Smith’s work, since he was occupied by the merchant, who is the opposite of speculator. Rather, the concept of speculation was briefly discussed in a number of independent paragraphs in order to explain the different risk and returns characteristics of his merchants with speculators. His merchants entrust their capital over the long term to “any regular, established, and well-known branch of business” and their fortunes are built “in consequence of a long life of industry, frugality, and attention.” (1998: 111). The main characteristics of the merchant, or what we can call today investor, are his willingness and intentions to invest over the long run in a branch of business that he is well aware of. That means that the merchant has a clear picture of the business in which he will put his money, allowing him to estimate reasonably his risks and potential returns. As we are informed “In all the different employments of stock, the ordinary rate of profit varies more or less with the certainty or uncertainty of the returns.” (p: 108). That is all a speculator could not do or be, for speculators spend most of their time, according to Smith, navigating uncharted waters.

Contrary to his merchant investor, “The speculative merchant exercises no one regular, established, or well-known branch of business. He or she is a corn merchant this year, and a wine merchant the next, and a sugar tobacco, or tea merchant the year after.” The speculator has no preferences over a particular business and does not require any specific knowledge
regarding the product he or she is trading. According to Adam Smith (1998: 111), the speculator’s only criterion is the extraordinary high levels of potential profits, which as we have seen earlier, are proportionate to the level of risks.

“He enters into every trade when he foresees that it is likely to be more than commonly profitably, and he quits it when he foresees that its profits are likely to return to the level of other trades. His profits and losses, therefore, can bear no regular proportion to those of any one established and well-known branch of business.”

With his definition, Adam Smith drew a distinct line between speculators and investors’ intentional and operational territories. He was sure that their operations do not share any common characteristics. They have entirely different investments horizon, return expectations and risk preferences. However, his confidence about the differences between investors and speculators is not shared by subsequent writers.

In order to explain the operations and rationale of speculative activities, he mentioned the case of corn, wine, hops, sugar and tobacco, whose price fluctuate based on the quantities produced and variations in demand, suggesting, “The operations of the speculative merchant are principally employed about such commodities. He endeavours to buy them up when he foresees that their price is likely to rise, and to sell them when it is likely to fall.”

However, although he recognised the unusually high risks accepted by speculators and that their only intention was the quick profit, he saw in their actions the roots of innovations. He suggested, “The establishment of any new manufacture, of any new branch of commerce, or of any new practice in agriculture, is always a speculation, from which the projector promises himself extraordinary profits.” Consequently, Smith’s speculator by accepting high risks opens up a window for new industries and practices to be established. However, it is
particularly appealing that he distinguished speculation in banking from speculation in other areas of business. Although he recognised the contribution of speculators to innovation in manufacturing, commerce, and new practices in agriculture, he was extremely sceptical with regard to speculation in the financial services industry. Adam Smith specifically stated that,

“Though the principles of the banking trade may appear somewhat abstruse, the practice is capable of being reduced to strict rules. To depart upon any occasion from those rules, in consequence of some flattering speculation of extraordinary gain, is almost always extremely dangerous, and frequently fatal, to the banking company which attempts it.” (1998: 345)

Not only did he not recognise the contribution to innovation in the speculative conduct in banking, but he thought of it as an unsafe practice on the part of banks with potentially lethal consequences for their survival. That is a matter on which Minsky (1992) extensively elaborated. Minsky not only suggested that speculative activities in the financial services industry are harmful, but along with the observations of Keynes (1974), he also suggested that when speculation is taken on a large scale in a capitalist economy, it destabilises the whole system with devastating consequences not only for the speculators, but for the entire economy, as well. However, Minsky based the actions of speculators not on the high profit margins offered by risky trades, but on the confidence imposed by long periods of economic prosperity. We will return to Minsky’s financial instability hypothesis in order to elaborate on its details and contributions in a subsequent section.

The first complete account on speculation was provided by the Charles MacKay (1995). His extensive work looked into the “Extraordinary Popular Delusions and the Madness of Crowds”. The first three chapters of his work are devoted to the financial speculator, who found his place in a book including chapters, among others, on ‘The alchemists’, ‘Modern Prophecies’, ‘Fortune-telling’, ‘The magnetisers’, and ‘The witch mania’. It is clear from the
very first sentences that he does not appreciate speculative activities at all. On the contrary, he thought of them as the roots of the greatest misfortunes for both individuals and nations who relentlessly engage in them.

Although he has made no attempt to provide a definition for speculators, his vivid descriptions of the incidents included in the case studies he employed provide ample evidence for the reader who wants to conceptualise the character of speculative activities in a definition. For example, in the first chapter, MacKay explains, “A man of the name of André, without character or education, had, by a series of well-timed speculations in Mississippi bonds, gained enormous wealth, in an incredibly short space of time.” (1995: 18).

Of course, André, is an example of a successful speculator. Nevertheless he provides valuable insights into the definition of a speculator. According to Mackay, a speculator tries to time the market, which is the secret of his or her success. Also, the success or failure of his or her trade is determined in a short period of time. His observations side with the remarks of Smith who pointed to the fact that a speculator’s

“… profit and losses, therefore, can bear no regular proportion to those of any one established and well-known branch of business. A bold adventurer may sometimes acquire a considerable fortune by two or three successful speculations; but is just as likely to lose one by two or three unsuccessful ones.” (Smith, 1998: 111).

Although the definition provided by Smith refers only to the merchant of physical materials and not to the trader of financial stocks, it was the first academic attempt to define the phenomenon of speculation and the scope of activities of speculators. It also had an enormous impact on subsequent writers who defined speculation along the lines proposed by Smith. Keynes (1974), for example, devoted a substantial part of chapter twelve, ‘The state of long
term expectations’ of ‘The general theory of employment, interest and money’ to discussing the operations and impact of speculators on financial markets.

2.2.5. The speculator of Keynes

Keynes (1974), who published his classic work on the general theory in the aftermath of the great depression - which was seen by many (see Schumpeter, 1939 and Galbraith, 1992) as the outcome of mass scale speculative activities from both individual and institutional investors - approached speculation as an activity involving the guessing of market psychology, which when undertaken by the majority of market participants destabilises the markets. He understood than when speculators prevail over investors in the markets, the results are disastrous. Keynes (1974) suggested, “there are, indeed such serious-minded individuals [investors] and that it makes a vast difference to an investment market whether or not they predominate in their influence over the game players.” (p: 156). A view that later was expanded by one of his greatest followers, Hayman Minsky.

Keynes defined speculation as the “activity of forecasting the psychology of the market” (1974: 158). In this respect, he concluded that speculators, who consist of institutional investors, as well, “are concerned, not with what an investment is really worth to a man who buys it ‘for keeps’, but with what the market will value it at, under the influence of mass psychology, three months or a year hence.” (p: 155).

The speculator of Keynes not only ignores market valuations, basing his or her decisions solely on market psychology, but destabilises the market, as well, since he or she subjects it “to waves of optimistic and pessimistic sentiment”. A direct consequence of his or her actions is a forceful change in the mass psychology of the markets. He actually suggested a positive
feedback loop that was later developed by Soros (2003; 2008) in his work about reflexivity, where understanding and thinking of market participant form a new reality through action.

Actually, the concept of the feedback loop has been introduced by Mackay (1995). In describing the Mississippi scheme of John Law in Paris, he recognised that an increased interest by the general public and aristocracy in the shares leads to an increase of the share prices, which in turn leads to an increased interest for shares, and so on. “The great concourse of persons who assembled to do business brought a still greater concourse of spectators.” (p: 15). As he explained in more detail (Mackay, 1995: 61)

“In times of great commercial prosperity there has been a tendency to over-speculation on several occasions since then. The success of one project generally produces others of a similar kind. Popular imitativeness will always, in a trading nation, seize hold of such successes, and drag a community too anxious for profits into an abyss from which extrication is difficult.”

Keynes, too, dealt with speculators with no sympathy. Actually, he paralleled their actions, especially when they outnumber long term investors, with the activities taking place in a casino. Regarding the potential magnitude of the impact of speculators’ activities on the economy Keynes (1974: 159) suggested that,

“Speculators may do no harm as bubbles on a steady stream of enterprise. But the position is serious when enterprise becomes the bubble on a whirlpool of speculation. When the capital development of a country becomes a by-product of the activities of casino, the job is likely to be ill-done”.

He was highly critical of their negative impact and this cannot be independent of the discussions held after the great depression. Speculators attracted a lot of criticism for their role in the economic calamities following the 1929 crash. The speculator of Keynes was not
the nice person contributing to innovative developments that we met in Adam Smith’s work. He was a gambler, bringing high volatility swings to the markets. While Adam Smith (1998) distinguished the speculator in physical stocks or assets from the speculator of financial services, attacking only the latter, Keynes made no such attempt. For Keynes, the distinction of importance lay in the scale of speculation and not in the industry in which the speculator acts. However, it should be stressed that while Smith’s attention was focused on the merchant who acts outside the financial services industry, thus feeling the need to differentiate him from the financial speculator, Keynes’s work was primarily focused on the stock market speculator.

Nevertheless, it is true that the financial speculator’s destabilizing forces on the economy are generally of much greater scale than those of the merchant who speculates with physical assets or stock because the merchant cannot expand its speculative activities infinitely for three reasons. Firstly, the assets bought by a merchant, need to be stored or located in their physical form either in a warehouse or in a factory. Secondly and most importantly, the access to leverage of a merchant is limited and thus the possible losses do not deviate significantly from his or her personal wealth, compared to the financial speculator who has access to leverage which is substantially higher than his or her personal wealth. According to the informants (mainly Christodoulos interview) and Minsky (1992), especially during financially euphoric periods, the lenders are drifted by the speculative returns, competing for increased market share regarding lending for speculative activities. Additionally, the employment of financial assets bought by financial speculators as collateral gives an erroneous sense of security, at least, for as long as the speculative period lasts, to lenders. Lastly, the financial speculation is destabilising because any damage in the financial services
industry hinders the availability of credit, as is currently the case, affecting not only those who speculated, but even sound businesses, as well (Minsky, 1992).

2.2.6. Schumpeter’s Historical approach to the analysis of business cycles

Schumpeter, writing in the same period that Keynes completed the general theory, in the aftermath of the great depression, dealt extensively with speculators in his second volume of ‘Business Cycles: A Theoretical, Historical and Statistical Analysis of the Business Circles’. Being a strong advocate of the existence of business cycles, he allowed a prominent place to speculators in his analysis. In his definition, Schumpeter followed similar lines to Smith and Keynes, suggesting that,

“The difference between a speculator and an investor can be defined by the presence or absence of the intention to “trade,” i.e., to realize profits from fluctuations in security prices.” (Schumpeter: 1939: 679)

Nonetheless, Schumpeter’s speculator is more risk taker than his ancestor of Smith’s, since he or she does not require the extraordinary high profitability of a trade in order to be attracted. Instead, he or she is lured by volatility, which in modern finance theory, by definition, represents risk. According to Keynes (1974), who blamed the volatility on speculators, it means that Schumpeter’s speculator is a risk taker who flourishes only in volatile markets, which are by-products of his or her own actions (en masse). A vicious circle fuelled by a positive feedback loop is thus developed. The higher the volatility in the markets, the more intensive the speculators’ activities will be and then the volatility in the markets will raise further, fuelling more speculative activities in the markets. The definition of Schumpeter paired with the observation of Keynes (1974: 158) that “As the organisation of investment markets improves, the risk of the predominance of speculation does, however, increase.” is
amply attested by the current data about the stock market trading in the USA. Given that 83\% of the trades of the NYSE today is not held overnight\textsuperscript{16}, it is evident that they were both correct. The speculator, who is facilitated by more liquid and organised markets, is operating in a high volatility environment, which is the result of his or her own actions in aggregation.

Their version of speculator agrees with the descriptions provided by Mackay (1995: 65) regarding the Tulip mania in Amsterdam that paralleled speculation with gambling. More specifically, Mackay recorded that

“The stockjobbers, ever on the alert for a new speculation, dealt largely in tulips, making use of all the means they so well knew how to employ, to cause fluctuations in prices. At first, as in all these gambling mania, confidence was at its height, and everybody gained. The tulip-jobbers speculated in the rise and fall of the tulip stocks, and made large profits by buying when prices fell, and selling out when they rose.”

However, contrary to the confidence exhibited by Keynes (1974) and Smith (1998) that the speculator can be safely distinguished from the investor, Schumpeter explicitly recognised the risks and difficulties of such attempted division. He well understood that the line separating the activities of the two groups is far from being obvious.

“But since investors also borrow and since they may at any time turn into speculators, this does not overcome the difficulty of distinguishing speculative from nonspeculative [sic] transactions. More useful for practical purposes is the criterion of the margin account.” (Schumpeter, 1939: 679)

The most complete work on speculation is provided by Chancellor (2000). His work includes an analysis of the history of speculation, drawing from a number of prominent speculative periods that marked financial history. Chancellor’s account is much closer to the historical

narrative of Mackay (1995), paying attention to the social context of the speculative cases he examined. He mainly relied on archival research, producing stories that illustrate the details of each speculative mania included in his work. Along the lines provided by Schumpeter, he believes that the difference between speculators and investors cannot be clearly defined. In order to highlight the elusiveness of the meaning of speculation, which means different things to different people, he quoted Sir Ernest Cassell, banker to Edward VII, saying that,

“When I was young, people called me a gambler. As the scale of my operations increased I became known as a speculator. Now I am called a banker. But I have been doing the same thing all the time.” (Chancellor, 2000: iv)

Although Chancellor believed that the meaning of speculation is elusive and “The line separating speculation from investment is so thin” he supported, “it retains something of its original philosophical meaning; namely, to reflect or theorise without a firm factual basis.”

Despite the fact that the borders between investment and speculation are blurred, Benjamin Graham (2003: 22), one of the most successful investors, whose book on value investing “The Intelligent Investor” has been among the most influential among investment practitioners, told investors “Never mingle your speculative and investment operations in the same account, nor in any part of your thinking.” The value of his advice, although ignored during euphoric periods of economic prosperity, is always remembered after the collapse of prices following speculative manias.

2.2.7. Characteristics of contemporary institutional investors
Minsky (2008) observed that institutional investors’ overwhelming impact will increase market volatility. He understood that institutional investors, especially during speculative
periods, are judged only on the basis of the returns achieved, ignoring the element of risk. Such behaviour, which is focused only on the short term-end of periods’ returns, unavoidably erodes market stability. Minsky stated that (1996: 1)

“Capitalism in the United States is now in a new stage, money manager capitalism, in which the proximate owners of a vast proportion of financial instruments are mutual and pension funds. The total return on the portfolio is the only criteria used for judging the performance of the managers of these funds”.

Regarding the buy-side impact of institutional investors, when looking at the ownership structure of the DJIA components we find strong evidence in support of Minsky’s view. For example, in only three companies, General Electric Company, 49.1%; Exxon Mobil Corporation, 47.5%; and Wal-Mart Stores Inc. 36.5%, did institutional investors have less than a 50% stake as of the end of December 2009. Noticeably, in nine corporations they owned more that 70% of the share capital, with American Express, Merck & Company Inc. and the Travelers Companies Inc. featuring high on the list with 80%, 80.5% and 89.1% respectively.17

At the same time, Minsky (1996) recognised that the expectations and thus the investment horizon will be reduced to the shortest holding period possible. As he suggested, money manager capitalism “makes the long view a luxury”. Allied with Keynes (1974: 157) who observed, “Investment based on genuine long-term expectations is so difficult today as to be scarcely practicable”, Minsky was quick to recognise the excessive uncertainty imposed on the system by the proliferation of institutional investors and the transformation of their investment horizons. However, even Minsky would have been surprised to know that the

17 Data accessible via the Wall Street Journal
average holding period of the investments in NYSE made by institutional investors today lasts less than a minute.

For example, in a Wall Street Journal\textsuperscript{18} article, Patterson (2009: par. 2, lines 1-3) argued, “Getco LLC, a private company with fewer than 250 employees, often accounts for 10% to 20% of the daily trading volume of many U.S. stocks ... including highly traded names such as General Electric Co., Oracle Corp. and Google Inc.” Getco of course specialises in high frequency trading, arguing that it provides liquidity to investors when it is much needed, as in the volatile trading days of late 2008. However, if a single investor accounts for 10 - 20% of a stock’s daily trading volume, then the possibility of price manipulation becomes an indisputable reality. Especially, when the stated objective of such investors is to profit from extremely short term movements in the traded share prices.

The leading players position their powerful computers in buildings, right next to the USA exchanges’ computers, a practice known as co-location, in order to gain fractions of a second, which allows the users, through algorithms, to trade up to 1,000 times per second. According to Tabb Group, such strategies “account for as much as 61 percent of U.S. stock market activity and 70 percent of individual trades”\textsuperscript{19} (Kearns et al, 2010: par. 4, lines 4-5). Tabb report also found that 83% of the trading volume in stocks listed in USA stock markets and 67% of futures activity are attributable to high-frequency trading\textsuperscript{20}.

On top of that, if we take into account the fact that such strategies yielded 21.8 billion in profits in 2009 there are reasonable grounds to suggest that the vast majority of institutional

\textsuperscript{18} http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aFrRXG2YEX30&pos=10 (accessed on 30/01/2010)
investors will be attracted by high frequency trading over coming years. Thus, competition in the higher floors of the investment community is not centred on information regarding the issuer’s cash flows, but it is focused, and will remain focused over the foreseeable future, on the speed with which they accessed the market. For example, Bats Global Market does not need more than 400 microseconds in order to process a trading order. That is 0.0004 seconds and it is “1,000 times faster than humans blink their eyes.”21 (Ortega et al, 2009: par. 3, lines 2-3)

This trend is precipitated not only by the exploitation of the speed advantage *per se*, but from the fact that the exchanges in competing for a larger share in daily trading volumes “by paying rebates to high-frequency brokerages that buy shares at the best public prices.” (Ortega et al, 2009: par. 10, lines 1-2). This kind of small fees, around a quarter of a cent per share, payable by the exchanges, allow high frequency investors, which manage the bulk of the trading volumes, to profit from a transaction “even if they buy or sell at a modest loss.” (Duhigg, 2009: par. 12, line 5). The following exact from the New York Times perfectly demonstrates the change in the behaviour pattern of institutional investors, which massively embark on high-frequency trades.

> “High-frequency traders often confound other investors by issuing and then cancelling orders almost simultaneously. Loopholes in market rules give high-speed investors an early glance at how others are trading. And their computers can essentially bully slower investors into giving up profits - and then disappear before anyone even knows they were there.” (Duhigg, 2009: par.11)

The doubtful strategy of high-frequency trading is perfectly aligned with the various definitions of speculative investments that all share the characteristic of a short term horizon.

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Practically, the shorter the period for which an investment is held, the less the investor will be interested in the affairs of the issuer. For example, institutional investors of the type of Warren Buffet, who keep the investments over the very long term, for a century in the case of Burlington Northern Santa Fe investment, can make a positive contribution to the firm’s corporate governance and profitability, for they have a strong interest in the firm’s long term cash flows and growth. On the other hand, if the institutional investors hold their investments for a remarkably short period of time, then they are interested in the short term price fluctuations only, which are not synonymous to the firm’s long term interest.

2.3. Investors Rationality: the disparity between theory and practice

2.3.1. The theoretical framework of Efficient Market Hypothesis

In this subsection, I discuss the theoretical framework of the EMH. Particular attention is given to the paper of Fama (1970) who, drawing from the work of Roberts (1959) and Keynes (1974), conceptualized and popularized the informational efficiency of markets by splitting it into three sub categories, namely: the weak, the semi-strong and the strong form of efficiency. The work of Fama is particularly relevant, not only because it has been accepted by regulators as a descriptive model explaining investors and markets’ behaviour (Nyberg, 2011), but because it stands in direct contrast to the speculative bubble of CSE, which is the main focus of my thesis. My respondents suggest a different framework, which includes the ‘regulatory failure’, ‘risk paradox’, ‘unrealistic assumptions’, ‘rumours’ and ‘strange friendships’ that does not fit the Efficient Market Hypothesis model. Although I argue that the model of rational investor, which the EMH is based on, cannot explain periodic market behaviours, such as bubbles (see Kindleberger, 2000), it can provide the basis for understanding the behaviour of institutional investors during the initial stages of the bubble.
Institutional investors act promptly in a strategic manner (Abolafia and Kilduff, 1988) in order to exploit the euphoric investment environment observed at the initial stages of the bubble and the ‘the new coming alevin’ (Christodoulos interview) that seems to enter the game *en masse* with the help of the ‘accelerator event’.

After Fama’s (1970) work on the Efficient Market Hypothesis finance within academic circles became a field of linear mathematical relations and a space occupied solely by rational investors. Financial markets were fully rationalised by academic textbooks, where irrational investors cancel out their trades and in the rare cases that irrationalities still persist, arbitrageurs capitalise on the opportunities without bearing any risk (see Shleifer and Vishny, 1997; MacKenzie, 2003; Shiller, 2005), bringing financial assets back to fundamental values. Thus, immediately eliminating any possibility for risk adjusted above market returns.

In a pivotal paper, which fuelled and marked the subsequent discussions in academic and practitioners’ circles, Fama (1970), drawing from the discussion of Roberts (1959) on methodological issues in financial analysis, provided the theoretical framework of the Efficient Market Hypothesis (EMH). Fama (1970: 383) suggested that a market is informationally efficient when “security prices at any time “fully reflect” all available information.” Although the definition seems fairly straightforward, it caused and it is still causing endless debates. Initially, the debates centred on whether the markets were efficient. Afterwards, when the financial bubbles became the elephant in the living room, the debate focused on whether markets with extreme deviations from fundamental values, as in the cases of speculative investments and subsequent bubbles (see Black, 1986 and Malkiel, 2003), qualify as efficient or not. Such markets include, but are not limited to, the crash of 1929, the internet bubble of 2000 and the ongoing credit crisis of 2007. Fama (1970) classified the
markets into three forms of efficiency. The first two, based on Roberts’s (1959) work, are the “weak form” and “semi-strong form” of efficiency. The third one is the “strong form”.

The “weak form” implies the randomness of the price changes. It supports that technical analysis cannot be used in order to predict future prices. The same stands for the statistical methods employed primarily by a portion of the professional investors in order to predict price changes. Such methods include the use of Linear Regressions, Standard Deviation and Standard Error Studies and other trading techniques which are based on secret algorithms (see Weidner, 2009) and automated trading, which are discussed in more detail in a subsequent section.

The “semi-strong form” assumes the incorporation in the prices of all the publicly available information. That means that investment analysts can add no value at the investment decisions since all the information contained in the financial statements are already reflected in the share prices. Although Roberts (1959) suggested that technical, fundamental and advanced statistical analysis should be rigorously employed by financial analysts for sound financial decisions, allowing for “judgment and intuition”, as well, Fama (1970) marginalized the contributions of such approaches by suggesting that prices’ changes are random and observed prices should always be trusted, since they are passive reflectors of relevant information. In short, Fama built his legacy by claiming that markets never err, a thesis that in the light of the current crisis is under heavy criticism, not only for its propositions, but also for its ontological assumptions (see Angelides, 2011; Nyberg, 2011).

From the practitioners’ point of view, Fama’s definition suggests that bubbles do not exist in the financial world, since “at any time” prices are perfectly aligned to their fundamentals.
That means investors do not pay more than the fundamental value of a security in order to include it in their portfolio. In the same vein, sellers do not accept any price lower than the fundamental value of the security they want to sell. In financial terminology, investors are rational. This assumption will further be dealt with in the methodology chapter. But it is worth noting now that it is an assumption that suggests that investors, even professionals, cannot outperform the markets no matter what stock of knowledge, experience and technology they employ. If all the information is always fully reflected in the share prices, any attempt to identify undervalued or overvalued securities is condemned to prove unsuccessful.

2.3.2. Noise

The concept of ‘noise’ although coined and popularised by Black (1986), actually it was extensively discussed and analysed by Keynes (1974), who observed that what today is called information, includes all sorts of irrelevant considerations, including investors psychology. Assuming investors’ rationality and arbitrageurs’ dominance over speculators or noise traders as they were termed by Black (1986) - assumptions, which have been at least questioned by Shleifer and Vishny (1997) and MacKenzie (2003, 2004a, 2004b) - the theory seems to be solidly bounded. However, as we will see later, the assumption of rational investors and arbitrageurs are at least unrealistic. Especially in the light of the current credit crunch, such assumptions have proved to be extremely costly for academicians, practitioners and administrators, as well. Although, as mentioned earlier, the definition provided by Fama (1970) is straightforward, its rigid nature, which is reflected in its wording, misaligned it with the observable reality which the theory intended to explain. The phrases “at any time” and “fully reflect” created a natural-law definition which failed both to provide any predictive power regarding the speculative movements of asset prices and the formation of bubbles and
to explain these phenomena ex post (after the event). For this reason, Black (1986) introduced the concept of ‘noise’, providing a much looser definition for the EMH, thus creating and allowing the necessary space for the observable market inefficiencies. In this vein, a number of irrelevant considerations, such as the ‘rumours’, ‘strange friendships’ and ‘unrealistic assumptions’, which have been identified by my interviewees, provide the basis for understanding and explaining institutional investors’ decisions, which materially deviate from the information-based model of rational investors.

As he observed, “Noise makes financial markets possible, but also makes them imperfect.” (Black, 1986: 530). He contrasted noise with information and defined it as any input in the investment decision that is not information. In the best case, it is a correct speculation about information “that hasn’t arrived yet.” As he explained (p: 530), a large number of factors cause “stock prices to stray from theoretical values”. In his attempt to fit market efficiency with what he observed in the financial markets, he expressed the view that a market should qualify as efficient if prices are “within a factor of 2”. In such a market, “the price is more than half of value and less than twice value.” (Black, 1986: 533). In simple words, markets should be considered as efficient even if they are 100% overvalued or 50% undervalued. Black, although rejecting the claim of Fama (1970) that markets are always correct, accepted the fact that his own definition is arbitrary. He stated that his arbitrary definition can justify the thesis, “almost all markets are efficient almost all of the time.” Nevertheless, he clearly understood that, in describing financial markets, it is pointless to work only on information, ignoring noise. In his own words: “I do not believe it makes sense to create a model with information trading but no noise trading” (Black, 1986: 531). An approach that actually derives from Keynes’ observation that investment decisions include “all sort of considerations that are in no way relevant to the prospective yield.” (Keynes, 1974: 152). For
example, as he claimed, without the motive that the joy of success offers, emotionless calculations of the long term returns would have not been able to generated sufficient investments.

At this point, Black (1986) suggested that only fundamental analysis will bring prices back to intrinsic values. Nevertheless, this proposition is entirely rejected by Fama’s (1970) model of market efficiency, in which prices are always correct. For Black (1986), value investors, such as Warren Buffet, are needed in order to remove noise from share prices, with their hard work on the financial statements. In this case, the model offered by Black explains the unusual outperformance of the market, as a whole, by Buffet and the like. On the other hand, for Fama, Buffet must owe his success to his lucky star, which seems to be remarkably reliable and persistent.

Black (1986: 534) attributed noise trading to two main reasons. He suggested that investors trade on noise because “they like to do it” and because of their ignorance that they are actually trading on noise. Both of the reasons imply that investors are not rational, since rational investors trade only on information and they are able to discern information from noise. The difference between these two groups of investors is fundamental. The first group, which choose to trade on noise, are speculators because they decided to speculate. Regarding risk, most probably they are aware of the risks they accept and create by their trading. Regarding the intrinsic value of the securities and markets they trade, either they do not care about them or they know that are far away from the prices they pay. The second group of investors, who do not know that they trade on noise, is much more vulnerable. They probably think themselves as investors and not as speculators, because they believe that they trade only on information and not on noise. As regards risk, obviously they are not aware of the risks
they accept, since they assume that the prices paid are fair. The most difficult issue in this discussion is the relationship between the two groups. The possibility of the speculators manipulating the ignorant cannot be ignored, as it seems to be the case in the CSE bubble. However, at the end, the forces of the bubble are so powerful that turned strategic manipulators into powerless victims, consumed by the speculative fever and the infinite richness it promises. Research on this area should try to examine and understand the relations between the two groups especially at markets’ highs. According to Black’s (1986) analysis, this is not a win-win situation. With their trades, the noise-traders push asset prices away from their fundamentals. Investors trading on information, at the beginning of this journey to the unknown, cannot push prices back either because the deviations are not visible to all or because the risk / reward ratio at this stage cannot justify such an enterprise. When the deviation from fundamental values become obvious to everybody, as happened in the 3com case, speculators find it extremely difficult to pull in more speculators. At the same time, investors are more willing to trade on the expectation that price levels are not sustainable anymore. Up to this level, while asset prices are deviating from their intrinsic values, the noise traders are making money at the expense of the investors. Additionally, at the highs of this deviation, speculators are more likely to pull out since they are aware that they are speculating. A possibility that is not supported by the data I generated, at least for the vast proportion of speculators. On the contrary, investors that speculate on their ignorance are more likely to remain trapped during the painful journey back to fundamentals.

For example, George Soros, a well-known speculator, was long on the markets up to the summer of 2007. During the summer of 2007, he realized that prices were not sustainable anymore and went short. On the other hand, the banking institutions often appear to speculate on their ignorance. They were trading on noise, thinking that it was information. In the words
of Black (1986: 534) “there is so much noise around that they don’t know they are trading on noise. They think they are trading on information.”

Let’s now see the impact of Black’s framework on the investment community through the example of the Bank of America. At the time of writing the Bank of America, which is still in business because of a series of bailout attempts by the US government, is traded at $12.20. According to the definition of Fama (1970), the price is correct. That means that practitioners should consider including it in their portfolio only on the basis of diversification. Additionally, there is certainly no reason for sorting it, since according to the EMH the only bias in the market is the long term trend. On the other hand, Black (1986) suggested that the intrinsic value of the Bank of America can be anywhere between $24.40 and $6.10. Immediately, the space and conditions needed for active portfolio management is created. Additionally, the justifications of the huge liquidity of the stock, which is the most heavily traded security in the Dow Jones Industrial Average, are provided. Investors who believe that the share price is undervalued will buy the stock and the investors who believe that it is overpriced will sell the shares they hold or they will short it. This helps explain the enormous turnover observed in the financial markets, which cannot be attributed only to diversification strategies. Even if the definition of Black (1986) appears to be broad, it provides a more reasonable ground to the supporters of EMH in defending the theory against the observable behaviour of financial markets, which thrive on periodic bubbles that drive prices significantly away from fundamentals (Galbraith, 1994; Kindleberger, 2000; Malkiel, 2003).

From the regulators and administrators’ point of view, the EMH means that markets are always at price equilibrium. Speculation, if ever happens, can have no effect on the asset prices. Thus, bubbles cannot be formed (see Angelides 2011; Nyberg, 2011). Subsequently,
asset prices stability should not be a concern for regulators, administrators or investors. For regulators, it means that the game is always fair, and they are a burden on the markets rather than a service. Free markets are inherently equipped with the required mechanisms which self-correct any inefficiency, as Friedman (1953) advocated. However, this is in sharp contrast with recent evidence, which reveals that the US government alone committed $2.7 trillion in order to establish new price equilibria for the financial assets, which were in free fall. The attempt was made in order to restore confidence in the markets, which according to the EMH has no role to play in the formation of asset prices. Of course, this stands in direct contrast to the behavioural works of Keynes (1974), Shefrin (2002), Shiller (2005) and Akerlof and Shiller (2009). Among other measures, Governmental intervention directly bailed out a series of financial institutions, including the American International Group, Citigroup and Bank of America. These financial institutions failed in the free marketplace in all four main areas of corporate finance. Bad financing and investment decisions, inappropriate dividend policy and mergers and acquisition strategies brought them to the brink of collapse. However, the systemic risks imposed by these institutions on the international financial community forced the US government to denounce the self-correcting mechanisms of the free market. Although regulators and administrators theoretically ascribed to EMH ideology (see Greenspan, 2007) when it comes to practice, in critical moments, they refuse to abide by its basic rules. It seems that in practice markets are not always correct.

When the credit crunch started unfolding in the spring of 2007, the biggest financial institutions in USA and Europe held in their accounts trillions of dollars of non-liquid assets for which the market price was significantly lower than their book values. It seems that the risk associated with these investments has been miscalculated or incorrectly perceived. The situation is even more problematic if we consider that these institutions are those supposed to
take advantage of the arbitrage opportunities provided by non-rational investors. According to the efficient market hypothesis’ principles, the investment community needs not to worry about pricing inefficiencies because arbitrageurs will capitalize on the opportunities provided by non-rational investors who trade on noise (Black, 1986) rather than on information. However, in practice, as it is discussed in a subsequent section (see Keynes, 1974), the institutional investors are to be found among speculators rather than among arbitrageurs, at least more often than not.

The concept of investors’ rationality is supported by three theoretical arguments. Firstly, deviations from the intrinsic values cannot happen in the first place because investors are rational and, as such, they would never speculate. The price investors are willing to pay for a particular asset is entirely guided by the available information affecting the issuer’s future cash flow and the discount rate to be employed. Yet, if some investors behave irrationally, their acts will be randomly cancelled out by other irrational investors that bet in the opposite direction. Of course, the argument supported by EMH advocates, that the irrational investors’ trades are cancelled out by each other, assumes that the capital speculating on a particular security price movement is equally split into two separate effects that perfectly offset each other. Consequently, prices should never deviate from intrinsic value. That is, the value derived after discounting the firms’ cash flows. Keynes (1974: 152) was critical about it. As he supported, we cannot “rationalise our behaviour by arguing that to a man in a state of ignorance errors in either direction are equally probable”. Evidence from the current crisis reveals that speculative capital tended to bet in the same direction. The other side is taken only by the exceptions (see Lewis, 2010; Zuckerman, 2009). Had speculation been equally split, the crisis would have never happened in the first place because prices would not have

22 For a critique of this argument see Keynes, 1974; Chapter 12: The State of Long-Term Expectation
deviated from their fundamental values. Unfortunately, the institutional investors collectively remained committed to the same direction to the end. Not surprisingly, the wrong one. To put it in context with simple words, avoiding academic rhetoric, as recommended by McCloskey (1998), the biggest and most prestigious financial institutions with privileged access to information and the support of a huge army of scientists (Bennett et al., 2003) speculated with hundreds of billions of dollars. They miscalculated the risk involved in their trades, lured by higher returns, and now are trapped holding financial securities that appear untradeable which only the Central bankers can afford to buy. According to Keynes (1974: 152) analysis, that is because “all sort of considerations enter into the market valuation which are in no way relevant to the prospective yield.” There is strong evidence from the data I generated regarding the CSE that, in conditions of speculative bubbles, the considerations of institutional investors become progressively irrelevant. At the bubble’s heights, the only relevant consideration seems to be speculation per se.

From an empirical point of view, contrary to the assumptions of the efficient market hypothesis, Shleifer and Vishny (1997) Froot and Dabora (1999) and Scruggs (2007) documented that arbitrage is both risky and costly. Academics and practitioners learnt this the hard way. The collapse of Long Term Capital Management in 1998, which specialised in arbitrage, reminded the financial industry that arbitrage is terribly risky, costs billions and can shake the confidence of financial practitioners, endangering the market’s stability.

Black (1986), by taking a softer approach to market efficiency and investors’ rationality, accepted that market efficiency allows for price deviations from the intrinsic value of 50 percent for the downside and 100 percent for the upside. Under this definition, as discussed earlier, he concluded, “markets are efficient almost all of the time” attaching to “almost all”
90 percent accuracy. According to Black’s approach, the LTCM case, the crash of 1998 where the US stock market declined 22.5 percent in a single day without any significant information being released, the technological bubble of the late 90s and the current credit crunch, all belong to this 10 percent. Although the definition of Black is broad enough to reconcile all the views on market efficiency, it seems that market inefficiencies are quite expensive in terms of practitioners’ losses and academics’ credibility and prestige. As a result, as he prophetically predicted: “Perhaps most important, research will be seen as a process leading to reliable and relevant conclusions only very rarely, because of the noise that creeps in at every step.” (Black, 1986: 530).

If we are truly interested in examining the levels of efficiency of financial markets, we have to look at them critically. We have to examine the behaviour of the actors involved, their motives and the impact of their acts on the markets. Looking critically, means consistently studying and examining the concepts, theories, models and practices under question in order to understand and reveal their problematic aspects. Obviously, it is impossible to achieve that only by statistical analysis governed by a number of unrealistic assumptions that transform the object of our analysis into a superficial externality. The problem with the assumptions is that they elevate the phenomena under question to a superficial world incapable of comparison with the one in which we operate. In the words of Kindleberger (2000: 219), we cannot “elevate technique above economic essence.” However, this is an issue that it will be extensively discussed in the methodology chapter.

2.3.3. Rational Speculative Bubbles

Although mainstream finance rejects the idea of irrational bubbles, since they do not fit its model (see Kosfeld, 2005), it accepts the existence of rational bubbles and the subsequent
crashes. The distinction between the rational and irrational bubbles can only be made by accurately estimating the fundamental value of the asset under consideration. The issue is that the accurate estimation of the fundamentals is an extremely difficult task (Rosser, 2000). An assignment that is almost impossible (see Keynes, 1974). How can we accurately estimate the cash flows generation ability of an asset and the appropriate rate with which the generated cash flows should be discounted for the next five years? Let alone that according to Siegel (2003) in order to assess whether the price of an asset is in a state of bubble, such projections should be extended over the next decades and not simply over the next years.

For example, Siegel (2005) supported that the stock market in 1929 was not in a state of bubble. Although the prices were not justified by the cash flows generated by the corporations during the 1930s, they were justified by the cash flows they generated during the 1960s. It seems that such approaches are extremely dangerous for regulators and investors, as well. I do not think that an investor or a businessman that lost everything during the Great depression cares if the assets will be able 20 or 30 years later to generate sufficient cash flows in order to justify the prices that put a whole nation into bankruptcy. This point brings us to the example of Richard Fuld, the final Chairman and Chief Executive Officer of Lehman Brothers. Fuld who started his career in Lehman Brothers back in 1969 as a commercial paper trader had a maxim: whatever it happens during the trading day, you have to stay alive in order to fight again the next day. The Lehman Brothers collapsed once Fuld departed from his maxim (see McDonald and Robinson, 2009). The fact that the housing prices may be justified by the cash flows over the next 30 years it is totally irrelevant to the employees and investors, at least of Lehman Brothers, who lost everything. The financing and financial decisions of Fuld and the rest of the institutional investors were irrational, and we do not need to wait for 30 years in order to evaluate it. What we need to do is to understand their
behaviour and explain it in order to inform practitioners and regulators in an attempt to prevent such bubbles, at least of this magnitude, to happen again. Consequently, I think that rationality of investors should be examined by looking at the end-result of their actions and not at the economic development at the very distant future.

Scheinkman and Xiong (2003), drawing from the model of Harrison and Kreps (1978) proposed a bubble’s model, which is based on the overconfidence of two different groups of investors, which agree to disagree, leading to heterogeneous beliefs. Although they share the same information, their interpretation is not the same. Both of the groups are overconfident about the quality of the information they have and their ability of correct interpretation of it. None of the groups is constantly optimistic or pessimistic. One of the two groups, at any time, believes it has superior information than the competitive group, thus both groups are willing to trade, when their beliefs differ substantially. The most optimistic group of the two is willing to pay a premium over the estimated fundamental value since “they believe that in future they will find a buyer willing to pay even more.” (Scheinkman and Xiong, 2003: 1208) Under the condition of short-selling ban, the bubble becomes a possibility and is normally accompanied by high trading volume. That is when the fundamental value exceeds the market price of the asset. A very practical definition in terms of real trading and its effects, with the only issue being the estimation of fundamental value. As they argued, their model “is quite different from “rational bubbles”” (p: 1188) in two respects. Firstly, in contrast to ‘rational bubbles’ models, their model links bubbles with high trading volume. Secondly, in their model, even assets with finite maturity can trade at prices well beyond the fundamental value. In this case, the bubble will deflate as the assets moves closer to maturity. Actually their model, although based on heterogeneous beliefs and trading volume, it does not accept the possibility of irrational investors acting as a crowd. Contrary to this, my interviewees suggest
that even institutional investors, at a point during the bubble, are simply part of the crowd. That is the point where their ability to strategically organised (Abolafia and Kilduff, 1998) is marginalised and actually defeated by their creed, with disastrous consequences. This is especially true during the last stage of the bubble, because they believe that stock prices have reached a new valuation plateau (Fisher, 1929), and they cannot fail.

The model of Scheinkman and Xiong (2003) was elaborated by Hong et al (2006) in order to incorporate insiders’ lockup. They suggested that bubbles, consistent with the internet experience, are positively associated with higher trading turnover and volatility, which they retreat while approaching the lockup expiration. In this case, the float will increase, since the insiders will be able to sell their shares, increasing the free float. The optimistic traders not only believe that more optimistic traders will buy the already overvalue asset, but they “speculate over the degree of insiders selling”, as well (Hong et al, 2006: 1073). The two models share a common limitation, which put them at a disadvantage when trying to explain real world bubbles. They both assume that since they are short sales restrictions, investors act only of their optimistic views regarding the asset under consideration. That means that the group of investors that are optimistic are buying the asset, while the group of investors that are pessimistic simply sit out of the market. This assumption, actually does not allow the pessimistic investors to sell their shares, meaning that when there are substantial differences between the views of the two groups of investors, there is always one group that acts as a buyer and a group that sits out of the market. That means that the investors, no matter what their views on the market are, they cannot move to cash. Since the models are based on the assumption of heterogeneous beliefs between two groups of investors, in the absence of insiders selling the bubble will grow infinitely. For example, in the model of Scheinkman and Xiong (2003) when someone pushes the logic of heterogeneous overconfident groups to its
extreme, she is always left with a group of buyers and a group of inactive investors. In the case of assets with infinite life, the bubble will never burst. It will only stop growing when the views of investors do not differ significantly, and it will start growing again once the views diverge again. On the other hand, as they argued, in the case of assets with finite life, prices will retreat to fundamental as we move towards the expiration date. In the same vein, in the case of Hong et al. (2006), the asset prices will retreat back to fundamental only with insiders’ selling. On the contrary, my respondents, consistent with the line of argument developed by Kindleberger and Galbraith, suggest that one of the main components of the asset bubbles is the absent of heterogeneous beliefs, which at the peak of the bubble takes the form of the suppression of contrary voices. However, my respondents confirm the strong association between bubbles and trading volume.

Fully aligned with the model of the rational bubbles, Blanchard (1979: 387) supported mathematically: “Self ending speculative bubbles, i.e., speculative bubbles followed by market crashes, are consistent with the assumption of rational expectations.” Actually he introduced the ‘self-ending’ mechanism of the bubbles, differentiating himself from the model of Flood and Garber (1980), who, as Blanchard shown, in order for the model of Flood and Garber “to be consisted with rational expectations, [the bubble] must however never end” (p: 388). The ‘self-ending’ property points to the ability of the markets to self-correct, which has been severely questioned over the current credit crunch. Of course, the bubble will burst at a point. They cannot grow exponentially for ever. However, how rational an investment behaviour can be, when its end-result is the end of the financial system, assuming a non-interventionist attitude from the part of regulators and administrators? Even the mighty Goldman Such accepted that it would have not survived without the taxpayers’ money.
2.3.4. **Systematic encouragement of large scale speculators**

According to Greenspan (2007: 209), in 1998 the head of New York Fed, Bill McDonough, “took the challenge of coping with the implosion of one of Wall Street’s largest and most successful hedge funds, Long Term Capital Management” (LTCM). Because of its size and its chaotic financial links with all the key market players at the time, the effects its failure could have had on the financial system were considered systemic by any measure. However, the account we have from Lowenstein (2000), in a work entirely devoted to the case of LTCM, suggests that the head of the New York Fed moved beyond its jurisdiction and forced 16 of the biggest players of the Wall Street to contribute up to $350 million each in order to bail out the fund. The press immediately pointed to the fact that such an action directed by regulators encourages speculators to engage in irresponsible activities or risky investments as they are called in financial textbooks. However, the Fed chairman, at the time of the incident, defended regulators’ action. He supported, “an orderly liquidation of the fund was by no stretch of the imagination a bailout.” (Greenspan, 2007: 195).

The way that the case of LTCM developed points directly to market inefficiencies. To start with, the information regarding LTCM’s financial distress was not immediately available to all investors. A group of powerful players, the elite of the marketplace, gained privileged access to crucial information. Furthermore, this information, even to the elite, was not “costlessly available” as argued by Fama. It had a significant price attached. It cost each player $350 million. Bear and Stearns, the only USA based firm that refused to contribute to the bailout, was punished nine years later when the other players vengefully refused to bailout two of its Head Funds that collapsed in August of 2007. The Federal Reserve, chaired by Ben Bernanke at the time, being consistent with its approach to speculators of large scale, bailed out Bear and Stearns in March 2008. From a practical point of view, cases such as
LTCM and Bear and Stearns clearly demonstrated that size is heavily weighted in administrators and regulators’ decisions as to whether to interfere or not. From an academic point of view, it seems that the assumption of rational investors, which reinforces the concept of self-correcting markets, should be re-examined.

The supposed arbitrageurs, those big players with the resources and knowledge needed to identify and profit from price discrepancies, are consistently encouraged by administrators and regulators to speculate heavily, pushing price deviations from fundamental values to extreme levels. As a direct consequence of their actions, markets are rarely allowed by administrators and regulators to activate their self-correcting mechanism. That is because of the devastating effects such systemic risks may have for investors and especially for those highly influential players that created the problems.

More interestingly, regulators’ interventions repeatedly appear in the markets with strengthened momentum. The practice of providing privileged access by regulators to dominant players has been documented by Thomas (2007; cited in Torres, 2007). The Federal Reserve Chairman, Ben Bernanke, from the decision of the 7th of August 2007 to keep interest rates unchanged to the 17th of August decision to decrease interest rates, discussed his thoughts with high profile practitioners, including Wall Street executives and money managers. Obviously, one can argue that the Fed’s Chairman did not actually communicate his decision to the selected practitioners. However, this does not truly matter. What is at stake here is the immediacy of access to the same sources of information for all investors. Certainly, not everybody has the privilege of discussions with the Fed Chairman before truly critical decisions, especially in turbulent times. This is not a right extended to “Main Street”. According to the theoretical framework of the EMH, when a group of investors has exclusive
access to a set of information, only the strong form of efficiency is violated. However, if this access is provided by regulators then the entire notion of efficiency is at stake, since the competitiveness and fairness of the markets are violated by those institutions that are supposed to protect it.

A question raised here is upon what basis do regulators have the right to intervene in such ways in the markets, given that, by doing so, they obviously put at stake not only market efficiency but also the notion of self-regulated markets? Either they wanted to protect wealthy investors, a case that has been declined by both Greenspan (2007) and Paulson (2007), or they recognized that the financial system was at risk because of investors’ irrationalities and they wanted to protect it. The latter case has not been denied by both. Greenspan (2007: 95), reflecting on the Fed’s involvement in the LTCM case, stated that the banks “By facing the harsh reality and acting in their self-interest ... saved themselves”. “But saved themselves” from whom? From the most successful traders and the best professors of finance, who decided to capitalise on the irrational investors’ behaviour through arbitrage? A financial activity that is supposed to be risk-free!

Another critical issue is the immediacy of access to information. The Treasury Secretary obviously has privileged access to information regarding the financial affairs of the important players, their exposure to risky and illiquid securities, and the effect this may have on the overall economy. During his attempt to persuade the leading players to establish the mega fund, obviously all the information he had was communicated to the selected panel, once again leaving out ‘Main Street’ from vital information. The biased attitude of administrators towards large financial corporations is even more problematic if we consider the ties of
regulators to the industries in trouble. According to Bloomberg data (Brinsley and Vekshin, 2008; Frye, 2010), $13 billion out of $37 billion in subprime loans held in the account of Goldman Sachs, the biggest global investment banking and securities firm, were created under the leadership Henry Paulson, promoted to Treasury Secretary under Bush Administration. For his services, he received from Goldman Sachs $38.5 million for 2005 and $18.7 million for the first half of 2006 as bonuses. These kinds of self-interest and interventions do not allow markets to self-correct imbalances caused by non-rational investors. They disrupt price equilibria by affecting the quality of information available to market participants and the speed that such information is made available to all investors.

Such bailouts of enormous scale, sponsored by regulators, directly affect the ability of the markets to correct the prices of traded assets. When regulators purchase problematic securities, they remove them from the market in order to prohibit pricing of those securities under market conditions. This is the main reason why bailout attempts are organised. If the holders are allowed to sell such illiquid assets to the open market, their actions will push prices materially lower causing colossal losses to everyone holding those securities because they will have to mark to market the securities held in their accounts at much lower prices. Consequently, they do not allow market participants to draw on precious information in order to accurately assess the value of those securities and subsequently the value of the corporations holding those securities, as well. As a result, the majority of the investors are not able to evaluate the firms that hold such securities in their accounts.

The exclusive access to valuable information of the elite, paired with bailing out the big players that normally constitute the elite that has privileged access to information, distorts the concept of ‘fair game’, encourages high profile speculators and puts additional risks on the
markets that nobody can accurately assess. This means that the assumption set by Fama (1970) regarding investors’ agreement on the implication of a set of information on prices is impossible to meet. Apparently, it is quite difficult to statistically test market efficiency under circumstances where speculation is encouraged and supported by regulators and size certainly matters when someone is in trouble. It seems that the ‘statistical significance’ cannot capture the motives and rationales of the large players that add additional risk to the markets. More significantly, those risks cannot be accurately estimated and their effects are apparent only after they have been fully deployed. History, which has no value under the weak form of EMH, repeats itself in financial markets, creating behavioural patterns that can be exploited (Galbraith, 1992, 1994; Mackay, 1995; Chancellor, 2000 and Kindleberger, 2000).

Characteristically, in periods of high uncertainty among investors, the assumptions on which valuations are based can break down rapidly. Investors, drawing from the worst experiences they have from the markets, which consist of intensely negative news, business malpractices and speculation that entire industries or markets are collapsing, value only certainty and liquidity. An observation consistent with the findings of Kahneman and Tversky (1979). They found that people, even from different countries, react in a similar manner when presented with risky choices. For their prospect theory tests, they distributed questions to the students and faculty of the Hebrew University and the Universities of Stockholm and Michigan. The pattern of results was essentially identical. They showed that people overweight certain over uncertain returns, in what they termed the ‘certainty effect. Recent market evidence suggests that in periods of heavily declining markets investors not only overweight certainty; they also avoid uncertainty, at any cost. This is a phenomenon known as flight to quality. During the current credit crunch, investors accepted lending their money to the US government for three months at zero return. This phenomenon has been approached
by a number of authors (Galbraith, 1992, 1994; Mackay, 1995; Chancellor, 2000; Kindleberger, 2000; Greenspan, 2007) academics and practitioners, as well, who share a common belief that it is better attributed to panic and not to risk adjustment factors, as suggested by the advocates of the Efficient Market Hypothesis (Fama, 1991; Malkiel, 2005).

Consequently, investors fail to estimate the marginal impact of any new information on asset prices accurately, especially in speculative periods. The effect of Bayesian law violation, which suggests that once new information is released, investors immediately and accurately incorporate its impact on assets prices, can mainly be seen and better understood by looking at the premiums paid for liquidity and safety and the levels of correlation between national stock markets. As Greenspan (2007: 195) remarked concerning the crisis of 1998, irrationality governed investors’ decisions which “reflected not judgment but panic. Panic is like liquid nitrogen - it can quickly cause a devastating freeze.” Panic, which is the psychological state of investors where they fail to judge on the basis of the information available, and they are guided only by pessimism and fear, seems to be the reason explaining the correlation of national stock markets in times of turbulence. For example, on 19 October 1987, markets experienced unprecedented one day declines all over the world without any apparent reason.

2.3.5. Why professional investors cannot outperform the markets

Obviously, the argument of Malkiel (2005) that markets are efficient because professional investors cannot outperform them is at first sight convincing. However, a closer examination reveals its false logic. Malkiel (2005) analysed the performance of equity mutual funds over a period of twenty (20) years, ending at December 31, 2003. He compared the funds’ returns
over periods of 5, 10 and 20 years and he found that, in all three periods, the markets outperformed the equity mutual funds.

The data clearly indicate that fund managers failed to attain superior returns. However, the percentage of fund managers that outperformed the benchmark index over the examined periods was over threefold that for the shortest time period as for the longest, from a poor 10% over the 20-year period ending December 31, 2003 to 37% for the 5-year period. Since the argument of Malkiel (2005) is that larger capitalization funds underperformance is a strong indication of market efficiency, in the same vein, it could be argued that markets are less efficient now compared to the past, because the managers outperforming the markets almost three folded. However, I am not tempted by this line of argument. The reason behind fund managers’ underperformance is quite straightforward. Probably it is not appealing to the normative branch of finance, its statistical significance it is extremely difficult to be measured and does not draw from the rhetoric of positivist methodologies. Nevertheless, it exactly reflects the vicious circle in which we have been trapped into. In their majority, fund managers cannot outperform the markets, because they have never been taught how to achieve it.

Warren Buffet tried to draw the attention of the academic community on the mismatch of what finance students are taught in the university and the needs of the financial industry, as early as in 1984. Being one of the most successful fund managers, with impressive returns, 22.2 percent compounded annually, he stressed the disparity between the formal finance education provided by Universities and real market needs. He argued that his success is

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23 He also used periods of 1 and 3 years but they do not allow to the fund managers to interact with the markets over substantial period of time. Although useful insights can be gained by any period of time, such short periods cannot be accurately used for conclusions, since the argument of market efficiency is that investors cannot outperform the markets over the long run.

24 See for example McCloskey (1998)
entirely attributable to the knowledge acquired when he was working along with his mentor, Ben Graham.

Ben Graham is considered the most prominent investor, not only because of the spectacular returns he achieved between 1936 and 1955, but also because of his influential philosophy. He conceptualised value investing and according to Buffett (Graham, 2003) the vast majority of the persons that attended his night classes followed his records of accomplishment, outperforming the markets and proving that their success cannot be attributed to luck; what is termed in the statistical science as survivorship bias. Voices from practitioners, especially those instilled with the authority of consistent success and accumulated experience cannot be disregarded because their methods do not agree with the established normative models.

A metaphor will facilitate understanding the effects of the alienation of finance theory from practice. Imagine a scientist who conducts a survey in the western countries in order to find out the percentage of people in the West that speak Chinese. After drawing from a large sample and rigorous statistical analysis that safeguards the objectivity and reliability of the results, he concludes that the proportion of Western people speaking Chinese is remarkably close to 0. He, therefore, concludes that people in the West are not capable of speaking Chinese and, consequently, they should never try because their efforts will be unsuccessful. He even goes further to infer that even if a small number of the Western population manage to learn the Chinese language, their success is attributable to pure luck. However, an equally plausible alternative reason why people in the Western countries cannot speak Chinese is because they have never been taught the Chinese language. If they start attending Chinese glasses, the majority of them, as demonstrated by Warren Buffet with the “Graham and Doddsville investors”, will speak Chinese as happens with any other second language.
Just imagine the psychologies studying a new psychological disorder of which they have not yet been able to trace causality. Can those doctors claim that the disorder is randomly affecting people and its pattern cannot be predicted? Obviously not! Their purpose is to examine the disorder, by paying more attention to approaches that provide better insights. Probably, finance is the only branch of ‘science’ that claimed its victory by informing practitioners that the object of their interest is unbeatable. It has also proudly said to practitioners that if they ever manage to outperform the markets, it will be solely attributable to chance (Fama, 1970; Malkiel, 2003, 2005) and not to their skills and knowledge. A more sound approach seems to be the rigorous study of those outperforming the markets instead of totally ignoring them.

2.3.6. The real cost of the gap
Unintentionally we have created two worlds. The normative one, in which mainstream finance argues for efficient markets and the positive one, in which frustrated practitioners and administrators are faced with non-linear dynamics that call for new approaches. Recent market failures suggest that we can no longer afford to ignore practitioners that emphasise markets irrationalities. Top officials (Egan, 2008; Fons, 2008; Joynt, 2008; McDaniel, 2008; Raiter, 2008; Sharma, 2008), from the credit rating agencies, highlighted the contemporary inevitable irrationalities that lead all market participants to a consistent underweighting of risk. Such statements directly question the foundations upon which the informational efficiency is based. Such claims, forced by market developments, suggest that the four axioms introduced by Von Neumann and Morgenstern (2004), on which the theoretical framework of investment rationality is based, are only part of the normative world. They are not part of reality as experienced in the positive world, in which market developments point
to large scale speculators that destabilise markets. Excessive speculation, leading to speculative bubbles (Galbraith, 1992, 1994; Mackay, 1995; Chancellor, 2000; Kindleberger, 2000), highlights that irrationalities are not cancelling out each other (see Shleifer, 2000), but are escalating in volume and scope, deteriorating the universally accepted sense of values, risks and returns as understood by investors in periods after financial crises.

Especially today, in a world of more than 10,000 unregulated hedge funds and unprecedented government controlled wealth from the Gulf countries and China, which are not famous for their rational capitalistically guided approaches, speculation is becoming the norm rather than the exception. On the top of that, regulatory bodies, such as central banks all over the world and the governments with whom they are associated, are encouraging speculation on a large scale. They provide credit lines to speculators by aggressively lowering the interest rates. They bail out institutions that speculated with investors funds’ (see the cases of LTCM in 1998 and Bear and Stearns in 2008, both in USA; and Northern Rock in 2008 in UK) and orchestrate the creation of mega funds in order to buy the worthless investments from the big players (see the SUV mega fund creation encouraged by the US Treasury Secretary). As became evident, costly deviations from the rational models shook the international financial system and cost trillions of dollars to the investment community. Additionally, financial crises revealed the limitations of mainstream finance in its provision of adequate explanations for these phenomena and its ability to invent models with predictive power.

Drawing from these deviations from the rationality, we, academics should shift the research focus from normative finance, which describes what investors should do in a perfect world, to positive finance, which deals with what investors actually do (Sharpe, 2007) in the financial world in which we operate. This will allow us to investigate, understand and explain the
irregularities inherent in human investment decisions, providing practitioners with invaluable insights into the price behaviour of financial assets.

Although markets’ history does not suggest that markets are efficient most of the time, I think that the approach of Black (1986) can bring normative and positive finance closer in order to benefit both the investment and the academic community. The enormous prospects of normative approaches will only be materialised if they are used to understand how investors’ actual behaviour repeatedly deviates from how those investors’ ‘should’ be behaving.

2.4. Can the markets be seen differently?

2.4.1. Minsky’s Financial Instability Hypothesis descriptive Framework

Minsky (1982; 1992; 2008), who was tremendously influenced by the works of Keynes and Schumpeter, conducted an extensive analysis and discussion on the nature of the investment activities of economic agents. He thought of Keynes as the master, in terms of understanding the economic complexities among economic agents in a financial system with sophisticated financial institutions and structures. From his supervisor, Schumpeter, he borrowed views on business cycles, accepting them as an integral part of the capitalist economy rather than imposed by external shocks. His work is mainly based on the borrowing and investment behaviour of financial institutions and how they affect the stability of the system. He accepted business cycles as an integral part of the modern capitalist economy, suggesting that financial instability (Minsky, 1992) is the result of the loose financial structures developed in prosperous times rather than “the work of evil outside forces” (Minsky, 2008: 5). In his own terms ‘speculative’ and ‘ponzi’ borrowing and investing lay at the heart of financial instability. The theoretical framework developed by Minsky provides valuable insights in
understanding how the speculative bubbles are sparked by external economic shocks, as in
the case of CSE, with real economic consequences. Additionally, his work on ‘Financial
Instability Hypothesis’ (1992) can be used in explaining lenders and investors ‘pro-
cyclicality’ regarding risk tolerance. A phenomenon I call ‘risk paradox’.

According to Minsky (1992: 6), “The financial instability hypothesis, therefore, is a theory of
the impact of debt on system behavior and also incorporates the manner in which the debt is
validated.” He essentially drew from the theories of business cycles (Fisher, 1933,
Schumpeter, 1939) and speculation (Kindleberger, 2000) in forming the hypothesis which, on
the basis of historical observations, provides an accurate descriptive and explanatory
framework of the impact of speculation and debt on business cycles. For example, it is now
widely accepted that the recent financial crisis resulted from the deteriorating quality of
credit, which became available to “financing units” that were unable to repay the interest
charges and/or the principal, as well, at the end of the business cycle. That is what Minsky
(1982) named ponzi financing; the financing of investments with borrowed money on the
assumption that the price of the asset purchased will keep rising and that the markets will
allow borrowers to roll over their debt. In fact, they invest with borrowed money on the
assumption that will be able to keep replacing the old debt with new, on the same favourable
terms.

Minsky observed that the importance of credit lies in the quality of debtors, rather than in
credit per se. For this purpose, he separated borrowers into three distinctive financing groups.
The first, which he called hedge financing units, are those who borrow based on their
available cash flows. Hence, they have no problems in honouring their interest and principal
payments as they fall due.
The second financing unit is called speculative. It accesses credit after hedge financing units and based on its cash flows can always repay the interest charges but not the principal. According to Minsky (1982: 26),

“A unit speculates when for some periods the cash payment commitments on debts exceed the expected gross capital income. The speculation is that refinancing will be available when needed.”

For honouring the principal, a speculative unit relies on its ability to roll over its debt in some periods. For as long as the economy prospers, speculative financing units have no problems in responding to their financial commitments. However with adverse economic conditions, such as higher interest rates or reduced cash flows, a speculative unit is in danger of defaulting. Increasing numbers of speculative units in an economy is the first sign of systemic instability. However because at this stage the proportion of hedge financing units overshadows that of speculative units, the system can easily absorb any defaults. If normally in an economic system the majority of investors are hedge financing units, the majority of investments can be financed by existing cash flows. However, in an economic system where some financial agents are ‘too big to fail’ this is not always the case.

For example, in 1998, Long Term Capital Management put the entire financial system at risk because of its size and its interconnections with other key financial agents, such as the largest commercial and investment banks in USA and Europe. In this case, the Federal Reserve of New York orchestrated the bail out of the LTCM, which was the result of the systemic risks imposed by a single financial agent, in order to prevent a domino effect. However, in the absence of ‘too big to fail’ financial agents, which, unfortunately, is not the case in the
current credit crunch, a big proportion of hedge financing units ensure the stability of the system.

The last financing unit, which is called a ponzi unit, cannot meet its obligations. It can pay neither the interest nor the principal. According to Minsky (1992: 7), “Such units can sell assets or borrow” in order to respond to their obligations. The proportionate increase in the economy of speculative and ponzi financing units at the expense of hedge financing units creates destabilizing systemic forces in the economy which cause additional fluctuations in the business cycles and affects their severity.

In simple words, Minsky (1992) highlighted quality of borrowers and their investments as the single most significant systemic factor for economic stability. He suggested that at the initial stages of a business cycle credit is available only to hedgers. These are people and businesses that employ the credit in productive activities, and they can repay both the principal and the interest. When prosperity starts to settle in the economy a second group of people and businesses, called speculators, gain access to credit lines. This group has sufficient cash flows to guarantee the interest charges, but not the principal. The final group of people and businesses, the last one to access credit lines, are called ‘ponzi’ units, and they can pay neither the interest nor the principal. Because asset prices have been observed climbing during the period of prosperity, it is assumed that they will keep rising. Thus, money is borrowed in order to speculate, profiting from the climbing asset prices. Minsky suggested that when the last two groups, the speculative and the ponzi outnumber the first, the hedgers, the economy is in a zone of instability. My findings regarding the CSE bubble suggest that the bubble became unsustainable once the ‘accelerator event’ attracted to the stock market what Christodoulos (Christodoulos interview) called ‘alevin’. Inexperienced investors that
employed credit for their speculative investments. This pushed stock prices to astronomical levels (see CSE price chart in page 8) and forcing even prudent institutional investors to enter the market (Marios interview).

Minsky (1992) actually pointed to an open system, as Lawson (2009) did, in which stability relies on the interaction between lenders and borrowers and the validation of credit. He explicitly stated that the quality of these relationships determines the stability of the economy. As Minsky (1992: 7-8) claims: “The first theorem of the financial instability hypothesis is that the economy has financing regimes under which it is stable, and financing regimes in which it is unstable.” That is what he called “financial relations” (Minsky, 1992: 4).

He further proceeded with his conclusions by suggesting that long periods of prosperity deteriorate the quality of debtors that gain access to credit lines. He clearly pointed, not only to irrational borrowers, since they borrow while acknowledging that they cannot honour their obligations, but also to irrational lenders, which are institutions with financial expertise. They lend money when they know that the borrowers do not have sufficient cash flows to honour their payments. As he concluded (1992: 8),

“The second theorem of the financial instability hypothesis is that over period of prolonged prosperity, the economy transits from financial relations that make for a stable system to financial relations that make for an unstable financial system.”

This conclusion is in line with the work of Kindleberger (2000) who was cited by Minsky (1992) in his analysis. Kindleberger started the first chapter of his now classic book ‘Manias, 25

Panics, and Crashes: A History of Financial Crises’ by acknowledging the impact of financial crises that are fostered during prosperity periods of economic expansion. He specifically stated (Kindleberger, 2000: 1) that he is interested “in the financial crisis that is the culmination of a period of expansion and leads to downturn.”

2.4.2. Herding and Positive Feedback

Herding in investment decisions can be said to be as old as the markets themselves. Financial historian Mackay (1995) provided colourful accounts of investors herding in every speculative episode of early financial history. His accounts are validated by the comprehensive research conducted by financial historians, such as Kindleberger (2000) and Chancellor (2000). They both confirmed that herding is an integral part of speculative episodes and includes not only naive retail investors, but established institutional investors, as well. As Jean-Claude Trichet, (2001: 2, emphasis in original) President of European Central Bank confessed, “Mimetic behaviour is by no means a new phenomenon on financial markets.” More importantly for investors and regulators, herding destabilises financial markets by intensifying buying or selling at extreme valuations through homogeneous actors’ behaviour (Keynes, 1974; Mackay, 1995; Chancellor, 2000; Kindleberger 2000; Trichet, 2001; Greenspan, 2008). In this subsection, I discuss the concept of herding. I first look into the theoretical framework of herding and then examine the empirical evidence. Afterwards, I discuss reflexivity theory (Soros, 2003; 2008) and its links to self-fulfilling prophecies (Thomas, 1928; Merton, 1948; Krugman, 1995) and the nature and characteristics of rumours.

Bagehot (1873), the first editor of ‘The Economist’, provided one of the first accounts on positive feedback. According to his account, positive feedback is closely associated with
speculative episodes in which speculators turn their attention to price trends rather than to the return from the asset itself. The exclusive focus on price action creates the necessary support for the existing trend, making it even more obvious and thus, invitates a gradually increasing number of speculators into the market under examination at unsustainable levels.

“The fact is, that the owners of savings not finding, in adequate quantities, their usual kind of investments, rush into anything that promises speciously, and when they find that these specious investments can be disposed of at a high profit, they rush into them more and more. The first taste is for high interest, but that taste soon becomes secondary. There is a second appetite for large gains to be made by selling the principal which is to yield the interest. So long as such sales can be effected the mania continues; when it ceases to be possible to effect them, ruin begins.” (Bagehot, 1873: 79)

The description of Bagehot speaks of rising prices because investors imitate each other. The magnetism of exceptionally high profit lures a mounting number of investors into the game; a game which according to Smith (1998), is played primarily for the pleasure of playing rather than for profit per se. As long as there are more investors willing to join in, a positive feedback is in progress, pushing prices higher, which in turn tempts more investors.

Herding can be attributed to a number of factors. Theoretical works, such as Keynes (1974), Smith (1998), and Akerlof and Shiller (2009), blame it on human nature, more specifically on the animal spirit of investors. Likewise, as Kindleberger (2000: 15) aptly put it, “Monkey see, monkey do.” This particular theme appears in Akerlof and Shiller’s (2009) cover design which depicts various monkey-type human acrobats performing on the peaks and bottoms of a price index, with terrified and depressing expressions when they are at the bottoms and celebrating gestures when they are at the tops of the index. Kindleberger’s (2000: 15) explanation of herding during euphoric periods, which is along the lines of Galbraith (1992,
1994), Stewart (1992) and Smith (1998) suggested, “There is nothing so disturbing to one’s well-being and judgement as to see a friend get rich.”

According to De Long et al. (1990: 379-380), who provided one of the first pieces of empirical research on herding,

“Positive feedback investors are those who buy securities when prices rise and sell when prices fall. It can result from extrapolative expectations about prices, or trend chasing. It can also result from stop loss orders, which effectively prompt selling in response to price declines. A similar form of positive feedback trading is the liquidation of the positions of investors unable to meet margin calls.”

The theoretical framework provided by De Long et al. (1990) links prices destabilization with rational speculators. Although the rational speculators respond to positive news, their trades unintentionally invite irrational speculators, who follow positive price action rather than positive news, triggering positive feedback trading, which destabilises market prices. De Long et al. described an environment in which rational speculators’ reaction to good news is followed by ‘noise’ trading. Since the rational speculators, who are associated with price stabilization, know that their buying will be followed by irrational speculators, they intensify their buying, taking advantage of being the first movers, thus pushing prices above the levels justified by the new information just released. The price move, which is closely watched by irrational speculators, is then caught in a positive feedback spiral, which keeps inviting new categories of speculators such as trend followers. This phenomenon is especially sharp in the contemporary investment environment, in which prices are watched, and trades are executed by sophisticated, super-fast trading hardware and software.
De Long et al. (1990) partly attributed the practice of rational speculation to George Soros, who built his wealth and reputation by speculating across a range of assets, including shares, commodities, currencies, and metals; across every geographical region of the world. In the next subsection, I examine in more detail the practice and philosophy of Soros, namely, reflexivity. De Long et al.’s findings of institutional herding are consistent with those of Badrinath et al. (1996), Del Guercio (1996), Falkenstein (1996), Gompers and Metrick (2001), and Bennett et al. (2003) who found evidence of significant correlation between institutional ownership. Additionally, they documented that institutional investors share common features such as capitalization, liquidity and share price preferences. In simple words, institutional investors are attracted by the same stocks.

Bennett et al. (2003) found that institutional investors, although far from being a homogeneous group, hold larger portfolios, giving them an advantage in research and execution (Minsky, 1996). They are also evaluated and compensated on performance criteria, which means that they have the same incentives, which in turn leads to reputational herding. According to Hirshleifer and Teoh (2003), reputational herding is the convergence of behaviour among institutional investors in order to protect their reputations. Keynes was the first to observe the difficulties of independent thinking among institutional investors. He understood that the rules of the investment game have moved away from the conventional wisdom of “long term expectations” (Keynes, 1974: 156). He observed that the institutional investors, because of the excessive volatility caused by speculators, could not afford failure in the short term in order to benefit over the long term. Not only, as he observed, would we not be alive over the (very) long term, institutional investors could also not bear the reputational damage attributed to short term adverse price movements. The criticism was severe, for those institutional investors deviating from the common investment behaviour at the time.
“For it is in the essence of his behaviour that he should be eccentric, unconventional and rash in the eyes of average opinion. If he is successful, that will only confirm the general belief in his rashness; and if in the short run he is unsuccessful, which is very likely, he will not receive much mercy. Worldly wisdom teaches that it is better for reputation to fail conventionally than to succeed unconventionally.” (Keynes, 1974: 157-158)

Based on Keynes’ analysis, institutional investors see herding as a way of safeguarding their reputations when they are wrong. If everybody is wrong, an institutional investor can easily blame it on the market. However, when an institutional investor alone is ‘wrong’ when everybody else is ‘correct’, it will suffer unbearable reputational damage.

The best contemporary example, in order to demonstrate the difficulties of being unconventional in the investment world, is the story of Dr Michael Burry, which has been vividly told by Zuckerman (2009) and Lewis (2010). Michael Burry was unconventional by any measure. A one-eyed fund manager with Asperger’s syndrome, liable to serious difficulties in social interaction, he realised by 2005 that the credit bubble would eventually burst. Although he was unquestionably correct in shorting the credit markets through credit default swaps and in April of 2008 made $100 million for himself and $700 for his investors when he liquidated his positions, he was psychologically drained, and he, eventually, quit. His investors, even his initial investors who enjoyed impressive returns even during the bear market of 2001, 2002 and 2003, revolted and started withdrawing money. In order to avoid an early run on his fund he imposed withdrawal restrictions, which further infuriated his investors who kept threatening him with litigation. His only crime was that he decided to short the credit markets when everybody else was long. Because he was able to see out of the box, he could not speculate irrationally. He decided to distance himself from the party because he knew that, as Keynes predicted, “when the music stops some of players will find themselves unseated.” (1974: 156). Although he, eventually, made a fortune, over the short
term, he was ‘wrong’ because of the speculative excesses. His short term ‘failure’ caused increased anxiety among his investors (see Smith, 1998), drawing severe criticism and engendering a potential run on his fund which would have drained him not only emotionally but financially, as well. Additionally, it would have irreversibly damaged his reputation among both his peers and investors. That is why Keynes suggested that it is better to fail conventionally, rather than succeed unconventionally; the personal risks of the former, if materialised, are unbearable for the professionals involved.

On the other hand, Lakonishok et al. (1992), in a pivotal paper regarding institutional investors’ herding, found little evidence in support of the destabilizing hypothesis. After analysing “769 all-equity tax exempt funds, the majority of which are pension funds, managed by 341 different institutional money managers.” (p: 24), they concluded, “neither the stabilizing nor the destabilizing image of institutional investors is accurate.” (ibid). They found that institutional investors herd remarkably little in large capitalization stocks, which account for 95% of their trading. “There is some evidence of more herding in smaller stocks, but even there the magnitude of herding is far from dramatic.” (ibid). Actually, although they found some evidence of herding when trading in small capitalisation firms, the data suggests that herding cannot distort prices. They attributed their results to the fact that institutional investors seem to follow neither “positive- nor negative-feedback strategies, on average.” (ibid). Their findings suggest that investors neither mimic each other by engaging in momentum strategies, nor do they go against the trend by adopting contrarian strategies. As they mentioned, they duplicated the results of Kraus and Stoll (1972) who, after examining SEC data of monthly institutional holdings, found no strong evidence regarding herding and trend following. Bennett et al. (2003), who conducted their research more than a decade after
Lakonishok et al. (1992), did, however, find a shift in institutional capitalization preferences towards smaller firms.

Herding, not only provides an alternative framework for explaining periodic investors’ behaviour, but also directly contradicts the rational investors’ theorem. According to mainstream finance’s rational models, the expected return is always aligned with the risk accepted. For example, the diversification model of Markowitz (1991) - who is considered the father of modern finance theory - which deals with the specific risks of individual investments when pooled in a portfolio and the Capital Asset Pricing Model of Treynor (1999), Sharpe (1964) Lintner (1965), and Mossin (1966), which focuses on market risk, are fully rational models. They reject non-computational approaches to investments a priori. Probably one of the greatest problems facing finance in terms of the status of its knowledge over recent decades is that alternative investment frameworks have been seen as competitors and have been dealt with through ignorance and hostility rather than seen as complementary in the journey towards a more complete picture.

I say complementary because in order for investors and regulators to produce sound decisions both of the frameworks are needed. We need the normative framework provided by rational models in order to understand how the investment world should be, and we need the descriptive framework of behavioural finance, including speculation and herding, in order to understand how the financial world, in which we operate, works. Any meaningful guidance can only be derived by comparing these two worlds. For example, as in the case of the current credit crisis, when there is a material deviation between the two worlds, it is a strong indication that turbulent times lie ahead. More specifically, when investors are exclusively
focused on the return by entirely ignoring the risks, as supported by the data analysis and discussion, it should be a strong warning that that market risks have dramatically increased.

Because of herding, prices keep trending, moving far beyond the fundamentals. This is the case with the Japanese bubble that started bursting in December 1990 and prices have still not recovered. This is also the case with the internet bubble that kept inflating until March 2000 and, of course, this is the case with the credit bubble that burst only after the collapse of the two hedge funds of Bear Stearns in the second quarter of 2007. Based on the theoretical discussion on speculators in the previous subsection, speculators do not act on information beyond asset prices since they are only concerned with short term fluctuations of the asset prices. Given that there is no information relating to a short term price movement, and the speculators are exclusively focused on short term price changes, it means that they must always trade on noise, as discussed in a previous subsection. Information has a permanent effect on the asset fundamentals until replaced by new information. If no new information arises, then there should be no change; or at least there is no rational reason for change in the fundamental value of the assets under consideration.

The importance of herding is not limited only to the empirical evidence provided. Its theoretical framework, which is directly linked to the reflexivity theory developed by Soros (2003; 2008), suggests fundamental ontological implications, as well. Herding allows the unreal to replace temporarily the real through the consequences of trading en masse. It does not matter if the speculators’ actions are based on noise (see Black, 1986) or illusions. What matters is the fact that the implications of their actions are real (See Thomas, 1928 and Merton, 1948).
According to Soros (2003; 2008), the prevailing of the unreal over the real has its roots in misconceptions, which are manipulatively created by insiders. This idea was first expressed by MacKay (1995) and then elaborated by Galbraith (1992, 1994), Chancellor (2000) and Kindleberger (2000). Because of the asymmetries of information existing between insiders and non-insiders the insiders are able to manipulate investors’ expectations. Gibson (1889) suggested that such manipulations are made possible by investment risk and uncertainty, which, when combined with investors’ ignorance, allow for expectations to be inflated especially when misguided by the “get rich quickly” syndrome that is present in every single speculative episode. The outcome of such misconceptions is disastrous for investors. In Soros’s (2008: xxiv) words “One cannot escape the conclusion that both the financial authorities and market participants harbour fundamental misconceptions about the way financial markets function.” His theory of reflexivity is extensively discussed in the following subsection.

2.4.3. Reflexivity theory and self-fulfilling prophecies

Soros, being one of the most successful speculators over the last 60 years with an exceptional track record, regarding the scope, scale and success of his operations, proposed a new paradigm in financial markets, namely, reflexivity. He considered the prevailing paradigm of investors’ rationality as unrealistic and thus misleading, and he openly criticised the Efficient Market Hypothesis, which epitomises the rational models (Soros, 2003; 2008). “I contend that rational expectations theory totally misinterprets how financial markets operate. ... I contend that the prevailing paradigm is false and urgently needs to be replaced.” (Soros, 2008: 6).
Reflexivity, according to Soros, “seeks to illuminate the relationship between thinking and reality”; an extremely essential correlation in financial economics, which is rejected *a priori* by the equilibrium models of rational investors. “People base their decision not on the actual situation that confronts them but on their perception or interpretation of that situation.” (Soros, 2008: 10); a statement that is fully and deeply rooted in the analyses of Thomas and Thomas (1928) and Merton (1948), which are discussed in detail in the subsequent paragraphs. Soros also observed that misinterpretations of and misconceptions about financial and economic conditions play an active role in forming the same conditions that market participants try to understand, interpret and adapt to. If his observations are correct, it means that the concept of self-fulfilling prophecy should be given a much more prominent role in investment decisions (see Krugman, 1995).

Soros based the theoretical framework of reflexivity on two assertions in replacement of the Efficient Market Hypothesis’s axiom that markets always reflect fundamental prices. Firstly, he asserted, “Markets are always biased in one direction or another” and secondly, “Markets can influence the events that they anticipate.” (Soros, 2003: 52). His starting point is that the structure and dynamics of social phenomena are different from those of natural phenomena. For example, in the stock market there are no hidden truths passively waiting to be discovered. There are only continuously forming worlds, which influence and at the same time are influenced by the actors involved. These actors are guided by their imperfect understanding on which they base their definitions of the situations in which they are in, which most of the time are not correct. Or at least these definitions deviate, sometimes materially, from the definitions expected by rational agents (see Thomas, 1928; and Merton, 1948).
“There is a two-way connection between the facts and opinions prevailing at any moment in time” (Soros, 2008: 7). On the one hand, participants seek to understand the circumstances and, on the other hand, seek to influence them. The best example in order to understand this two-way communication is the case of Soros himself, when he attacked the British pound in September 1992. At first, he understood that the British pound was pegged at artificially high levels in relation to German marks. The 2.7 British pounds to a German mark could not be justified under any circumstances given the inflation and interest rates of the two countries at the time. Afterwards, Soros tried to influence the market in order to reinforce his expectations, which were based on his endeavours to understand market conditions surrounding the assets which he was interested in. He heavily shorted the British pound by establishing deep credit lines, he coordinated his efforts with other key players and he spread the news in order to attract more short sellers and discourage prospective buyers of the British pound. Although the Central Bank of England and political will conjoined to make tremendous efforts to defend the currency rate, the British pound was eventually devalued, earning Soros the reputation of the “man that broke the Bank of England” and a billion dollars overnight. Would the British pound have been devalued had Soros not understood it to be overvalued and not predicted that it would eventually be devalued? Certainly the British pound would have never been devalued in one fell swoop on September 16, 1992 without Soros’s intervention.

The theoretical framework provided by Soros applies not only to investors, but to regulators, as well. We can look at the Federal Open Market Committee, which meets eight times per year in order to review market and economic conditions, assess price stability risks and evaluate monetary policy. Firstly, there are herculean efforts made on their part in order to understand the economic and financial circumstances at the time of each meeting. A task that
lately is characterised by extreme deviations in members’ views rather than the expected consensus. Secondly, in line with Soros’s reflexivity theory, they desperately try to influence the same economic and financial situation that they must understand. The impact the committee has on the markets has extended well beyond monetary decisions into the rhetoric used in the evaluative comments regarding the markets and the economy that the committee provides. More specifically, a word changed or even more importantly the introduction of a new phrase or the elimination of an old one compared to the previous statement, can have dramatic effects on investors’ psychology, particularly within the turbulent market conditions experience of late.

Drawing from this example, we can also see why Soros considered the participants’ understanding of the financial conditions as always imperfect. He actually suggested that investors will never be able to have perfect knowledge of the markets. That is because the part cannot perfectly understand the whole. The example of the Federal Reserve offers an excellent case study for this purpose because it is the only participant in the financial markets with continuous and unrestricted access to information regarding every aspect of the economy and the markets. Nevertheless, during and after the 1929 depression it was heavily criticised (see Friedman and Schwartz, 1963) for not understanding the market and economic conditions at the time. Even today, with the benefit of hindsight of so many cases and a vast pool of experience, the Federal Reserve is under fire from every direction, and it accused of misunderstanding the financial and economic situation it seeks to influence. It seems that the theory of reflexivity is applicable not only to investors, as recommended by Soros (2003, 2008) but to all the participants in the financial markets.
Soros based the development of reflexivity theory on three concepts, namely, participants’ bias, the underline trend and prevailing bias. Now let’s look into these concepts in more depth in order to gain a critical understanding of reflexivity theory. Soros (2003: 50) suggested that there is a discrepancy between the “actual course of events” and investors’ expectations about the development of these events. Actually, he contended “that market valuations are always distorted” and in turn these distortions can have an effect on market valuations through investors’ expectations (2003: 52). Soros did not exclude the possibility of matching expectations and events. However, he saw such cases as the exception rather than the rule. In simple words, he suggested “that market participants are always biased in one way or another”. The contribution of this concept lies in the connection it establishes between participant expectations and outcome. In the literature, this is a phenomenon known since 1948 as a “self-fulfilling prophecy” introduced by Merton, who elaborated on Thomas and Thomas (1928) theorem. The second pivotal concept to Soros’s reflexivity theory is what he called ‘prevailing bias’. Soros, contrary to the EMH claims, suggested that although a part of the deferring participants’ view on the markets is cancelled out there is always a residual value. This residual is the prevailing view, which causes the prevailing bias. Soros accepted that differing views may cancel each other out, but the process is not conclusive or without remainder. The prevailing view - which is reflected in Graham’s (2003: 408) famous assertion: “The stock market is a voting machine, not a weighing machine” - cannot be totally eliminated. It is the view that gives the market its trend, which is closely linked to herding and positive feedback. That leads us to Soros’s third concept, which is the ‘underline trend’. What we “have here is a reflexive relationship in which stock prices are determined by two factors - underline trend and prevailing bias - both of which are, in turn, influenced by stock prices.” (Soros, 2003: 53). Actually, he was describing how ‘self-fulfilling prophecies’ are set in motion in markets.
The concept of the ‘self-fulfilling prophecy’ was coined by Merton (1948), who based his work on the ‘Thomas theorem’. Thomas and Thomas (1928: 572) suggested, “If men define situations as real, they are real in their consequences.” The Thomases used the example of a prisoner, who murdered several persons because they were discussing on the street. The prisoner thought that the unfortunate victims were swearing at him. Thus, he killed them. As Adeimantus observed 2,500 years ago when he was making his argument regarding justice and injustice, “appearance has more force than reality” (Plato, 2003: 47). In market terms, according to Soros, the gap between appearance and reality is called discrepancy and lies at the heart of reflexivity theory. That is the difference between what seems to be, which forms expectations, and what truly is, which should have formed expectations. This is an issue that will be further discussed in the theoretical framework of the methodology. If a sufficient quantity of speculators, in terms of buying power, believe that prices will keep rising because they kept rising over the last week, they will impose their expectations on the market through their buying power. In simple terms, that is how self-fulfilling prophecies work in the markets. The difference between the real, which is the objective event unaffected by erroneous interpretations and the non-real, which is the subjective explanation of the participants, is so blurred that it is impossible to draw a line separating the two worlds, which, especially in speculative markets, become indistinguishable. According to the accounts provided by Galbraith (1992, 1994), Mackay (1995), Chancellor (2000) and Kindleberger (2000), the investors heavily oppose any attempt made to warn them that the world of easy profits, in which they live in speculative periods, is built on sand. Gradually, the investors slip into a riskless world of excessive returns that is not-real that temporarily replaces reality through frenzy buying, which in turn is based on erroneous definitions of the financial situation. The non-reality holds as long as the liquidity ammunition of investors
lasts. Any attempt to uncover this unreality is greeted with extreme hostility by all those benefiting from the unreal (Galbraith, 1994; Nyberg, 2011). However, inevitably, the unreal world will make way for the real one, or, perhaps better, an alternative one, as happened with the credit crunch of 2007; forcing everyone to look into the past for insight about speculative episodes and bubbles. Forcing everyone to rethink the prevailing frameworks intended to illuminate investors’ behaviour.

As regards the first assertion of Soros, its importance and relevance to my work lies in the fact that it provides the theoretical framework for trend following and herding. For example, rational speculators, such as Soros, are well aware that their actions are closely watched by market participants. Subsequently, either intentionally, or as suggested by De Long et al. (1990) unintentionally, the actions of rational speculators, who act on information, attract the attention of irrational speculators, who follow price actions rather than information. As a result, the rational speculators’ expectations are self-reinforcing, which lead us to the second assertion of Soros’s reflexivity theory. In turn, this is directly related to speculative investment behaviour, which is the main theme of my research.

2.4.4. Rumours and self-fulfilling prophecies
An important aspect of the transformation of reality into unreality is rumour. In a key paper on the subject of war rumour, Knapp (1944: 22) defines rumour as “a proposition for belief of topical reference disseminated without official verification.” A similar definition, which lies closer to the investment world, was provided by Peterson and Gist (1951: 159). They suggested, ““Rumor,” in general usage, refers to an unverified account or explanation of events, circulating from person to person and pertaining to an object, event, or issue of public concern.” Although rumour in the realm of investments has not been extensively researched,
it seems that the above definitions can serve, at least, as a basis for understanding the nature, characteristics and effects of rumours in the land of investments, as well. According to Kosfeld (2005: 647), the reason that rumours have not been extensively researched is because “While economic theory focuses mainly on rational behaviour, rumours were often thought to be something rather irrational. In some sense, they did not fit into the model.” Kosfeld (ibid), who studied rumours quantitatively in order to “propose an analytical framework for studying the effects of rumours on markets” found that rumours impact on markets by influencing and bringing together the beliefs and opinions of the participants involved. He actually found that if the word of mouth “communication is strong enough” (ibid) it has a significant influence on the stock prices.

Based on Knapp’s (1944: 22) analysis, the war rumour has three basic characteristics which seem to be equally applicable to investment rumour, as well. “They have, first, a distinct and characteristic mode of transmission - mostly by word of mouth.” Interestingly, Galbraith (1992, 1994), Mackay (1995), Chancellor (2000) and Kindleberger (2000) provided accounts that confirm Knapp’s perspective on rumour. As in wars, the rumour during speculative periods is mainly transmitted ‘by word of mouth’, although technological advances of recent decades allow public and electronic media to gain their share of responsibility, too. Especially Mackay (1995), who extended his work in social spheres beyond investments, stressed the key role of rumours in creating a parallel reality, which may temporarily overturn reason, although, over the long run, it cannot survive. However, it can be disastrous for firms, especially, in the financial sector. For example, a bank with sound fundamentals that, nevertheless, features negatively in rumours regarding its solvency will find it difficult to survive without liquidity injections during a panic period. The bank’s insolvency ‘problem’ will become, in Merton’s (1948) terms, a self-fulfilling prophecy. ‘The panic of 1907”
(Bruner and Carr, 2007) provides some excellent examples of how sound banking institutions can fall apart in the absence of liquidity injections because of rumours during panic. In Mackay’s words, this parallel reality consists of extraordinary delusions and madness; in the words of his intellectual descendants it just consists of bubbles.

A second characteristic of rumours is that they are always disguised as information. This gives rumours a sense of legitimacy, authority and reason, which are all crucial in increasing the impact of the specific rumour on investors’ confidence. A similar explanation is provided by Black (1986) who worked on noise, which although it can be perceived by investors as information, is not. The last characteristic, according to Knapp (1944: 23), is that it satisfies. “Rumours express and gratify the emotional needs of the community in much the same way as dreams and fantasy fulfil the needs of the individual.” This characteristic is also consistent with the literature on speculative episodes, which describes investors during speculative episodes to be in a state of emotional euphoria, willing only to adopt views that are consistent with their expectations (see Galbraith, 1992, 1994). It seems that rumours give rise to hope or fear at the expense of expectations which are grounded in reality and reason. Rumours, as suggested by Peterson and Gist (1951), take advantage of the increased public interest and emotional sensitivity of a particular topic. Because rumours try to impose their own unverified version of reality on a particular issue, they solely rely on the “communication of information that has not been confirmed by a reliable source” (Pendleton, 1998: 69). Subsequently, as suggested by Allport and Postman (1947: ix), rumours take the form of “proposition or belief, passed along from person to person, usually by word of mouth, without secure standards of evidence being presented”, targeting expectations by manipulating the hopes and fears of the social group under attack. In our case, the investment community.
Prices run-ups caused by rumours have been examined and documented by Pound and Zeckhauser (1990), Zivney et al. (1996) and Kosfeld (2005). Pound and Zeckhauser (1990) examined the impact of rumours on takeover prices. They examined a sample of rumours from the ‘Heard on the Street’ column, published by the ‘Wall Street Journal’. Their sample includes 42 firms’ related rumours “from January 1, 1983, through December 31, 1985” (p: 293). Although they found that, over long horizons, markets are efficient, meaning that investors that trade the rumours cannot outperform the market, they found a “significant positive cumulative excess returns of approximately 7%.” (p: 292) over the 20 trading days preceding the publications of the rumour. They also found that rumoured firms are associated with exceptionally high variance of excess return. For example, “Many firms in the sample experienced positive or negative excess returns of 50%-75% during” the year following the publication of the year. Now the question is: Are markets processing rumours efficiently over longer periods, or just insiders load before the rumours and unload after the rumours the overpriced shares on the unsuspected investing public, as suggested by my informants? This is the argument developed by Lefèvre, as well (2005).

Zivney et al (1996) extended the research of Pound and Zeckhauser (1990) by including more recent data and increasing the rumour sources to two. In addition to the ‘Heard of the Street’ column, they included the ‘Abreast of the Market’ column, as well. Although are both published in the ‘Wall Street Journal’ as Zivney et al (1996) observed “Most of the time, the rumor initially appears in the AOTM and then days or weeks later is repeated in the HOTS column.” In addition, they significantly increased their sample size. They included 871 takeover rumours that appeared in the two columns from 1985 to 1998; a period of intense rumours and takeover activity. Although they found that no excess returns are possible by
trading the rumours appearing in the ‘Heard on the Street’, they found that investors overreact to the rumours published in the ‘Abreast of the Market’. Additionally they found that the period of 20 trading days preceding the publication of rumours result in 7.5% excess return, with an additional 3.44% on the day of publication. They also found that the investors trading the overreaction of the market to the 20 days preceding the publications of the rumours can also achieve excess returns. For example, the investors holding the market portfolio should sell the stock that has been the subject of the rumour on the day of the rumour publication and buy it back 80 days later. “This strategy would result in an average annualized return of 20 percent (6.35% x 252/80) with 70 percent of such trades being profitable.” (p: 106)

Although, at a first glance, hope and expectation seem to be identical, in finance they denote entirely different referents. Hope is grounded on our wishes and greed (see Shefrin, 2002), while expectation should be based on conclusions rooted in hard evidence (see Krugman, 1995). As regards hope, because investors align their actions with what they wish to happen, an environment conducive of self-fulfilling prophecies is established. On the other hand, in the case of well-founded expectation, investors align with what the evidence suggests. In conclusion, expectation is characteristic of rational markets while the hope is related to speculative markets. The main issue with these two terms, however, despite their careful separation above, is that, in practice, investors can hardly distinguish one from the other.

The world, which is our primary interest, can be identified only through the ‘consequence check’. Drawing on the prisoner’s example provided by Thomas and Thomas (1928: 572) in support of the view, “If men define situations as real they are real in the consequences”, we see that the world in which we are called to live is not the one in which events flow
undisturbed based on reason alone. Rather, it is a world which has been formed on the
grounds of misinterpretations and misrepresentations of factuality. From an alternative - and
with the benefit of hindsight - justifiable perspective, the victims of the murderer were simply
talking to each other across the street about private matters. However, the murderer thought
that they were swearing at him and he killed them, creating a new reality. As a result,
although the new reality does not resemble the old one it is now a permanent reality in itself
which has totally replaced the old one through its consequences. Eventually, misrepresentation, misinterpretation and their consequences have replaced reason.

However, the impact on us, as financial economists, of misrepresentation and
misinterpretation is not so easily perceptible and, unfortunately, has yet to receive the
attention it requires. Clarifying the impact will be particularly enlightening in terms of our
ontological and epistemological positions. The question that has to be answered at this point
is ‘which is the world that all the parties affected by the incident will live in, the old one or
the new one?’

We cannot keep pretending that such distortions of facts do not happen in finance. Just
because every major textbook in finance prefers to ignore such incidents, does not mean that
they do not exist. According to Merton, who is consistent with the concept of reflexivity
developed by Soros (2003), the “public definitions of a situation (prophecies or predictions)
become an integral part of the situation and thus affect subsequent developments.” (Merton, 1948: 195). That means that the effects of misinterpretations and misrepresentations of
financial events are part of the new reality, and, as such, they cannot be ignored on the
ground that they should have never happened in the first place. We cannot ignore financial
bubbles because, based on reason, they should have never happened. We can only study them
in order to understand both their roots and their consequences. The ‘consequence test’ is straightforward in the case of the recent credit bubble. Which world do we have to live in; the one of rational investors, which should have prevailed or the one of bubbles that eventually prevailed? The answer defines the world which requires our immediate attention.

Merton also proposed a remedy for self-fulfilling prophecies, which literally turn anticipation into actuality. He suggested that in order to break the vicious circle created by false aggregate anticipation, one has to attack the misinterpretations and misrepresentations of the actual events directly, in order to establish a new definition, the correct one, of the situations.

“The initial definition of the situation which has set the circle in motion must be abandoned. Only when the original assumption is questioned and a new definition of the situation introduced, does the consequent flow of events give the lie to the assumption.” (Merton, 1948: 197)

Although the recommendation of Merton is sound, the issue is how to attack the false definition, in order to establish the ‘correct’ one. As he accepted, “One does not expect a paranoiac to abandon his hard-won distortions and delusions upon being informed that they are altogether groundless.” Given that the accounts we have from speculative episodes (Galbraith, 1992, 1994; Mackay, 1995; Chancellor, 2000; Kindleberger, 2000) suggest that investors are in a paranoid state aggregately, we should not expect them to amend their excessively optimistic definitions of the situations with more modest and more rational ones simply because someone suggests that their reasoning is erroneous and may have potentially dangerous consequences. Galbraith (1992) vividly demonstrated how changing aggregate mind-set in such circumstances is not an easy task at all. Not least because according to Nyberg (2011) speculative bubbles enforce conformity of views, punishing those who resist compliance. Although Merton (1948: 198), using the example of race discrimination in the
USA, recognised, “Education may serve as an operational adjunct, but, not as the chief basis for any but excruciatingly slow change in the prevailing patterns of race relations”, I do not see any better tool than education in the case of financial fallacies. Someone can only recognise a financial bubble and its risks only if he/she has been taught about financial bubbles.

What proportion of the leading financial textbooks dealt with destabilizing speculation over the past five decades? The majority do not even accept the existence of destabilizing speculation, let alone the creation of bubbles! Of course, the recognition of a bubble before it eventually bursts is an extraordinarily difficult task. However, it seems that part of this excessive difficulty is attributable to a knowledge gap regarding bubbles on the part of educators and students, as well, for which we have to start thinking and acting immediately.

2.4.5. Minsky and Kindleberger’s Model

Minsky (1975; 1982; 2008) and Kindleberger (2000), in their attempt to explain the observed financial crises, developed a five stage model that describes all the phases of a financial crisis. Although the model stems from the writings of Minsky, who devoted his life in studying the endogenous instability characteristics of capitalism that lead to periodic crises, it was presented in its complete form by Kindleberger (2000). Even though Minsky is widely credited by academics and practitioners alongside Kindleberger (2000) for the development of the crisis model (e.g. Wolf, 2008; Cassidy, 2008), no author has directly quoted his work, at least for the first stage of the model, namely displacement. Even Kindleberger (2000) gives credit to Minsky without referring to Minsky’s work that specifically discussed displacement. On the other hand, the rather modest Minsky appeared to feel flattered with the credit that he has received (Minsky, 1982).
The model they developed consists of five stages. It starts with the stages of ‘displacement’, ‘boom’ and ‘overtrading’ which are central to my research questions and it is completed with the stages of ‘revulsion’ and ‘tranquillity’. Although the model has always been applied to macroeconomic crises (Kindleberger, 2000; Minsky, 1982; Saqib, 2001), my investigation is focused on stock price inflation and deflation, which is the result of speculative activities on a mass scale.

2.4.5.1. Displacement
I am particularly interested in the first phase of the five stage model introduced by Minsky and clarified and elaborated by Kindleberger (2000) - namely, ‘displacement’ - because it is the stage at which the seeds of speculation and its subsequent adverse consequences are sown. The term was used by Kindleberger (2000) in order to describe the event that causes a positive change to the state of investors’ expectations. Interestingly, Minsky (1982: 118) initially used the term in order to describe the event that triggers the fourth stage of the model, revulsion. Specifically, Minsky suggested, “after an expansion has been in progress for some time, an event that is not of unusual size or duration can trigger a sharp financial reaction. Displacements may be the result of system behaviour or human error.” However, the term is currently used to denote a positive shift in investors’ expectations, initiating a series of initially positive financial developments which, however, reinforce the overconfidence and overtrading that eventually lead to financial crisis.

According to Kindleberger (2000: 15), the speculation is sparked by “some exogenous, outside shock to the macroeconomic system.” These shocks can vary from wars or peace treaties, new technological discoveries, innovations in finance which make credit easily
available, or significant political decisions and corporate events as in the case of the Cyprus Stock Exchange. Effectively, the ‘displacement’ is an event grounded on important economic factors, which materially improve the underlying economic prospects of the market under examination. Minsky (1982: 120-121), in applying his model to the mid-1960s American economy, suggested that the event that changed expectations during the mid-sixties, was an investment boom.

“In the mid-1960s the U.S. economy experienced a change of state. ... The substance of change of state was an investment boom: in each year from 1963 through 1966 the rate of increase of investment by corporate business rose.”

The most significant aspect of the stage of ‘Displacement’, contrary to the speculation that follows, it is that it is based on sound economic reasons. For example, in the case of Cyprus, a combination of events from the political and corporate spectrum perfectly served the displacement phase. Firstly, the political decision to cancel the installation of missiles on the island, which was polemically opposed by Turkey, dramatically reduced perceptions of political risk, thus improving economic prospects. Secondly, a corporate event, the acquisition of the Siacolas insurers’ companies by Laiki Bank, the second largest banking institution on the island, increased the liquidity of investors and spread further optimism about economic prospects.

That brings us to the second stage of the crisis model, where the sound economic reasoning supporting investment decisions is gradually replaced by over optimism, wishful thinking and illusions of perpetual development. Drawing again from Minsky’s (1982: 120-121) application of the model to the mid-1960s American economy we see that
“By the mid-1960s business investment was guided by a belief that the future promised perpetual expansion. An economy that is ruled by such expectations and that exhibits such investment behaviour can properly be labelled euphoric.”

2.4.5.2. Boom

Based on Kindleberger’s analysis, the second stage of the model consists of the boom, which is governed by euphoria. As we have seen, after the displacement event, which drastically improves expectations, euphoria settles in. Drawing from Minsky’s (1982: 121) analysis, “As the belief in the reality of a new era emerges ... [fund managers are] willing to assume [portfolio] structures that are less defensive and to take what would have been considered in earlier times, undesirable changes in order to” include in their portfolios peripheral and less liquid stocks. In short, Minsky (1982: 123) concluded, “A euphoric new era means that an investment boom is combined with pervasive liquidity-decreasing portfolio transformations.” During this phase, the increased effective demand for financial assets leads to higher prices, which act to invite more investors into the game. That is what is described as a “positive feedback loop” (De Long et al, 1990) which I discussed in detail in the subchapter on ‘Herding and Positive Feedback’. During this stage, the inflation of asset prices is based on credit expansion; an approach that lies at the heart of Minsky’s “Financial Instability Hypothesis”. The investors drastically shorten their holding horizons, and they focus their attention on reselling the assets at profit rather than gaining their returns from the assets’ ability to generate income through interest or dividend payments. This transformation feeds not only in portfolio structures that become more illiquid and oriented towards capital appreciation. It also hugely affects professionals’ attitudes toward risk by drawing their attention only to the short term returns of the investment and by thus entirely removing usual
risk considerations from their investment decisions (see Smith, 1998, chapters 15 and 17; Partnoy, 2004). An excellent account of the nature of financial euphoria and its consequences is provided by Galbraith (1994: 12). He demonstrated that euphoria is a requisite part of speculative episodes. “[F]or built into the speculative episode is the euphoria, the mass escape from reality, that excludes any serious contemplation of the true nature of what is taking place.” His work is discussed in detail in the subchapter on speculation, since financial euphoria is an integral part of any speculative episode in the financial markets (see also Chancellor, 2000). A contemporary example of excessive risk taking culture during periods of financial euphoria is provided by McDonald and Robinson (2009) who employed the case study of Lehman Brothers. McDonald, having worked on the trading desk of the now bankrupt firm for 6 years, he depicts a world in which greed and irresponsible risk taking, for the sake of return, are amply represented.

Keynes (1974: 321), looking at speculation, argued that a boom is characterised by over-investments, which are ‘misdirected’ by “conditions which are unstable” and “cannot endure, because [they are] prompted by expectations which are destined to disappointment.” These illusions are principally the source of material deviations of asset prices from their intrinsic values (Kindleberger, 2000; Galbraith, 1992, 1994; Chancellor, 2000). A state of mind on the part of investors that leads to ‘overtrading’.

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26 For a wider application of this see Burrough and Helyar (2004) and Elkind and McLean (2004). The former by focusing on the case of RJR discussed how the most important investment decisions at the time were solely based on factors other than risk. For example, commissions of investment bankers, prestige and ego of the parties involved. The latter, drawing from the bankruptcy of Enron, vividly described how investment decisions worth of hundreds of millions are made by totally ignoring the factor of risk. This practice applies to both the buy and sell side of the investment banking.
2.4.5.3. Overtrading
The third phase of the model is the stage of ‘overtrading’, which was first analysed by Adam Smith (1998). Although his analysis was mainly focused on the merchant speculator, it provides valuable insight into the financial speculator, as well. His views about those overtrading were negative, suggesting that they push prices higher during normal economic conditions, enticing more investors to extend their operations beyond their means. After that, the boom period settles in, during which borrowing is irresponsibly and dangerously increased. His view was strongly echoed by economists at the end of the 19th century and at the beginning of the 20th century (Hill, 1904; Gibson, 1907) who had of course fresh memories of extremely costly, periodic financial panics, such as those that took place in 1873, 1893 and 1907.

Over-speculation has been described by Gibson (1907: 17) as “the composite result of ignorance, greed, and false appearances”, which causes “wide variations in prices”. That is a state of affairs that was later characterised by Keynes (1974) as illusionary. According to Smith, speculators increased demand for money makes the system unstable and vulnerable. His thesis was later elaborated by Minsky in criticising mainstream finance and developing his alternative explanation to the prevailing Efficient Market Hypothesis. Smith (1998) also pointed to the systemic risks imposed by overtrading, since the consequences of overtrading are felt by everyone, not only by those endorsing or practising it.

“This complaint, however, of the scarcity of money is not always confined to improvident spendthrifts. It is sometimes general through a whole mercantile town and the country in its neighbourhood. Overtrading is the common cause of it.” (p: 224)
Smith was also revealing about those engaging in overtrading and the consequences of the practice. He suggested that they are destined to fail because they over-borrow and misestimate the risk involved in their trades.

“Sober men, whose projects have been disproportioned to their capitals, are as likely to have neither wherewithal to buy money nor credit to borrow it, as prodigals whose expense has been disproportioned to their revenue. Before their projects can be brought to bear, their stock is gone, and their credit with it.” (Smith, 1998: 224).

He refers to men that borrow in order to embark on new investments that are well beyond their financial means; a group of investors that Minsky (1992), in developing the Financial Instability Hypothesis, called Ponzi finance units. According to Smith, over-traders accept risks that they cannot bear. As a result, they lose both their capital and their access to credit. Such practice, when widespread, especially among sizable players, imposes systemic risks on the financial system, making it crises-prone (see also Kindleberger, 2000).

The main reason behind overtrading is the illusion of excessive returns. Smith observed, “the high profits of trade afforded a great temptation to overtrading” (Smith, 1998: 163), adding, “When the profits of trade happen to be greater than ordinary, overtrading becomes a general error both among great and small dealers.” (Smith, 1998: 224). In the same vein, Keynes warned, “when disillusion falls upon an over-optimistic and over-bought market, it should fall with sudden and even catastrophic force.” (Keynes, 1974: 168).

There seems to be a consensus among leading financial historians (Galbraith, 1992, 1994; Chancellor, 2000; Kindleberger, 2000) who have focused their studies on speculation and financial crises. They suggest that, in periods of financial euphoria, it is extremely difficult for investors to resist the temptation of extraordinarily high returns and thus suspend their
mimicking of each other. It has also been observed that herd trading (Nofsinger and Sias, 1999; Wermers, 1999; Hirshleifer and Theo, 2003; Sias, 2004; Barber et al, 2006a, 2006b; Chen, et al, 2008) is not uncommon, even among institutional investors. This is a fundamental aspect of institutional investors’ investment behaviour that is discussed in detail in a subsequent section.

Hill (1904: 417), in his extended work on financial speculation on agriculture commodities, remained in sympathy with Smith, defining overtrading as the “attempt to do too large a volume of business on a given amount of cash capital.” Although he referred to such efforts as ‘evil’, he extended the targets of his opprobrium, blaming capital providers along with those to whom they supply their capital. He recognised that since overtrading is financed by credit, it is up to the credit providers to restrain speculators who are lured to move well beyond their means. This is an approach, which is at the heart of Minsky’s instability hypothesis, which suggests that overinvesting with borrowed money destabilizes the financial system with disastrous consequences. In the same vein, Guenther (1911: 174) not only noted that over-speculation is maintained by lenders but also, identified it as the main indication of a panic.

“It is here in the first place where over-speculation, the most pronounced symptom of a panic converges and as it is a quick market it is here also that lenders of capital hurriedly rush to liquidate their loans, and get their money back.”

He suggested that the panic is actually initiated and precipitated by the sudden change in lenders expectations, who rush to get their money back causing a further decline in the asset prices which have been so willingly financed in the past. What is tremendously valuable in Guenther’s analysis is that lenders set not only the scene for the next financial crisis by
providing borrowed liquidity to speculators in order to extend their operations, but also they pull the trigger of the panic by abruptly cutting liquidity lines and calling in the loans. Such actions lead speculators to force-sale their positions leading to more declines in asset prices, especially those that were favoured by speculators during the boom which in turn leads to more liquidation and so on. As we will see in the following section, an event that will cause ‘revulsion’ is needed which will remove the illusions created during the phase of ‘boom’ and were embedded during ‘overtrading’ through their convincing of investors of the unique opportunities for extraordinary profits combined with low risks that appeared to be available. In the words of Kindleberger (2000) positive feedback will fully develop. However, this time it acts to push prices lower in exactly the opposite fashion to the positive feedback effect that took hold during the boom period. For a positive feedback to develop, a trigger event is needed.

2.4.5.4. Financial Distress and Revulsion
The fourth stage of the model is called ‘revulsion’. That is the phase during which speculators become aware that there is not enough money “to enable everyone to sell out at the top.” (Kindleberger, 2000: 17) The link between the stages of Boom and Revulsion is what Kindleberger called “financial distress”. It is an extremely critical element in the model since it provides the first macroeconomic signs to practitioners, regulators and academics that the price trend is unsustainable.

The markets become distressed because regulators, as a result of climbing asset prices, are forced to raise interest rates. This monetary action from the regulators signifies the beginning of the end of the party after which, according to Keynes, there are never enough seats for everybody. Minsky’s (1982) analysis suggested that although the increased financing needs
of the financial sectors of the economy initially stimulate economic growth, inevitably with the passage of time they also push interest rates higher. That is because of the climbing prices taking place during the boom and the fierce competition for funds between the various financing units. Accordingly, the cost of financing the investments in the stock market moves higher, making investments unattractive. Higher interest rates also mean lower values of long term investments such as bonds. A side effect of the lower long term assets’ value is the reduced value of the collateral held by lenders.

Kindleberger explained (2000: 17) that insiders are the first to move against the market by liquidating their positions. Their action distresses the market, preparing the way for the ensuing revulsion.

“[A] few insiders decide to take their profits and sell out. At the top of the market there is hesitation, as new recruits to speculate are balanced by insiders who withdraw. Prices begin to level off. There may be ensue an uneasy period of “financial distress.””

Because of their unique access to information, insiders are aware of the fact that the prices are well above those that one would anticipate on the basis of fundamentals (Soros, 2003; 2008). Consequently, they offload their positions, balancing the demand from speculators. It seems that, at this point, financial distress will be transformed into revulsion, which is typically accompanied by forced sales and panic. According to Selden (1912: 87), “the panic, properly so-called, represents a decline greater than is warranted by conditions, usually because of an excited state of the public mind, accompanied by exhaustion of resources”.

Minsky (1982), aligned with the observations of Smith (1998), furthered his analysis by suggesting that it is at this point that lenders call in their loans. Weak financing units, namely
speculative and ponzi units, are further degraded; credit lines are cut; loans are called in; and for the over exposed the only option, since they cannot roll over their liabilities, becomes to liquidate their positions. As a result, a vicious circle of declined asset prices will make financing even more difficult, sending prices lower and lower.

2.4.5.5. Tranquillity

Kindleberger (2000) suggested that prices will stabilize when they enter the stage of ‘tranquillity’ which is the final phase of the model. However, this will happen only if prices fall to unsustainable low levels or the regulators intervene by injecting liquidity to the system or by suspending trading. Selden (1912) and Gibson (1907) proposed that prices will stop declining only when the investors that do not have the resources to hold on to their positions liquidate their holdings. In the words of Selden (1912: 89) “The actual bottom prices of the panic are more likely to result from necessity than from fear.” Selden, actually, suggested that investors who are prone to fear will be frightened before the bottom. Consequently, “The lower prices are usually made by sales for those whose immediate resources are exhausted” (ibid). Along the same line of reasoning, Keynes (1974) suggested that for prices to recover there needs to be both ‘speculative confidence’ and easy access to credit. Although he recognised that material declines of equity prices may be caused by any of the two factors, a recovery demands both of them. More specifically,

“A collapse in the prices of equities ... may have been due to the weakening either of speculative confidence or of the state of credit. But whereas the weakening of either is enough to cause a collapse, recovery requires the revival of both” (1974: 58).

Minsky and Kindleberger’s descriptive model provides an alternative model to the efficient market hypothesis’s normative rationality. Its theoretical framework situates investments in a
social context which is characterised by interaction among the participants rather than by computational rationality. In the world of Minsky, Kindleberger and Galbraith, manias and panics can be traced to an unorganised crowd which is driven only by greed during euphoria and fear during panic. In their model, the crowd is not ascribed rational thinking and strategic action as in the model of Abolafia and Kilduff (1988). Instead of leading the course of asset prices, the crowd is rather a follower of unfolding events. More specifically, in the theoretical framework provided by Minsky and Kindleberger, the crowd, which includes institutional investors, as well, has only been moved by the illusionary promises of extraordinarily high riskless profit. In all three phases of the bubble, namely, mania, distress and panic, the market participants do not strategically organise the speculative bubble of which they are the main actors. Even though it seems extremely difficult, almost impossible, to draw a line separating passive followers from active constructors of the events in a bubble, the notion of ‘strategy’, which has been introduced by Abolafia and Kilduff (1988) for this purpose, makes the distinction between the two groups much more visible.

2.5. An Alternative approach to the construction of bubbles

Abolafia and Kilduff (1988) provided an alternative interpretation of the speculative bubble and its subsequent burst. Their framework, namely enactment, “reflects economic behaviour that is strategic, political, and embedded in institutional structure.” (p: 177). Although they adopted the three crisis’ stages described by Kindleberger and Minsky, they focused on how alliances formed by market participants affect prices as a result of rational, self-interested behaviour. In this respect, Abolafia and Kilduff’s interpretation contrasts with Kindleberger and Minsky’s who suggested that climbing prices dictate irrational investors’ actions. Subsequently, Abolafia and Kilduff approached bubbles as the outcome of strategically
organised attempts by self-interested, rational groups, which participate in the market. As a result, these groups, which are formed on the grounds of common financial, economic or political interests, are well aware of market conditions. Although their main objective is to influence prices, as the authors demonstrated using the 1980 silver’s crisis as an example, their actions are not the result of pure greed and fear as in the model of Kindleberger and Minsky. It is rather the outcome of their firm belief that reality, regarding valuations and prices will be redefined in their own terms, prevailing over similar attempts to redefine reality by competitive groups. The prevailing definition of reality, in this case, is extremely powerful since it will first attribute blame to available scapegoats and then it will call for new and stricter regulation in order to curb the crisis and alleviate its consequences. More specifically, Abolafia and Kilduff (1988: 182) suggested: “The mania itself can be understood as the unintended consequence of the strategic action of self-interested entrepreneurs.”

The attention of Abolafia and Kilduff (1988) during the phase of mania, which is the first stage of a crisis, is centred on how investors take advantage of the market shock that triggers speculative behaviour in order to capitalise on the newly created profit opportunities. They called this phase ‘action’. This rational, strategic speculation pushes prices higher. It is an intentional act by the investors in their attempt to shape the environment in a self-serving manner. That is an explanation adopted by De Long et al. (1990) in their work on positive feedback. Speculators are aware that the prices they pay are higher than the intrinsic values of the assets they buy. However, they are convinced that somebody else will pay them a higher price shortly.

The second phase of the bubble is focused on ‘attribution’. At the beginning of the distress phase, which mediates the phases of mania and panic in the framework of Kindleberger and
Minsky, investors try to make sense of the new situation which is characterised by astonishingly elevated asset prices and uncertainty. Actually, the phase of ‘attribution’ begins when the market participants start questioning “the dominant definition of the situation” (Abolafia and Kilduff, 1988: 182). In essence, market participants try to interpret the new situation. The authors suggested: “attribution becomes especially visible and furious during the slide into panic, as market participants attempt to make sense of dramatic and threatening events” (Abolafia and Kilduff, 1988: 181). Market participants are looking for “a readily identifiable scapegoat” in order to attribute blame for market hardships. Most importantly, the attribution of blame prepares the ground among market participants for more regulation, which is expected to cure market turbulence and safeguard the return to normality. Attribution is an act that progressively becomes highly political. Investors, regulators, administrators, legislators and academics form strategic coalitions, engaging in blame attribution, which will be used in the third phase of the crisis, namely ‘regulation’, in order to shape a more favourable regulatory environment.

As mentioned, during panic, which is the last phase of a financial bubble, Abolafia and Kilduff (1988: 181) focused on ‘regulation’ which “refers to the process by which participants in the market system maintain the rules of transaction.” According to the authors, market participants operate in a “social context of institutional constraint” which comes from formal and informal sources of participants’ control of activities. Informal mechanisms of control include collective memory, which is frequently institutionalised through memberships and professional standards (see MacKenzie and Millo, 2003). MacKenzie and Millo (2003) demonstrated that the collective memory, which causes collective action, is deeply rooted in ‘collective trauma’ caused by extraordinary events in the markets. For example, according to MacKenzie and Millo (2003), after the most dramatic drop of share prices in a single day in
1987, investors in the USA priced in the options the possibility of dramatic drops. A possibility that was entirely ignored, until it was finally materialised.

On the formal regulatory front, all market participants start questioning the adequacy of existing regulation in maintaining order in the market place. Of course, regulatory competence is seen through self-interested lenses by the various market players. For instance, investors and financial institutions worry about their own solvency, which threatens their financial viability. Hence, through powerful coalitions market participants try to impose their own perspective of the market events in order to demonstrate the need for regulatory changes, which they believe will curb financial, political and power losses. In this sense, regulation is an ongoing battle between market participants. It is a highly dynamic process, which relies on strategic coalitions. As Abolafia and Kilduff (1988: 189) put it in their analysis of the silver futures crisis of 1980: “Throughout the crisis, the market environment was an arena in which actors from interdependent domains competed for control.” The end product of the ‘regulation’ phase is the evolution of new regulations, mainly of a formal nature, serving the common interests of regulators, administrators, politicians and, of course, of powerful practitioners, as well.

In simple words, although Abolafia and Kilduff (1988) adopted the cyclical nature of bubbles they emphasised their organisational / strategic origins, departing from the irrational model of Kindleberger and Minsky, which in turn was rooted in the animal spirit introduced by Keynes (1974). As Abolafia and Kilduff (1988: 190) concluded, “Only by focusing on the strategic actions of key institutional and individual players can the shifts in supply demand be explained.”
The domain of regulatory impact on asset prices had a centre stage on the classic work of Friedman and Schwartz (1963, see chapter 7). They attributed the Great Depression to the highly deflationary policies of the Federal Reserve during the depression which, coupled with the subsequent banking failures, created a feedback loop. They maintained that had the Federal Reserve provided the banking system with liquidity the great contraction caused by the banking failures would have been of significantly lesser extent. They suggested that the Great Depression was the result of the failure of the Federal Reserve to support the banking system with the much needed liquidity. According to their analysis, a moderate decline in the money stock brought about by the Federal Reserve’s lower outstanding credit in 1929 - 1930 was sharply accelerated by the bank failures staring at the end of 1930. These developments caused near-panic attempts by the public to withdraw their deposits, which negatively affected both the deposit-currency ratio and the deposit-reserve ratio, further deteriorating the willingness and ability of the banking system to lend money to cash deprived corporations, financial institutions and individuals. As they concluded,

“The decline in the money stock was intensified after September 1931 by deflationary actions on the part of the Federal Reserve System, in response to England’s departure from gold, which led to still further bank failures and even sharper declines in the deposit ratios. Yet the Federal Reserve at all times had power to prevent the decline in the money stock or to increase it to any desired degree, by providing enough high-powered money to satisfy the banks’ desire for liquidity” (Friedman and Schwartz, 1963: 52)

Of course, they have never suggested that the Federal Reserve started the Great Depression as is widely believed, partly because they never rebutted the transmutation of their argument (see Krugman, 200)²⁷. They only suggested that the Federal Reserve had failed to prevent the

²⁷ http://krugman.blogs.nytimes.com/2009/03/02/friedman-and-schwartz-were-wrong/ (accessed on 02/03/2009)
Great Depression, as it ought to have. However, it is remarkable that their criticism is focused on Federal Reserve’s action after the burst of the bubble, ignoring the regulators responsibility during the formation of the bubble.

2.6. Conclusions

As Black (1986: 530) put it, “my response to the scepticism of others is to make a prediction: someday ...” we will be entirely disgraced by practitioners and the public. We, academics, will accumulate so much opprobrium because of our choice to ignore the real world. The consequence will be that our views will not be valued even when they are correct. Although, we are not the ones speculating with billions in securities and derivatives, with minor exceptions, endangering international financial stability, we choose to live in a world where irrationality actually does not exist because it is self-cancelled, saving rational investors and regulators time and anxiousness.

Our purposeful ignorance of the existence and impact of inefficiencies and their subsequent irregularities, such as the recent credit crunch, does not allow us to focus our attention on the positive finance. It will be a time, where the accumulative momentum of the irrational investors, paired with the misguided conviction that the arbitrageurs with the efforts of regulators always sort out any mispricing, will take their unbearable toll on the investment community. Pain, misery, large unanticipated losses, skeletons in the accounting statements of major financial firms and distrust of the markets will, evidently, point to us for not accepting irrationality and its consequences, as part of the investment game (see Keynes, 1974 and Kindleberger 2000). We will be accused of not studying the world in which we live,

28 Alan Greenspan’s (2007) account provides powerful insights about the systemic implications of speculation
In order to understand financial markets, we have to study and understand the participants involved. Investors’ behaviour is pivotal to this. It seems that investors’ decisions are not the result of a mathematical formula (Keynes, 1974; Lawson, 2009), which immediately incorporates new information according to Bayes’ theorem, and discounts the future cash flow of financial assets using a risk adjusted rate. On the contrary, according to the former Fed Chairman, Alan Greenspan, human nature does not allow for such linear approaches to investing. As he states, “The human race has never found a way to confront bubbles”. Probably because we have not tried hard enough.
Chapter 3: Research Methods and Methodology

3.1. Research Methods

3.1.1. Introduction

In this section, I discuss the methods I employ for the purpose of my research. Although methodology denotes the broader theoretical framework of a research project, which has been discussed in the previous section, ‘research methods’ entail a clearly practical aspect. They are concerned with data generation and analysis. Drawing from the guidelines provided by Silverman (2005), I explain and discuss the data generation methods, the data I ended up and how I analyse it.

My main objective is to persuade the readers for the appropriateness of the selected methods in relation to my research questions. That means that I do not support the dichotomy separating the methods into good or bad. There are only appropriate and not appropriate methods, given the nature of the research objectives and questions (Morgan and Smircich, 1980; Guba and Lincoln, 1994). The following discussion is based on the principle that the choice of methods should not serve the researchers’ passion or preferences but should serve only the research questions and objectives.

The first section discusses the nature of qualitative data, with emphasis on semi-structured interviews, which is the data collection method I employed. It also includes my reflections regarding the collection of my data. The second section involves a critical analysis of the nature of data I ended up. I draw from the work of Miller and Barry (2004) and I explain why the position of Denzin (2001) is not appropriate for my research. The final section deals with
data analysis, with particular emphasis placed on the framework I employed for analysing my data and the advantages and criticism of qualitative data analysis software.

3.1.2. Qualitative data and how I generated it

Claiming that we cannot increase our understanding of the financial phenomena is a self-defeating strategy, standing at par with positivism. Under the normative approaches of positivism that exclusively branded the financial knowledge for more than 50 years, the assets prices are always in equilibrium. Consequently, not only the financial bubbles cannot exist, but we cannot predict asset prices, as well, since the investors are rational. Actually, we say to the practitioners that there is no reason to try to predict the asset prices since the markets are efficient and subsequently investors and regulators do not have to worry about asset bubbles since they cannot happen. Now, compare this positivistically generated view with the proposition that we can learn nothing for the real world through interviews. It generates the same disappointment to those practitioners seeking understanding of the real world. One of the main objectives of academics in finance and management, as well, is to inform practice. In case our methods fail to respond to this objective, we either have to improve them or completely dismiss them in the sake of more appropriate ones for this purpose.

I generated my data through semi-structured interviews because of the rich and relevant data they offer access to. I use the word ‘generated’, instead of the more conventional ‘collected’ since I do not believe that the data exist independently of the researcher, amenable to ‘objective’ collection, as suggested by positivism. As Gummesson (2003: 486) suggests:
“I prefer the term data generation to data collection, as data in social settings are not objects that are ready for collection. Instead data are generated, meaning that they are the creation of the researcher in interaction with, for example, a respondent in an interview”.

The interview is an interaction process, which no matter how hard we try to objectify it, it remains highly social (Holstein and Gubrium, 2004a, 2004b). From the first stage of identifying the respondents to the last one in which we conduct the interview and thank the respondent for his/her valuable time and input, we engage in social interactions, which unavoidably affect the outcome to various degrees (Warren, 2002). As highlighted by Easterby-Smith et al. (2002: 131) “Even if the interview is highly structured it should be remembered that the interaction is a social process.” That does not mean that the researcher is allowed to influence the outcome in ways that serve her presumptions about her object of analysis. It only means that the researcher should be aware of its role in generating the data in order to be able to deal effectively with it.

When selecting a qualitative method for generating my data, my intention was to gain access to rich, holistic and relevant data. Miles and Huberman (1994: 10) in their landmark work on qualitative data analysis emphasised the richness and relevance of qualitative data and the potential they offer for ‘fruitful explanation’.

“Another feature of qualitative data is their richness and holism, with strong potential for revealing complexity; such data provide “thick descriptions” that are vivid, nested in a real context, and have a ring of truth that has strong impact on the reader.”

In the case of my research, in order to understand the ‘hows’ and ‘whys’ involved in the ‘impact of a speculative stockmarket on institutional investors’ investment behaviour’ I needed accounts of experiences, from the actors involved. At the other end of the spectrum of my options were the numbers. However, according to the same authors, “Focusing solely on
numbers shifts attention from substance to arithmetic, throwing out the whole notion of “qualities” or “essential characteristics.” which are extremely important in understanding the complexity embedded in such phenomena.”

The vast majority of research in financial economics over the last 60 years has been exclusively based on numbers and statistical analysis. Judging our knowledge of the descriptive financial economics - that is what is happening in financial markets - by the collective failure of the academic community to understand the dynamics fostering the crisis for years, I would say that, at the best, it is still at an infant stage. Not only had we collectively failed to predict the crisis, with only a couple of notable exceptions including Nuriel Roubini and Robert Shiller, but in responding to it, regulators and administrators exclusively relied on purposely misinterpreted Keynesians recipes, which interestingly were marginalised by the mainstream finance for more than 30 years.

I believe that rich accounts of experiences provided by the protagonists of the phenomenon under examination are strongly relevant, providing the researchers with the opportunity to ‘reveal complexity’. For such data “are a source of well-grounded, rich descriptions and explanations of processes in identifiable local context. [As a result, w]ith qualitative data one can ... derive fruitful explanation.” (Miles and Huberman, 1994: 10)

However, an issue that should not be ignored is that the richness and relevance of the data generated partly depend on researcher’s ability. I say partly because they also depend on the knowledge and experiences of the respondent regarding the issues under examination. They also depend on his/her ability and willingness to communicate this knowledge and experience to the researcher. Willingness is enormously decisive, since key potential informants may
refuse to be interviewed for a number of reasons. The most common reason is the lack of time. Normally, people working in managerial positions are terribly busy, and they are unwilling to further burden their demanding schedule.

For example, one of the potential informants for my research, although when contacted by a friend of mine he initially accepted to be interviewed and he even provided me with his mobile phone, he later had second thoughts. When I called, he explained to me, very politely, that he is extremely busy and it is extremely difficult to arrange for the interview. I politely thanked him, and I deleted his name from my list. Whether time constraints are the real reason or it is simply an excuse will never be known. What is noteworthy is that for the researcher asking for access to the floors of finance the busy schedule of informants will always be an issue to worry about.

Additionally, a common concern faced by qualitative researchers is the sensitivity of the issues under examination. People do not feel comfortable in speaking for a corporate failure in which they were involved or for a speculative bubble, which in retrospect seems so predictable. For example, one of my MBA students was examining the independence of risk management departments in Middle East banks, through semi-structure interviews. Although he knew the managers interviewed, because he worked in the industry, and he repeatedly ensured them that the interviews will be anonymous and confidential, they were extremely worried, and one of them declined to be recorded. On a different occasion, one of my MSc students, examining the impact of the quantitative models on the current credit crunch by interviewing high ranking personnel in investment banks, noticed that when the recorder was off, the information provided by the interviewees was much more rich and relevant in terms of description and details (see Easterby-Smith et al., 2002). When she asked the informants
why this was happening, they said that they have to be careful when they discuss these issues. In my interview, some interviewees were drifted by the ‘discussion’, mentioning names of institutions and individuals that manipulated particular stocks. All of them at a point during the interview or after the interview was completed they politely asked me not to mention the manes. “You do not have to mention the manes. They make no difference, you know.”

A third issue faced by researchers in generating rich and relevant data is the trust built between the researcher and the interviewee (Miller and Barry, 2004; Saunders et al, 2007). This is particularly decisive when the questions are dealing with sensitive topics. This is aptly discussed by Blomberg (2009) when Anders, the interviewer, felt that was on an informal probation every time he met with a new interviewee, until to gain their acceptance.

“At first, the managers at Skandinaviska were cautious or even skeptical towards Anders and his (our) study. As Anders gradually proved that he met their expectations concerning competence in general and the financial sector in particular, he was rapidly determined to be ‘one of us’. ... Anders passed the tests and rites of initiation, and was allowed to step into Skandinaviska’s homosocial world of finance.”

The reflections of Blomberg (2009) illustrate the difficulty in gaining access to the information needed, even after gaining access to the interviewee. If the researcher does not manage to develop a feeling of trust with the interviewee, making both she and the interviewee feel comfortable, it is unlikely that she will be granted the access she needs to generate the data.

The main problem of the researcher regarding this issue is the vast number of unknown factors and the lack of time in dealing with them. For example, the researcher is usually interviewing people that she has never met personally. She is not aware of their personalities
and the trust needed for invading into their knowledge and experiences need to be built from scratch in no time. Probably the only way to deal with it is to allow for a ‘warming up’ period before starting the interview, as I did. The warming up period, although unofficial, not planned and usually not ‘visible’, is always taken from the interview’s time. Its length, for an interview planned for an hour, can vary from a couple of minutes limited only to the introductions to 30 minutes, extending to researcher’s future plans and the general business and economic conditions.

For example, when I interviewed the CEO of one of the main stockbroker firms in Cyprus, in which I had previously worked, the ‘warming up’ was initiated by the interviewee and lasted for about 10 minutes. It was more than enough to make me feel comfortable and allowed me “to develop the trust of the interviewee” (Saunders et al, 2007: 318). On a second occasion, when interviewing an executive director of the same corporation with PhD and academic career, the warming up period lasted for 30 minutes. He asked me about my PhD, my academic development, and my future plans. Then the discussion moved to the state of the tertiary education and finally to the financial crisis. This established a warm and friendly atmosphere, making both of us feeling particularly comfortable. However, it made me worry if the remaining time was sufficient for my interview, and in case it was not, I was wondering if I would be given a new appointment. Of course, I could not interrupt the discussion because I would seem rude. I feel that, at a point, he detected my concerns, and he asked if I was ready for the interview. He told me that in case we do not complete the interview, a new meeting will be arranged. Of course, interviewers cannot expect from every interviewee to have a PhD, an academic career and understand the importance of the interviews on our projects. I have to admit that I have not faced any significant issues with any of my interviews. The only issue that I faced with two of my interviews was that they
enthusiastically spent a lot of time elaborating on the first topics. When they realised it, they simply rush the last topics. I could not help but notice it.

3.1.3. Semi structured interviews

The benefits of semi-structure interviews compared to the in-depth interviews are the relevance of the data collected. “In semi-structure interviews the researcher will have a list of themes and questions to be covered, although these may vary from interview to interview.” (Saunders et al, 2007: 312) Although the ‘respondent interview’ (ibid) allow the respondent to speak freely about the given areas, the interviewer, by directing the discussion to prearranged themes, is more likely to end up with data that are directly related to his research questions and objectives. It is the researcher’s responsibility to ensure that the time provided by the respondent will be used as productively as possible. Easterby-Smith et al. (2002: 88) discussed this issue and warned the interviewees about the risks of ending up with non-relevant data. They suggested:

“… the researcher should be warned against assuming that a “non-directive” interview, where that interviewee talks freely without interaction or intervention is the way to achieve a clear picture of the interviewee’s perspective. That is far from true. It is more likely to produce no clear picture in the mind of the interviewee of what questions or issues the interviewer is interested in, and in the mind of the interviewer, of what questions the interviewee is answering! Too many assumptions of this kind lead to poor data, which is difficult to interpret. Researchers are likely to be more successful if they are clear at the outset about the exact area of their interest.”

The semi-structured interviews combine the relevance of the data needed by the researcher with the flexibility needed by the respondent in order to speak his knowledge and experiences freely. They allow the access needed to the respondents’ knowledge and experiences by minimising the risks of getting lost in the labyrinth of interviewees’ thoughts.
An additional issue that affected my decision to use semi-structured interviews is the request by the respondents of a set of issues, for which they would be asked to speak. They asked for an interview guide (Bryman and Bell, 2007). After discussing the issue with the first two respondents I contacted, I realised that it is tremendously significant, since it affects the perception of the interviewees about the researcher’s professionalism. Because at the beginning, I had in mind the unstructured interviews, I was trying to explain to the interviewees that are free to speak “about events, behaviours and beliefs in relation to” (Saunders, 2007: 312) the institutional investors and the bull market of the Cyprus stock exchange in 1999. Afterwards, the potential interviewees asked me to be more specific because the topic is enormous, including so many parameters, and they would not be able to say what they want to say within an hour. As a result, I prepared a number of issues that I was specifically interested in, and I communicated them to the potential respondents before the interview. My objective was to give a clear indication to the interviewees of the particular issues of the phenomenon I was interested in without limiting their ability to expand on or to move to aspects or closely related areas that I have not thought of. After all, as suggested by Bryman and Bell (2007) “If the researcher is beginning the investigation with a fairly clear focus, rather than a very general notion of wanting to do research on a topic, it is likely that the interviews will be semi-structured ones, so that the more specific issues can be addressed.” For example, I was interested in gaining access into the reasons that sparked the speculation, and if the institutional investors played any role. I started my interviews by asking

“Could you please explain the investment climate from the end of 1998 to the beginning of 2000? If possible, I would like to focus on institutional investors.”
The formulation of the question guided the respondents to the reasons sparking the speculation and the role of institutional investors, but at the same time allowed the respondents to expand on any other related issues that seemed significant to them. From the first interview, it strongly emerged that although the institutional investors did not collectively organize speculation, once it appeared they strongly engaged with it. The question was also designed in order to facilitate respondents’ engagement with the topic of speculation and institutional investors. The first respondent started his account by referring to the particular period as speculative. This allowed me to ask a supportive question, which I kept in the interview guide for the following interviews, as well.

“You mentioned that the particular period was speculative. Could you please expand more on this issue? Why do you think this particular period qualify as speculative?”

Since all the respondents in the first question referred to the particular period as ‘speculative’, I did not need to rephrase this question for the remaining interviews. It allowed me to delve mainly into the participants’ accounts of their experiences in order to understand the phenomenon of speculation and be able to explain it, at least in the context of Cyprus. Additionally, it opened up the possibilities of conceptualization and theoretical links (Gummesson, 2003) to other accounts of speculative markets (see Galbraith 1994; Mackey 1995, Chancellor 2000, Kindleberger, 2000) in which we observe common themes and similar patterns. A full list of the questions/topics given to the interviewees can be found in appendix 1.

3.1.4. Key informants

After considering my research questions, I concluded that my objective of understanding the complexity governing the “impact of speculative market on institutional investors’
“investment behaviour” was better met by gaining access to the professionals making the investment decisions for the institutional investors during the period under examination. The term ‘institutional investors’ is used rather loosely, and it means all the organizations employing professionals in order to manage investors and customers’ money. In the Cypriot context, during the period in question, this group consisted of Banks, stockbroker firms, closed-end funds, insurance firms and pension funds. Although I worked in the industry for four years and I had some contacts, access to this limited group of people proved to be extremely difficult. The first problem was their limited number. Cyprus is a small country, and at the time, this was in 1999, there was only a remarkably small group of professionals worked in the fund management. The second issue was that after the market collapse during 2000 to 2003, a number of professionals stopped working in the industry, either because the number of positions contracted or because they found it too stressful. This is common after stockmarket crises and it is observed in developed markets, as well (Lucchettti, 2009).

I was introduced to the informants by Louisa, who started working in the financial services as a back office officer in 1998 and gradually climbed to the position of Deputy Managing Director. Louisa spent her entire career in the financial services, working in a number of positions, establishing an admirable cooperation not only with her colleagues but with competitors, as well. She introduced me to all my interviewees, but three; Loizos, Marios and Christos K. I am acquainted with Loizos since we were colleagues. Hence, I called him, and I explained him that I need an interview, approximately 60 minutes long, for my PhD research. I gave him more information on the particular issues I was interested in, and we arranged an interview in his regional office. After the interview, Loizos introduced me to Marios, with whom I arranged an interview in his office. To Christos K, I was introduced by Emilios. Emilios belong to the group of the interviewees that were introduced by Louisa. We arranged
for a meeting in a local bar close to Emilios workplace. Actually, he had a meeting with his colleagues there. Once I arrived at the bar, Emilios introduced me to his colleagues and asked me if I wanted to interview his manager. I was more than grateful.

I interviewed ten Cypriot men, who during the period under examination were working for the leading financial organizations as investment professionals. The interviewees represent two of the three local banking institutions and the biggest non-banking financial institution in Cyprus. Although there are no official numbers regarding the asset management industry in Cyprus for 1999, based on the market share of the CSE members, the employers of the respondents represented almost 50% of the trading volume in the CSE. They managed an enormous portion of the funds under management in Cyprus in 1999, including large pension funds, insurance companies’ funds and closed-end investment companies. It should be noted that during 1999 the main players were the three local banking institutions, with Sharelink Financial Services being the only non-banking institutions among the leading fund management players.

Although the majority of the interviewees changed employer since 1999 – 2000, at the time of the interview, they were still working in the financial industry, as investment professionals. All but one interview was conducted in Greek language and translated in English during transcription. Only one interview was conducted in English, and it was shorter than the others. I met eight of the informants in their offices after arranging for the date, time and place on the phone. When calling to the informants, I made it explicit that I could meet them anywhere at any time they wish (see Warren 2002). I wanted to be as polite as possible and make sure that I will keep the interruption to their busy schedules at minimal levels.
In retrospect, I think that this interaction is part of the social aspects of interviews that draw from everyday life (Rapley, 2004), which can dramatically improve (or damage) the trust between the interviewer and the interviewee (Warren, 2002). The social interaction involved in interviews has not only been documented in the interviews’ literature (Holstein and Gubrium, 2004b), but has also been found to have aftermath effects, as well. This is what has been called as “post interview echoes” by Warren (2002).

Table 2: List of interviewees

<table>
<thead>
<tr>
<th>Interviewees</th>
<th>Venue</th>
<th>Length</th>
<th>Experience and qualifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loizos</td>
<td>Regional office</td>
<td>48:48</td>
<td>Extensive experience as a Head of Fund Management and Managing Director in financial services; BA in Business Studies; MBA</td>
</tr>
<tr>
<td>Charis</td>
<td>His office</td>
<td>31:03</td>
<td>Extensive experience as a Head of wealth management; specialised in wealth management products and services, insurance and risk management; MSc; Executive MBA in International Wealth Management; Executive MBA in International Wealth Management; MBA in International Wealth Management</td>
</tr>
<tr>
<td>Louis</td>
<td>His office</td>
<td>38:51</td>
<td>Former President of the Cyprus Financial Services Firms Association; One of the most senior stockbrokers in Cyprus</td>
</tr>
<tr>
<td>Christos K</td>
<td>Bar near workplace</td>
<td>29:03</td>
<td>Extensive experience as a Head and Manager in Asset Management and as a Head in Private Banking; MBA</td>
</tr>
<tr>
<td>Emilios</td>
<td>Bar near workplace</td>
<td>29:03</td>
<td>Extensive Experience as a Fund Manager; BSs Economics and Finance; MSc Economic Development and International Finance; FCCA</td>
</tr>
<tr>
<td>Christos V</td>
<td>His office</td>
<td>24:39</td>
<td>Extensive Experience as a Trader, Analyst and Fund Manager; BA in Business Administration; MA in International Banking and Financial Services</td>
</tr>
<tr>
<td>Marios</td>
<td>His office</td>
<td>28:51</td>
<td>Extensive experience as a Manager of the Asset Management, Head of Fund Management and Auditor. BSc in Business, Finance and Economics; ACA; CFA</td>
</tr>
<tr>
<td>Christodoulos</td>
<td>His office</td>
<td>40:78</td>
<td>Extensive experience as a Chairman and Chief Executive Officer in financial services; Former Chairman of the Cyprus Stock Exchange Members Council; Former Chairman of the Cyprus Investment Firms Association; One of the most senior stockbrokers in Cyprus; BA in Finance &amp; Accounting; ACA</td>
</tr>
<tr>
<td>Giannis</td>
<td>His office</td>
<td>25:52</td>
<td>Extensive experience as an Executive director and in asset management; experience as an investment analyst; experience in academic research and lecturing; member of the Strategic Planning Society (SPS) and the Institute of Directors (IoD) of UK; BE and a Ph.D. in Chemical Engineering; an MBA and a Graduate Diploma in Applied Finance and Investments</td>
</tr>
<tr>
<td>Michalis</td>
<td>Conference room</td>
<td>45:23</td>
<td>Experience as Managing Director and Fund Manager; BEng in Civil Engineering with Advance Mathematics; MSc in Construction Law &amp; Arbitration;</td>
</tr>
</tbody>
</table>
3.1.5. What data I ended up?

Although I do not agree with the prevailing data collection methods in the field of finance, which it is still under the authority of the positivism paradigm, I cannot claim that I feel comfortable with the properties of ‘reflexive interview’ of the social constructionism, as advocated by Denzin (2001). He totally refused the existence of ‘reality’ in the data generated through interviews. More specifically, Denzin (2001: 31) supported that the interviews:

“entice us into believing that we are seeing the real world being staged. This is not so. But then there is no real world. There are no originals. There is no original reality which casts its shadows across the reproduction. There are only interpretations and their performances.”

I think that the richness of the data generated can vastly improve our understanding of the financial phenomena. In the event of the recent financial crisis, which, hopefully, has shaken our pre-understanding of the financial world, interviews can provide, contrary to Denzin’s (2001) argument, a window for looking into the workings of financial speculation and bubbles as manifested in the knowledge and accounts of experiences of the actors involved in the phenomenon. My position regarding the nature of the data generated through interviews is summarised in the argument of Miller and Barry (2004: 125-126)

“This is not to say that we accept the positivist view of the possibility of untouched data available through standardized interviewing, nor that we take the romanticised view of seamless authenticity emerging from narrative accounts. Instead, it is to suggest that we are not willing to discount entirely the possibility of learning about the social world beyond the interview in our analysis of interview data.”

Although an externalised objective truth, as advocated by positivism, cannot be claimed by qualitative researchers, increasing our understanding about the social world can be a desirable
objective. Each interview contains essential details about the phenomenon under investigation, which can provide powerful insights for academics and practitioners, as well. Of course, the establishment of universal laws is beyond the scope of qualitative researchers, but that does not hinder us from adding our small pieces into the mosaic of knowledge. I prefer seeing the stock of knowledge in any discipline as a tower with millions of little bricks (contributions) placed by millions of workers (researchers). Each new brick, although sometimes not so visible, set the stage and create the intellectual space and capacity for the next one. This is how our understanding about social phenomena is built through time.

In my research, I study the impact of speculative stock markets on institutional investors’ investment behaviour through semi-structured interviews. The informants, who have been investment professionals during the period under examination, have been asked to share with me their accounts, which of course are contextual. This does not mean that the accounts are deprived or segregated from reality. It only means that the bits of reality included in the accounts generated through the semi structure interviews, cannot be reduced to a precise mathematical formula, which will be applicable in any phenomenon including institutional investors in speculative settings. However, a reflective analysis of the data will provide valuable insight into the phenomenon, which will increase understanding of both academics and practitioners. For example, if we had carefully studied the accounts of the actors involved in the speculative periods of 1929 and 1999 in USA and of 1980s in Japan we could have been better equipped in understanding the current credit crunch *ex ante* and possibly warn the practitioners, the regulators and the administrators.

In support of the qualitative data generated through the semi-structured interviews, I also employ secondary quantitative data. The numeric data are provided where necessary in order
to validate or not, qualitative claims from the part of the interviewees. These include mainly tables of figures regarding the stock prices, returns, volume and new fund raised during the speculative period under examination. I have also plotted the CSE general index prices on a graph, from 1996 to 2005 in order to provide a visual experience of the bubble’s impact on the stock market prices. The numbers are mainly taken from the yearly ‘Fact Books’ published by the CSE.

3.1.6. How I analysed it?

3.1.6.1. A workable Framework for Data Analysis

For my data analysis per se, I mainly follow the framework provided by Carney (1990), Miles and Huberman (1994) and Gummesson (2003). Their guidelines are suggested to researchers working with qualitative data. The main question guiding the formation of my framework of analysis is the one raised by Miles and Huberman (1994: 1). “What methods of analysis can we use that are practical, communicable, and no-self-deluding - in short we get us knowledge that we and others can rely on?” However, I would like to clarify that I have no intention to suggest that we are in need of the highly structured procedures followed in the positivistic realm. In the words of Gummesson (2003: 483), “We have endless options, none offering a self-evident choice. They all required judgment calls and the major source to excellence is our own experience, wisdom and inventiveness.” The procedures should aim at making the process of analysis more efficient and transparent. For this reason, I have to stress the fact that I have adapted their guidelines to the needs of my research, instead of strictly following every step they suggested.

The reason I have followed the general principles of the framework provided by Miles and Huberman is because it perfectly fits with the main objective of the chapter of data analysis,
which is to present and describe to the readers the findings in a clear way (Saunders et al., 2007). Clearly presented data facilitates the researcher in discussing it and drawing conclusions. It also allow the readers to follow the explanations and the flow of arguments in subsequent chapters, as they emerge from the data.

Table 3, below, depicts the steps that I follow in analysing and discussing my data. This framework of analysis consists of three stages. The first stage involves the transcription and the initial reduction of data. The second stage consists of the coding, identifications of themes and presentation of the data. The final stage engages with the conceptualisation of findings and discussion of their theoretical and practical implications. The following discussion expands on the most fundamental aspects of the process, defining the key steps, in order to provide justifications for my choices.
Table 3: The ladder of analytic process

<table>
<thead>
<tr>
<th>Discussion, conceptualisation and implications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Discussion</strong></td>
</tr>
<tr>
<td>Conceptualization, discussion of the theoretical and practical implications of the results</td>
</tr>
<tr>
<td>Making the link with the existing body of knowledge; Highlighting theoretical contribution and practical implications;</td>
</tr>
<tr>
<td><strong>Analysis</strong></td>
</tr>
<tr>
<td>Selecting and presentation</td>
</tr>
<tr>
<td>Selecting the most representative ‘bulks’ of the issues emerging from the data in order to be presented to the readers as raw material and thematic networks</td>
</tr>
<tr>
<td>Selecting and presenting the primary data to the readers</td>
</tr>
<tr>
<td>Identifying the strongest themes and possible gaps in the data</td>
</tr>
<tr>
<td><strong>Mapping</strong></td>
</tr>
<tr>
<td>Finding out where the emphasis and gaps in the data are</td>
</tr>
<tr>
<td><strong>Coding, themes and memos for discussion</strong></td>
</tr>
<tr>
<td>Coding the important parts, assigning it to themes and writing memos</td>
</tr>
<tr>
<td>Identifying and coding the material that is directly related to the research questions and objectives; Writing memos from which to draw in subsequent analysis, discussion and conclusions;</td>
</tr>
<tr>
<td><strong>Initial coding and memos</strong></td>
</tr>
<tr>
<td>Identification of relevant material; Preliminary coding</td>
</tr>
<tr>
<td>Rereading the transcripts in order to identify preliminary themes and preparing software for coding</td>
</tr>
<tr>
<td><strong>Transcription</strong></td>
</tr>
<tr>
<td>First stage of reduction; Removing the obviously irrelevant material</td>
</tr>
<tr>
<td>Listening to the interviews, before transcription; Transcribing the interviews;</td>
</tr>
<tr>
<td><strong>Conducting the interviews</strong></td>
</tr>
</tbody>
</table>

Source: Carney, 1990; Miles and Huberman, 1994; Gummesson 2003
3.1.6.2. Data reduction

‘Data reduction’ is one of the main steps of analysis suggested by Miles and Huberman (1994: 10). It “refers to the process of selecting, focusing, simplifying, abstracting, and transforming the data that appear in written-up field notes and transcriptions.” The rational is to allow the researcher to focus on the material that is relevant to his/her research questions and objectives. They explained that in qualitative projects “All this information piles up geometrically. Worse still, in the early stages of a study, most of it looks promising. If you don’t know what matters more, everything matters.” (1994: 55)

Data reduction helps qualitative researchers coping with the frustrating task of selecting from tens and sometimes hundreds of pages of primary data. The objective of this step is to end up with the ‘chunks’ of data that I present to the readers in building my arguments and drawing conclusions. Data reduction and coding primarily deal with the taunting issues of data overload and retrieval, which are both crucial, not only during the stage of data analysis but during the data discussion and conclusions, as well. I started the data reduction immediately after each interview collection. The first step after conducting an interview was to listen to the recorded interview again, before transcribing it. I tried to transcribe what initially looked relevant in order to have the opportunity to have a look at it again and again. Most importantly, before the second wave of reduction, I wanted to have the opportunity to have all the interviews together as a single piece. This gave me the opportunity to see my data in a single picture. It was like a colourful painting full of messages, which I had to reveal, discuss and contextualise. Actually, I initially transcribed more that 90% of the recordings. I omitted only parts of the material that were obviously irrelevant to my research questions and objectives. That is data referring to information that they could not related in any way with my research objectives.
This leads us to the second level, which consists of three steps. Initially, I coded the relevant material, which provides insight into my research questions and objectives. The coded material consisted of extracts, which retain their context and create the platform needed for the final level, which is the discussion. The most critical step of this level is coding. According to Miles and Huberman (1994: 56),

“Codes are tags or labels for assigning units of meaning to the descriptive or inferential information compiled during a study. Codes usually are attached to “chucks” of varying size-words, phrases, sentences or whole paragraphs, connected or unconnected to a specific setting.”

They are used in order to organise the relevant material, creating the necessary space for the important step of retrieval (ibid) and discussion at a later stage. Initially, I mainly used labels from the existing literature in order to facilitate preliminary coding, but the analysis progressed and the themes emerged strongly from the analysis I was able to create new themes, drawing from my findings.

For example, it became apparent from the second interview that although the institutional investors engaged in speculative activities during speculative periods, mainly because they did not want to be left out of ‘bull markets’, after the bubble collapse, they totally avoided any risk taking. As seen by the interviewees:

“Simply I think that they became much more risk averse. After this period, a number of institutional portfolios they hold an important part of their assets in cash.” (Charis interview)

Although during the speculative period they weighted more the return at the expense of risk, after the collapse of the bubble they paid attention only to the risk, totally ignoring the return.
I started coding the relevant material from the data under the concept of risk, which I borrow from the existing literature. My intention was not to approach the issue of risk deductively, but to be able to focus and identify the relevant data into themes in order to facilitate the presentation and retrieval, as well. Consequently, after the issue emerged strongly, I created the label of “risk detestation”, acting inductively for the chapters of ‘data discussion and conclusions’. In this way, starting with a concept I borrow from the relevant literature, I ended up with a much stronger theme, in term of risk aversion, which emerged from the data.

In supporting and strengthening my analysis, while setting the stage for the discussion and conclusion, I kept expressing my initial thoughts on the coded material in writing. This process, memoing, was termed, by Glaser (1978). He suggested, “A memo can be a sentence, a paragraph or a few pages. It does not matter as long as it exhausts the analyst momentary ideation based on data with perhaps a little conceptual elaboration” (Glaser, 1978: 84). The purpose of memos is to capture the initial thoughts of the analyst ‘as they strike him’.

I found the idea and practice of memoing to be both reflective and creative. I was able to write down my initial thoughts on the relevant codes and to elaborate on the relationships between the codes. As recommended by Miles and Huberman (1994: 72), “They are one of the most useful and powerful sense-making tools at hand.”

As a result, the data retrieval, which is vital for the data discussion and conclusions, will be considerably facilitated. The connection between our explanations, arguments and conclusions should be clear to the readers of our research. Miles and Huberman (1994: 2) in explaining why an explicit framework for the stage of analysis is needed, they drew from the case of a massive team project. They correctly supported,
“We are left with the researchers telling us of classifications and patterns drawn from the welder of field data, in ways that are irreducible or even incommunicable. We do not really see how the researcher got from 3,600 pages of field notes to the final conclusions, as sprinkled with vivid illustrations as they may be.”

As I supported earlier, an explicit framework for the data analysis is not needed in order to assess how scientific our analysis is. However, it is needed in order to increase the efficiency and transparency of the data analysis stage. Increased efficiency will allow more time to the researcher for reflection on her assumptions, choices and results. The transparency will explicitly communicate to the audience of our research the methods involved in our analysis. This permits the readers to follow easily our line of arguments, by making the links between data analysis, discussion and conclusions explicit.

3.1.6.3. **NVivo Software**

As highlighted by Miller and Huberman (1994: 299) “data analysis includes selecting, condensing, and transforming data; displaying these data in an organized way; and drawing and verifying conclusions from the contested, displayed data.” It is commonly split into two distinctive tasks. The administrative part, which it is time consuming and includes the organisation of the primary data and the discussion and conclusion, which calls for the researcher’s judgment and builds on the work done during the administrative phase.

For the administrative part of the analysis of my data, I used the NVivo software. My decision to use it was solely based on my wish to remove the secretarial efforts needed when manually administrating my data, making the process more efficient. Especially after my experience with the software, it is now clear that the NVivo “removes many if not most of the clerical tasks associated with the manual coding and retrieving of data.” (Bryman and Bell, 2007: 603). To be honest, before using it, I had the impression that it is involved with the data
analysis *per se*. However, after expressing my concerns to a colleague of mine who used NVivo for administrating her qualitative data, consisting of focus groups and in-depth interviews, she supported that the software do not perform the analysis, but its involvement is limited to administrating tasks. “This means that the computer takes over manual tasks associated with the coding process” and retrieving (ibid). Thereafter, I visited the web site of the NVivo software, which is the one provided by the University of Leicester and I attended some academic sources (Fielding and Lee, 2002; Silverman, 2005; Atherton and Elsmore, 2007; Bryman and Bell, 2007; Saunders et al. 2007) regarding the benefits and concerns of such an enterprise. After that, I decided to employ NVivo, since it serves the objective of minimising the ‘clerical tasks’. “Most obviously, CAQDAS [Computer Assisted Qualitative Data Analysis Software] can make the coding and retrieval process faster and more efficient.” (Bryman and Bell, 2007: 605).

As highlighted by Durkin (1997: 92) QDA [Qualitative Data Analysis] programs neither promise nor threaten to think.” At the stage of data discussion and conclusions, the researcher is on her own and cannot count on CAQDA. Not only they cannot think and discuss, but, obviously, are even far from being devices of artificial intelligence. Gummesson (2003) summarised what the software can do and what it cannot do. Put it simply,

“The software can store data in an orderly way, provide structures and hierarchies of data, perform certain analytical tasks and respond to questions that the researcher puts to the data. Software assists, but does not take over interpretation. Interpretation requires subjects - researchers - and their ability to continuously fine-tune their skills with each research project.”

The interpretation of data, which in qualitative research requires researcher’s creativity, can only be performed by researchers. For the time being, I think that we are still far from being threaten. An additional strength of CAQDA programs is that they forced researchers to reflect
on the administration and analysis of data. Because the use of CAQDA draws considerable criticism regarding the fragmentation of data and the detachment of the researcher from her data (see Atherton and Elsmore, 2007) the decontextualisation of data and the establishment of an “epistemological comfort blanket” (Atherton and Elsmore, 2007) researchers should clearly demonstrate and justify the steps followed. Atherton, although belongs to the researchers employing CAQDA he was particularly concerned about the epistemological risks of employing CAQDA. In discussing his experiences with CAQDAs recognised, “Generic and pre-formed protocols” (2007: 67) threat creating a ‘technological epistemology’, which is, by definition, structured and hierarchical, threatening the context embedded in the data. As he pointed, an additional issue of concern is the distance of the researcher from the architects’ centres. This does not allow the user to incorporate his/her own epistemological assumptions in the software analytic procedures. For this reason, it can also be supported that CAQDAS is self-centric because it totally ignores the epistemological origins of the users. Although Fielding and Lee (2002: 198) mentioned, “From its origin, the notable thing about software for textual analysis was that it was developed by social scientists, not commercial software interests.” Although, they admitted, “commercial pressures inevitably intrude somewhat”. In Atherton’s own words (Atherton and Elsmore, 2007: 67)

“The risk with using standardised software packages in qualitative research is that it does not stimulate, or drive, consideration of where the researcher is “coming from” and so does not provide a means of dealing with the subjectivity and agenda of the researcher in a reflexive way... Using generic software protocols, particularly when repeated regularly, creates an epistemological “comfort blanket” for researchers, in that they produce an expected and defined approach to dealing with data (again regardless of context).”
Subsequently, researchers employing CAQDA should explain their choices and respond to the above accusations. This increases “both transparency and methodological rigor” (Saunders et al. 2007: 505). The issue of increased transparency has also been raised by Bryman and Bell (2007: 605) who supported that

“It is sometimes suggested that CAQDAS enhances the transparency of the process of conducting qualitative data analysis. ... CAQDAS may force researchers to be more explicit and reflexive about the process of analysis.”

Although the use of CAQDAS “is becoming increasingly common in the social sciences” (Atherton and Elsmore, 2007: 62), there are strong voices of concerns opposing the invasion of technology to the ‘good old days’ of manual administration. The question is not if the technology will help us produce better quality research or worse. This does not depend on the technology per se, but on the way it is used by researchers. If we use CAQDAS in order to develop strict protocols or quantify our analysis, then, unquestionably the research outcome will not be better. However, if we use technology in order to cope with the administrative part of the data analysis, then more time will be left for the other parts of a research project and reflection.

An additional factor that is becoming increasing critical in the contemporary academic landscape is the increasing portion of research projects that are financed by external stakeholders. The terms of such projects are tight to strict deadlines, which impose a real threat to quality research outcome. Atherton, reflecting on his decision to adopt CAQDAS was explicit:

“The research projects were commissioned by external stakeholders, and so were bounded by contractual agreements based on specific outputs and timelines. An initial driver to use
software was to facilitate and support rapid data processing and analysis within clear and generally tight time constraints.” (Atherton and Elsmore, 2007: 65)

The decision to ignore technology has been fatal for any ‘industry’ so far. I do not think that qualitative researchers we can form an exception to the rule. Deadlines attached to funding for qualitative research projects will be stricter and shorter, taking into accounts the efficiency provided by technology. The best course of action is to familiarise ourselves with CAQDAS in order to be able to build on their advantages and positively reflect and shield from their threats. I conclude this section with the recommendation provided by Elsmore.

“...we need to be part of the debate about method in qualitative research, rather than sitting at the water’s edge. I propose that it is time for us to “get our feet wet” in the incoming and ever-growing tide of qualitative data software.” (Atherton and Elsmore, 2007: 72)

3.1.7. Conclusions

I directed my attention at persuading the readers about the appropriateness of my choices (Guba and Lincoln, 1994) regarding the data generation methods and analysis. I concluded that the most appropriate method for the generation of my data in order to answer my research questions are the semi structured interviews. Their advantages lay on the relative control of the researcher over the direction of the discussion in conjunction to the autonomy granted to the interviewee when addressing the issues raised by the researcher (Easterby-Smith et al., 2002) This combination encourages rich descriptions of the phenomena in question, which are both contextualised and relevant to the research questions and objectives. After all, as highlighted by Silverman (2006: 113) “everything depends upon your research topic; methods in themselves have no intrinsic value.” Although I recognise that interviewing is a contextualised social activity (Holstein and Gubrium, 2004a, 2004b), I do not discount
the possibility of gaining insights into the realities of the phenomena under examination (Miller and Glassner, 2004).

For the administrative tasks of the data analysis I employ the NVivo software, in order to improve the efficiency of organising and administrating my data (Gummesson, 2003, Bryman and Bell, 2007). However, the software was not involved in the analysis per se at any point of my data analysis (Gummesson, 2003). As highlighted by Bryman and Bell (2007: 603) the contribution of NVivo can be summarised as follows:

“The computer takes over the physical task of writing marginal codes, making photocopies of transcripts or fieldnotes, cutting out all chunks of text relating to a code, and pasting them together. CAQDAS does not automatically do these things: the analysis must still interpret his or her data, code and then retrieve the data, but the computer takes over the manual labour involved (wielding scissors and pasting small pieces of paper together, for example).”

Although for my chapter of analysis I extensively draw from the framework provided by Miles and Huberman (1994), it is not my intention to argue for more “standardised data collection procedures” (1994: 8). I only point to more openness (Miles and Huberman, 1994; Silverman, 2006) and transparency (Saunders et al., 2005; Bryman and Bell, 2007) regarding our methods of analysis. This will speed up the discussion on our practices, facilitating reflection and improvement, as well.
3.2. The incompatibility between normative methodologies and social sciences: Hard lessons from finance

3.2.1. Introduction

The recent turmoil in financial markets revealed the problematic aspect of the normative methodologies in modern finance that have been profoundly influenced by Friedman (1953). They failed to respond to the objectives expected by methodologies employed in financial economics (Hayek, 1989; Lawson, 2009; MacKenzie, 2009). That is, at least, to explain or predict phenomena (Friedman, 1953) that would change the landscape of making financial decisions forever. In short, it should enhance the understanding of all the participants involved in finance, namely, practitioners, academics and regulators. The prevailing methodologies that governed our efforts over the last 60 years, mainly after the Friedman’s work in positive economics and their subsequent assumptions should be constructively re-examined in order to come out of the recent financial crisis with methodologies that better reflect descriptive realities. In reflecting on our methodologies, the main question that should guide our intellectual journey is the one posed by Thaler (1993: xv). “Would the financial world be materially different if investors, traders, managers and workers were all replaced by computer programmes?” Current market developments strongly suggest that, in such a case, the financial world is entirely different.

Existing normative approaches cannot cope with the impact of humans on financial markets, since are not receptive of the social context (Kindleberger, 2000; Lawson, 2009; MacKenzie, 2009) in which the financial phenomena, as the objects of our analysis, are constructed. Normative methodologies are restrained by unrealistic assumptions, such as investors’ rationality (Kindleberger, 2000; Shleifer, 2000) and they heavily rely on quantitative methods that provide little insight and space for meaningful conclusions (Weber, 1949; Lawson,
Unfortunately, the results of inappropriate methodologies stemming from our ontological and epistemological assumptions have not only shocked administrators, as claimed by Greenspan (2008) and practitioners, but, most importantly, they have failed to enrich our understanding of the financial markets. Such failures carry unbearable costs to current and future generations.

The main objective of this section is to provide a constructive critique of the uncritical application of the ontological assumptions and methods of the hard sciences to financial phenomena. Contrary to the suggestions of Friedman (1953) that marked a shift to a new paradigm in finance, this section proposes the enhancement of descriptive approaches, drawing from the advice of Keynes (1917: 44) to deal with “physical laws as premises, but never as conclusions.” The section starts with a reflection on the current methodological state of finance, followed by a critical examination of the application of positivistic anthologies in finance. Afterwards, I discuss the reflexivity theory of Soros (2003) which provides a descriptive framework of the impact of the actors on the financial events. The discussion then turns to the impact of mathematical modelling on our understanding of the financial phenomena. Finally, I consider the premises on which descriptive methodologies seem more appropriate to be based and I critically evaluate the impact of unrealistic assumptions to financial theories.

29 The collapses of Bear and Stearns, Lehman Brothers, ING and a number of other corporations internationally, and estimates by the International Labour Organisation that 20 million people are expected to joint unemployment by the end of 2009 as a direct consequent of the recent financial crisis provide particularly good examples. Additionally, during the same period “the number of working poor living on less than a dollar a day could rise by some 40 million - and those at 2 dollars a day by more than 100 million” (Somavia, 2008).

30 The dramatic increases of national debt of both developed and developing countries and the negative impact on investments are expected to be carried by future generations. See the developing cases of Greece, Ireland and Portugal.
3.2.2. Finance as a field of social sciences

Academic disciplines, striving to position themselves as unique fields of studies in seeking for authorisation to ‘produce’ knowledge, need to align their inquiry methods with the nature of the phenomena under investigation. Such enterprises require the self-reflection of the academics inhabiting the particular domain of study in order to gain the maximum insight into the nature of the phenomena they have been devoted to. In this line of thought, Keynes (1917: 2) recommended,

“In seeking to define the scope of any department of study, the object of view is primarily to determine the distinguishing features of the phenomena with which it deals, and the kind of knowledge that it seeks concerning these phenomena.”

Unfortunately, in finance we failed to reflect on the nature of the phenomena we investigate. Furthermore, following uncritically the advices of Friedman (1953) not only we allowed unrealistic assumptions to shape our perceptions, but, with few exceptions (see MacKenzie, 2003), we have consistently resisted discussing the characteristics of the phenomena in question openly. We also assumed that the only form of findings that qualify as knowledge are the ones treating the financial phenomena as closed systems with predetermined, structured relationships amenable to objective observation and statistical analysis. As highlighted by Soros (2003, 2008), we see financial phenomena as passive developments of calculative decisions, which they contain hidden truths amenable only to objective observations. In short, without any reflection at all, finance has been classified in the natural sciences. Nevertheless, Keynes (1917: 6) provided an exceptionally compelling reason why in economics the traditional natural sciences’ methodological approaches are not appropriate. He argued,
“In the first place, economic science deals with phenomena that are more complex and less uniform than those with which the natural sciences are concerned; and its conclusions, except in their most abstract form, lack both the certainty and the universality that pertain to physical laws.”

Evidently, Keynes (1917) was correct in claiming that economic phenomena are governed by complexity and lack the uniformity observed in hard sciences. That means that the particular dynamics developed within individual cases are exceedingly complex and unique to the circumstances, at the time. Consequently, based on the suggestions of Hayek (1989: 4), at the best, we “have to deal with structures of essential complexity, i.e. with structures whose characteristic properties can be exhibited only by models made up of relatively large numbers of variables.” Such properties, as the trust/confidence (see Olsen, 2008) between lenders and borrowers, of course, are neither readily observable nor measurable in quantitative terms. However, it is an extremely significant variable, which has a pivotal role in every financial crisis (Keynes, 1974; Minsky, 1992; Akerlof and Shiller, 2009). Effectively, financial economists we have to focus on the ‘whys’ and ‘hows’ governing these variables in order to understand and explain financial phenomena, such as speculation and financial crises. The results of our obsession with the natural sciences were terribly disappointing (Hayek, 1989; Lawson, 2009). We entered the financial crisis without believing that it could even happen and evidently without the knowledge needed in order to deal with its consequences.

We intentionally ignored financial phenomena that contradicted the prevailing ontological assumptions of natural sciences. A pressing phenomenon that has been unexplored, especially, by the established financial academic journals is speculation (Lawson, 2009). It has been marginalised because it contradicts the doctrine of Efficient Market Hypothesis, which has exclusively formed and guided the economic policy of the developed world for the last 40 -50 years (Nyberg, 2011). Nevertheless, after the massive monetary and social costs of
the last crisis, we cannot afford any more ignoring the existence of financial bubbles. Speculation has always been part of the financial history, setting the seeds for severe financial crises (Abolafia and Kilduff, 1988; Galbraith, 1992, 1994; Chancellor, 1999). Kindleberger (2000: 221) aptly suggested, “Dismissing financial crisis on the grounds that bubbles and bust cannot take place because that would imply irrationality is to ignore a condition for the sake of a theory.”

Such cases have been consistently ignored by the mainstream finance because they do not fit into the ontological and epistemological assumptions of normative methodologies. However, the existence of such cases calls for the application of descriptive methodologies, whose findings will be priceless every time we face similar phenomena that present the same dynamics. For instance, the crises of 1929 and 2007 in USA and the one of Japan in 1990s present remarkably similar characteristics. These includes the unlimited production and wide availability of credit, whose impact on asset prices and the real economy, at the time, was not understood by the general public, the professionals and the policy makers, as well. All these crises followed after years of economic prosperity, where investments on financial assets were gradually replaced by speculative transactions focus on the short term profit (Kindleberger, 2000; Galbraith, 1992, 1994; Minsky, 1992). Although “There can be no understanding of economics without an awareness of its history” (Galbraith, 1989: 1). Bewilderingly, according to the same author, “There can be few fields of human endeavour in which history counts for so little as in the world of finance.” (Galbraith, 1994: 13).

There is no sufficient explanation for the marginalisation of observable phenomena, such as speculation by the academic community. It seems that because their infrequent appearance does not provide for a sufficient sample amenable to statistical analysis, the phenomenon has
been considered as not worthy of ‘objective’ research. Furthermore, phenomena such as financial speculation and crises cannot be examined in controlled experiments since it is impossible to reproduce the dynamics involved, resulting from the direct interactions of the market participants while the phenomena are being developed. What can we do then?

Financial crises, as a result of speculative activity, will happen again (Greenspan, 2009) and our only option is to recognise their existence (Kindleberger, 2000), devoting to them the required intellectual and monetary resources for systematic research. We have to examine them by employing appropriate methodologies in order to increase our understanding regarding their roots and consequences. In this respect, I find the framework provided by Kindleberger (2000) Abolafia and Kilduff (1988) Minsky (1992) and Lawson (2009) to be much more appropriate for the examination of financial phenomena. The framework they recommended suggests that finance is a social world with dynamic networks and relationships that heavily rely on the perceived trust between the participants.

In order to understand the appropriateness of the social framework recommended in investigating into the financial phenomena, is worth looking at the episode of the American International Group’s rescue using taxpayer’s money. During the recent crisis, the role of AIG was evidently extremely critical, putting additional pressure on the already distressed markets. The AIG with leading participation in insuring the structured investments of institutional investors through credit default swaps, which promise to pay the holder in case its investments in bonds default, aggressively expanded in the particular market. After the defaults in the bond market increased, the payments that the AIG had to make to the credit default swap holders eroded its capital. As a result, investors’ confidence in the markets
collapsed and the trust between the institutional investors vanished, impeding the flow of capital between institutional investors. Although on the Saturday 14th September 2008, the Bush administration publicly announced that it had no intentions of bailing out the AIG, after discovering that the AIG had credit default swaps contracts of $446 dollars, stretching to more than 100 countries, they forcibly changed their decision. These findings forced the Bush administration and the Federal Reserve to change their plans immediately, bailing out the AIG, committing a total $182.5 billion of taxpayers’ money. The consequences of allowing the AIG to collapse are perfectly demonstrated by the collapse of Lehman Brothers, which filed for bankruptcy on the 15th of September 2008. The flow of funds between the institutional investors fully frozen, making it impossible even for highly profitable firms with strong balance sheet to borrow. These developments, once again, forced the governments all over the world to refrain from the efficient market rhetoric, strongly declaring their commitments to preserve any financial institution that is systemically important. As a result, confidence in the markets gradually returned, pushing asset prices at much higher levels. Can hard sciences methodologies with their normative assumptions explain the ‘hows’ and ‘whys’ of the complexities involved in the abovementioned cases? I have to admit that it is difficult to imagine how.

The existing framework for approaching the financial phenomena strips them from their social context on the name of objectivity. On the contrary, the above example demonstrates that the social networks and interactions between the various players are extremely influential, and the confidence between the various players, which is highly subjective, plays a pivotal role in the financial world.
In this vein, Mitchell (2007: 244) suggested that we have to realise that we cannot reduce “the complexities of social life to the outcomes of the calculations of rational agents”. Obviously, assuming “that the work of social science is to represent a world external to itself.” removes the context from the financial phenomena, rendering the findings from such research attempts irrelevant. A viable option is to integrate the social context into our research efforts by adopting more appropriate methodologies for such endeavours. We need methodologies that look into the perspectives of the protagonists involved in the formations of the financial phenomena.

For example, by ignoring the highly contextualised financial phenomena, such as speculation and financial crises, because they do not fit our methodological preferences is not the best course of action. What we have to do, is to adapt our methodologies accordingly in order to be able to examine them, understand them and provide compelling insight for future course of action. In so doing, our focus of attentions should be the ‘economic essence’ and not the “conditions and limits of validity” (Keynes, 1917: 6) as defined by hard sciences. Finance needs to develop its own methodological identity based on the nature of phenomena under investigation, which of course differ materially from the phenomena encountered in physics, engineering, chemistry and mathematics.

Reflecting on the current state of knowledge, as produced by the positivistic methodologies, it seems more reasonable and practical to be guided by the appropriateness of the methods rather than its correctness as defined by other field of studies, based on different contexts and needs. According to Kindleberger (2000: 219), “This seems to me to elevate technique above economic essence.” Such approaches serve neither the techniques nor the economic science. As suggested by Hayek (1989: 3)
“this failure of the economists to guide policy more successfully is closely connected with their propensity to imitate as closely as possible the procedures of the brilliantly successful physical sciences - an attempt which in our field may lead to outright error.”

3.2.3. A descriptive ontology of financial phenomena

I think that the most appropriate question to be addressed in the very outset of a research investigating the financial ‘reality’ is about the nature of the phenomenon to be researched. That is what is known in the philosophy of research methods as ontology, which is a fundamental question. The assumptions underpinning the nature of the phenomenon to be investigated will undoubtedly inform the research methods chosen, heavily impacting on the findings and the way they will be transformed into knowledge.

Over the second half of the 20th century, the ontological paradigm that almost exclusively prevailed in the investigation of financial phenomena, even if it was rarely explicitly stated and almost never discussed by researchers, assumes financial markets as an external reality. That means that the financial phenomena, such a speculative bubbles, are not formed by the actors involved in the financial system. A financial phenomenon is assume to be a pre-existing world, amenable to objective observation, which will yields uniform laws that will be universally applicable. That is the ontological position derived from the hard sciences, where the phenomena to be researched pre-exist, and are amenable to only one ‘truth’.

However, the sociality of finance (Abolafia and Kilduff, 1988, Lowenstein, 2002; MacKenzie and Millo, 2003; Lawson, 2009) calls for different ontological approaches. That does not mean that the objectivism’s ontological position is wrong. It does mean only that it is not appropriate. Ascribing to objectivism and accepting that financial “phenomena and their
meanings have existence that is independent of social actors” (Bryman and Bell, 2007: 22) is the equivalent of claiming that as regards the recent financial crisis, the speculative culture striking the financial industry has played no role in the subsequent collapse. We cannot ignore it neither. It played a pivotal role in the crisis, and it is well recognised by leading figures from financial practitioners and regulators. For example, Alan Greenspan, the Federal Reserve chairman from 1987 to 2006, who attracted most of the criticism regarding speculators encouragement, supported in a number of his public speeches during and after the crisis that speculation is part of human nature (see for example Greenspan, 2007). For his reason, he suggested that financial crises will always be part of human history.

At this point, the question imposed by Thaler (1993: xv) becomes both relevant and pressing. “Would the financial world be materially different if investors, traders, managers and workers were all replaced by computer programmes?” Having the decisions from 1987 in the board of directors of the five big investment banks of USA, in the trading rooms and in the monetary committee of the Federal Reserve being made only by algorithms, without any human intervention, would the global economy still be at the brink of collapse? Or more pragmatically, having replaced Allan Greenspan with Paul Volcker would the outcome still be the same. Personally, I doubt it, but of course, there is no way to prove it ‘scientifically’. As suggested by Prigogine and Stengers (1984) the effects of these choices created a unique and irreversible reality, which has not pre-existed the actors and the choices. Instead it is bounded with and has evolved through the actions of the agents involved.

The relevant question to financial phenomena is the linearity of the causes and effects. Is the relationship between the investment culture of the institutional investors and the systemic risk produced of linear fashion? The answer to such questions will determine the methodologies
chosen for collecting, analysing and interpreting the data. In case we accept that a marginal change to the independent variable, such as the availability of credit, causes a specified change to the depended variable, such as the asset prices, we immediately create a phenomenon that is amenable only numerical analysis. However, such financial phenomena, of linear nature, exist only in financial textbooks created by normative approaches with unrealistic assumptions. Real life financial phenomena are characterised by the “presence of nonlinearities that can amplify “small changes” into “large effects.” (Buchanan and Vanberg, 1991: 1) as in the frameworks provided by Minsky (1992) and Kindleberger (2000) in which trust between lenders and borrowers cannot be arithmetically measured and of course is not in a linear relationship with other variables involved, such as liquidity or expectations.

The main antithesis between constructivism and objectivism ontology, in the field of finance, lies on their assumptions about the future and the flexibility assigned to the financial community regarding their choices. The objectivism ontology supports that the future is already there, independent of the actors involved. It assumes that the actors do not form reality, but they passively adjust their actions to a reality beyond their influence. In our case, the reality is the asset prices and the investors passively buy or sell assets based on the only variable of this reality, which is the new information. Subsequently, the financial community is seen as a collective decision maker which has no option at all, but to choose only the most rational path regarding his investments. This assumes the financial community to have been collectively programmed to perform a algorithm. This mathematical equation, by definition structured, safeguards the equilibrium in financial markets. It is based on the Bayesian’s law, incorporating any new information available and executing the investment trades accordingly. However, all these assumptions about the rationality of the investment community have been proved to be at least problematic (Kindleberger, 2000; Shleifer, 2000).
Firstly, to deprive investors of the right of choice, even if their choices are not proved to be the best among the available options is a highly questionable methodological practice. From an academic point of view, the assumption of the best investment choice has been invalidated by Kahneman and Tversky’s (1979) prospect theory and the documentation of the certainty effect. Actually, investment choices are context laden. In a simple application, as stated by Rabin (2000: 1981) “a dollar that helps us avoid poverty is more valuable than a dollar that helps us become very rich.”

3.2.4. Theory of finance’s nature

Soros (2008: 3), drawing from and reflecting on his philosophical searching and paramount success as speculator, claimed, “our understanding of the world in which we live is inherently imperfect because we are part of the world we seek to understand.” My only objection to his epistemological position is with the ‘inherent nature’ of our understanding. Although, I agree that our understanding is imperfect, I do not think that it is inherently so. Accepting the inherent nature of the incomplete understanding of the financial phenomena is equal to contributing it to gene defections, which cannot be cured, unless access to the DNA is gained. Such approaches are inconsistent with the main objectives of social scientists, which is to understand and explain social phenomena thoroughly. Knowing in advance that we can never achieve a complete understanding of the phenomena under consideration will affect both our morale and practices. We will end up as a distinct field of studies seeking only partial understanding, moving from the domain of the ‘dismal science’ to that of the ‘unfulfilled science’. It is safer to say that our knowledge will be continually evolving, along with the phenomena under investigation.
On the other hand, I accept that our ability to timely predict the future will always be limited. However, this is not necessarily associated with our imperfect understanding. I do not think that a perfect understanding of the phenomena under investigation will lead to prophetic skills. For example, in the case of speculative bubbles, a complete understanding of the phenomenon includes mastering the dynamics involved in its development and its consequences. However, it is almost impossible to draw a dividing line on the exact day that the speculation will start or even has started. But this is totally different from understanding and warning the practitioners when the seeds for speculation have been set. For instance, right now, financial institutions have unlimited access to central banks’ costless capital, which is directed to stock and commodity markets rather than to commercial lending, which is still depressed. However, understanding the impact the unlimited and costless liquidity have on asset prices does not mean being able to say exactly when the asset prices will collapse. Nevertheless, our task is to be able to provide practitioners, regulators and administrators with proper theoretical frameworks and accurate warnings of unsustainable deviations from the norms. Subsequently, only our ability to timely predict the future will always be limited, because developments in the financial world are too complex and associated in a non-linear fashion.

My explanation regarding the imperfect state of our understanding lays on the complexity of the financial phenomena and their dynamics, which render such phenomena in a constant flux. As Soros (2003, 2008: 3) explained, the desire and efforts of the actors to “impact on the world and change their situation to their advantage” is what make each crisis unique in character rendering efforts to predict the exact time of each crisis extremely difficult. A view shared by Abolafia and Kilduff, as well, (1988). For example, the weekend of 14-15 September 2008 it is probably the most dramatic in contemporary financial history, as the
fate of three of the most powerful financial institutions was decided, including the biggest corporate bankruptcy in history. Most specifically, the Lehman Brothers was allowed to collapse, sending the stockmarket to the abyss and completely freezing the capital markets at once. American International Group, which at the time seemed to be the greatest systemic risk to the financial world was bailed out by US tax payers’ money on a last minute decision. Finally, Merrill Lynch was technically bailed out by the Bank of America, which was previously bailed out by taxpayers’ money, as well. In an enlightening documentary, BBC explores and reveals the motives, actions, thinking and finally the impact of the actors on financial reality. That is what Soros (2003, 2008) called reflexivity.

Drawing from his successful career as speculator, he concluded, “People are participants, not just observers”. Subsequently their actions and thinking feed into reality, forming, altering, and sometimes as in the cases of speculation and crises, distorting their world and fate, as well. In the BBC’s documentary we observed how the actors, including banks’ CEOs, regulators from the central bank and administrators from the Treasury desperately tried not only to understand what was going on, but through their actions attempted to change reality by massively and decisively impacting on the unfolding financial events at the time. Their behaviour is perfectly consistent with the observations of Soros.

3.2.5. Methodological issues and their practical essence

The field of finance over the last 60 years has been methodologically treated by its inhabitants as being a natural science. As discussed in the previous section that means that the methodologies employed in researching the financial phenomena are built on the assumption that the financial world is external to both its actors and researchers, as well. However, these ontological and epistemological assumptions failed to further our understanding of financial
phenomena to the degree needed in order to protect both, the world from financial disasters and our profession from humiliation (see Hayek, 1989). Lawson, in reflecting on the insufficient stock of knowledge in the field of economics, which as he supported is reflected on poor economic policies and responses, he pointed to the deductive mathematical models. He highlighted the fact that

“For many years now, economic policy analysis emanating from the academy has been framed mostly in terms of properties of mathematical deductivist models. This modelling activity has not provided too much insight.” (Lawson, 2009: 759)

I agree with him that the persistent use of the deductive mathematical approaches has not further our understanding of the financial phenomena, especially those that cannot be mathematically modelled, as the speculative bubbles. Such approaches are embedded in the classification of finance as a natural science. This classification entails specific ontological and epistemological assumptions, which are paired with the deductive approaches that Lawson is referring to.

For example, in mathematical science, once a relationship has been established, it is universal and can be extended beyond the time, space and context under which has been investigated and the proof was provided. The simplest equation, $1 + 1 = 2$, it is universal and when applied you run absolutely no risks regarding its validity under the particular circumstances which is applied to. That is because it entails structured and predetermined actions and reactions. On the contrary, financial phenomena are based on complex relationships (Minsky, 1992; Lawson, 2009) which when pushed at their extremes always produce unexpected outcomes that react in a non-linear fashion.
The result of the positivistic mathematical approaches is that their research outcome was entirely stripped from economic or financial essence. The modern financial economist has been uncritically surrendered to the assumed ‘supremacy’ of the quantitative methods over real world context. The results in both the academic journal publications and the educational outcome have been astonishing. Blaug (1997: 3) has been extremely critical about the landscape in the top academic journals in economics. He supported that

“To pick up a copy of The American Economic Review or The Economic Journal these days is to wonder whether one has landed on a strange planet in which tedium is the deliberate objective of professional publication. Economics was once condemned as “the dismal science” but the dismal science of yesterday was a lot less dismal than the soporific scholasticism of today.”

Being in accordance with Lawson (2009) by whom he has been cited, directly points to the mathematical approaches that prevailed the economic and financial academic fields, reserving the right to exclusively brand the knowledge produced. The outcome, as we are informed by the Blaug (1997: 3) is a sick science. In an extensively cited quotation, he specifically asserted that

“Modern economics is sick. Economics has increasingly become an intellectual game played for its own sake and not for its practical consequences for understanding the economic world. Economists have converted the subject into a sort of social mathematics in which analytical rigour is everything and practical relevance is nothing.”

3.2.6. Principles governing methodologies of finance

It seems reasonable to agree that a methodology in finance should be governed by a number of principles that secure its credibility as a philosophy and practice under any intellectual
regime. These principles should not be seen as a checklist against which research outcome should be tested or evaluated. It should be preferably used by researchers in order to assess the appropriateness of the methods employed, since they heavily impact on the nature of the research outcome. Drawing from the multidimensional criticism that the current stock of finance’s knowledge has attracted, from within and outside of its domain, it seems that our theories/models should have either predictive or explanatory power and be free of assumptions that change the nature of the phenomenon under investigation.

Although I disagree with the epistemological positions developed and defended by Friedman (1953) I find his argument regarding the predictive power of finance theories extremely useful. Our theories/model should provide the academics, practitioners and regulators, with frameworks and tools that warn against deviations from the norms. In finance, this axiom should be accepted a priori. Failure to comply with predictive requirements is both costly and embarrassing with adverse consequences on the credibility of the intellectual state. The main objective of financial economists should be to contribute to the effort to predict the future outcome of specific practices or policies under a number of scenarios. A plausible course for our efforts should be to describe, understand, explain and ultimately make predictions. Areas of current interest are, among others, the attitude against risk, investment decisions, tolerance of losses and pricing of certainty under different market conditions.

The recent failure of the normative approaches to predict the current crisis evaporated trillions of dollars from the stock markets around the world and destabilised the currency markets, not only those of emerging countries, but those of developed countries and push European countries on the brink of collapse. The collapses of Bear and Stearns, Lehman Brothers, ING and of a number of other corporations internationally that were systemically
important and the millions of unemployed around the world as a direct consequence of the current financial crisis provide excellent examples of how damaging and costly such failures may be. On the top of that, during the crisis period “the number of working poor living on less than a dollar a day could rise by some 40 million - and those at 2 dollars a day by more than 100 million” (Somavia, 2008).

At this point I have to agree with Friedman’s (1953) position that an economic methodology is tested by its ability to predict the phenomena for which it has been applied. Reflecting on recent market developments, it seems that normative approaches failed to respond to this axiom. Practitioners not only were not warned against the current crisis but they were taken by surprise, as well. In the words of McDaniel (2008: 1), chairman and chief executive officer of Moody’s rating agency, “Over the past several weeks, we have witnessed events that many, including myself, would have thought unimaginable just two months ago.”

This leads us to the second premise of financial methodologies. That is the pragmatism of their assumptions. Departure from this axiom creates superficial worlds, which are not identical with the ones we are researching into. Such assumptions include the rationality of investors, the subsequent ability of the markets to always reflect the correct prices (Fama, 1965; 1970) and the perfect markets, which secure unlimited access to capital at the same cost to all markets’ participants. That is an assumption that Greek, Irish and Portuguese people would find, at least, hard to believe.

Indeed, I see nothing wrong in normatively approaching financial phenomena by relying on a number of unrealistic assumptions as long as it is clearly stated that the resulting theories and models explain only how the investors should behave and not how they actually behave.
Nobody can deny a place to normative approaches to financial research nor can question its contribution to understanding how the world should operate. Their failure resulted not from what they discovered, which if restrained to an external perfect world is unquestionably correct, but from their attempt to persuade that the findings can be safely applied to the real world. For example, mounting evidence from recent market developments suggests that investors are not rational. Over the last years, they have been consistently underpricing risk (Greenspan, 2007, 2008; Bernanke, 2009; Trichet, 2009; Paulson, 2010) and obviously it was demonstrated that capital not only can became extremely expensive, but it can be totally unavailable, as well. It is interesting that all kinds of market credit lines were cut, not because of the availability of information, but because it was credit became simply unavailable (IMF, 2009). During the crisis the prevailing feeling in the markets was that the available information could not be trusted and the real information, such as the financial institutions balance sheets, was impossible to be processed. On the top of that, markets participants lost confidence on the credit rating agencies, the most sophisticated processors of financial information (ibid). Initially, the institutional investors underpriced risk and then they wanted to avoid it at any cost. They collectively rush to the exit, pushing the short term USA government bonds’ return to zero.

Friedman’s (1953) argument that methodologies should not be judged by their assumptions is problematic. If the purpose of research is to examine an external world that is perfect, in which the agents behave as they have to, then there is no objection in employing a number of assumptions that do not reflect the emotion-laden reality. However, if the purpose of the research is to examine the real world, then the unrealistic assumptions change entirely the behavioural identity of our objects, creating an artificial one. Subsequently, the findings of
such research will address issues of the artificial world and not of the one that the research was originally targeting at.

Two contrasting examples that illustrate the contributions of the financial theories/frameworks are provided by the capital structure irrelevance theory (Modigliani and Miller, 1958) and the financial instability hypothesis (Minsky, 1992). The capital structure totally failed to explain practitioners’ actions during the crisis, because it is based on all the unrealistic assumptions governing modern finance theory. It assumes that markets are perfect, granting access to capital to all, abolishing bankruptcy risk. It also assumes, contrary to observable reality (see IMF, 2009) that the information is freely available to all market participants and that investors are rational. The theory totally failed to incorporate changes in market behaviour, regarding confidence and liquidity. Although it has little, if any, explanatory and predictive power, it awarded Miller and Modigliani a place in the pantheon of Nobel prices. Although the theory supports that the capital structure has absolutely no effect on firms’ value, during the crisis we have witnessed a number of corporations across the entire spectrum of industries either to fail because of their capital structure or to forcibly renegotiate their capital structure with their creditors in order to avoid bankruptcy. Of course, as I have explained earlier, there is certainly nothing wrong with the theory per se. The theory perfectly explains how capital structure approach should be in an external, perfect world. The limitations lie on the way the theory has been marketed to practitioners, academics and regulators. A normative theory has been promoted as a descriptive solution.

On the other hand the financial instability hypothesis developed by Minsky (1992) present a perfect example of how a theory can be simple in order to be understandable by everybody with little interest in finance, explanatory and predictive, as well. It is free from all the
unrealistic assumptions of modern finance and it clearly explains what is happening in the real world. However, it gave Minsky only a place in “in the letters of private sector sell-side analysts to their clients.” (Spaventa, 2009: 6).

3.2.7. Assumptions and their ontological and epistemological implications
As I have briefly discussed in the previous section, the unrealistic assumptions have been the cancer of the knowledge body of modern finance. For instance, some assumptions not only are unrealistic, changing the properties and subsequently the nature of the phenomena under investigation, but are dangerous for the progress of knowledge, as well. For example, the assumption of rationality, firstly, changed the nature of the phenomena under investigation. It turned a complex financial world occupied by humans governed by complex interactions and susceptible to greed and fear (Selden, 1912; Keynes, 1974; Minsky, 1992; Akerlof and Shiller, 2009), into an external object. In this external world decisions are made by computer-like humans and linear uniformity governs everything. The recent financial crisis proved that relations among market participants are far from being linear. We have recently observed unprecedented systemic risks imposed by single financial institutions, whose direct financial transactions with other influential players were so gigantic that terrified practitioners and regulators. Moreover, their indirect relations with the entire economy cannot yet be estimated. It seems that it will take years of extensive research and debate for the full impact of the AIG and Lehman Brothers on the international financial system to be revealed and accurately measured.

Additionally, the assumption of rationality, which for years prevailed in the academic research, absorbed enormous intellectual resources that, for example, they could have been used in order to examine and understand the phenomenon of speculation. This could have
provided the practitioners and regulators with theories dealing with such phenomena and their subsequent impact. However, the assumption of rational agents, excludes the existence of such phenomena and any propositions claiming the opposite, found it extremely hard to qualify as knowledge (Kindleberger, 2000).

I do agree with Friedman (1953) that there is no point in dealing with the “personal characteristics” such as the colour of the hairs and eyes of the traders or their families. For these characteristics do not alter the nature of the phenomena under investigation. However, assuming that the traders or investors are rational, while are not, it thoroughly changes the nature of the phenomenon under investigation. A financial system occupied by rational agents, or in which rational agents prevail through arbitrage, will never experience a crisis such as the current one.

The main objective of the assumptions employed should not be only the simplification of the research. It should always be a cost-benefit analysis. If the advantages of employing an assumption are greater than the limitations imposed on the findings, then should be employed. If not it should be relaxed. Of course, such an analysis is highly subjective, and would never be a consensus among the researchers. However, assumptions that change the nature of the phenomenon under investigation should be avoided at any cost.

3.2.8. Conclusions and recommendations
Max Weber (1949) suggested that ‘Objectivity’ in social sciences, which reduces the empirical reality into ‘laws’ is meaningless. He drew from the complexity and uniqueness of social phenomena, arguing that pooling such phenomena into samples for the sake of statistical analysis deprives any findings of content, thus rendering them meaningless. What
makes phenomena such as the crash of 1929, 1987 and 2007 so ‘unpredictable’ is their uniqueness, which is governed by complex interactions between the actors occupying and forming the phenomenon under consideration (Kindleberger, 2000; Hayek, 1989; Minsky, 1992; Lawson, 2009) in a non-linear mode. For example, one of the main variables of the current credit crunch was the persistency of London Interbank Offer Rate (LIBOR) to remain at prohibitively expensive levels despite the efforts of central banks around the world, which inflated the financial system with trillions of dollars. The astronomical levels of LIBOR during the crisis reflected the broken confidence between banking lenders and borrowers. Trust among lenders and confidence, although pivotal in the frameworks of Kindleberger (2000), Minsky (1992) and Lawson (2009) are ignored by the neoclassical finance theory, which approach the financial phenomena as unemotional worlds.

Such phenomena do not render themselves to statistical analysis since the most persisting questions are about the ‘hows’ and ‘whys’, which can only be answered by more qualitative approaches. For example in order to reveal why the banks did not lend to each other during the specific period, we have to interview the bankers at a senior level, look at their confidential electronic communication and examine internal memos, which are not publicly available. Such an investigation will help us to trace the roots of the problems, understand them and start working on theories free from simplistic assumptions that better respond to real life financial phenomena.

Extending the argument of Taleb (2005) economists cannot afford to leave the tails, which have been proved to be materially fatter than what is suggested by normal distribution. Actually, the attention of the research community should be focused on the financial phenomena occupying the tails. Historically, the financial activity and the foundations of the
financial system frequently are disrupted by phenomena that do not comply with the assumptions of the normal distribution. Valuing methodologies and assumptions more than the phenomena under investigation is, from an intellectual point of view, extremely unproductive (Kindleberger, 2000). “Dismissing financial crisis on the grounds that bubbles and bust cannot take place because that would imply irrationality is to ignore a condition for the sake of a theory.” (Kindleberger, 2000: 221). As long as we refuse to devote the necessary intellectual resources to these phenomena, applying appropriate methodologies, which are able to incorporate the social dynamics into the findings, understanding of such phenomena will remain limited. As a result, the occurrence of such phenomena will be both unpredictable and ‘shocking’. Finally, I would like to conclude with the recommendations of Lawson (2009: 774) who suggested that

“it is apparent that the legitimate and feasible goal of economic analysis is not to attempt to mathematically model and perhaps thereby predict crises and such like, but to understand the ever emerging relational structures and mechanisms that render them more or less feasible or likely.”

The intellectual and monetary resources of the financial community should therefore be allocated on the basis of the ‘economic essence’ (Blaug, 1997; Kindleberger, 2000) of our findings and not on the basis of the perceived mathematical rigor of the methods employed. In paraphrasing Keen (2009), we are in great need of theories explaining how markets operate and not of theories promoting the markets. Probably the academic beauty of finance is that theories should prove themselves in the field of practice and not in isolated laboratories. It seems, “The human actors who make up market are not disembodied agents or abstract information processors, however convenient it may be for economics to model them as such.” (MacKenzie, 2009: 3). As Hayek asserted, (1989: 3) “We have indeed at the
moment little cause for pride: as a profession we have made a mess of things.” Unfortunately, his remarks sound more relevant today than ever.
Chapter 4: Data Analysis and Discussion

4.1. Introduction

In this chapter, I analyse, discuss and conceptualise the data I generated through semi-structured interviews. The main purpose of the analysis is to present a detailed account of the data in simple and logical order. Attention is given to presenting meaningful extracts, capturing the essence of informants’ accounts’ of experiences and knowledge (Saunders et al., 2007). The heart of the life of the data is found in the extracts, which enclose the understanding and perspectives of the informants regarding the specific issues under investigation. The frequent employment of extracts from informants interviews aims at helping the reader to relate easily to the, sometimes, vast amount of data generated, which, for practical reasons, it is difficult to be presented entirely in its pure form. From a methodological perspective, the primary objective of the data analysis is “to establish a phenomenon (i.e., show that something is empirically the case)” (Merton, 1995: 380).

After the presentation of data, I proceed with the discussion, which includes my own interpretation of the data. Having said that, the reader will be confronted with my ‘judgement’ (Saunders, 2007) which although will be bounded by a strong link to the data and literature, I understand that it is my own interpretation and understanding of a complex and dynamic world; the world of speculation at the upper floors of finance. A world that although it attracts the strongest minds on both practitioners and academics’ battlefields, it remains largely misunderstood, surprising and periodically terrifying (Galbraith, 1994; Kindleberger, 2000; Zuckerman, 2009; Markopolos, 2010; Lewis, 2010). Subsequently, the discussion, which follows the analysis, explains ‘what the data means’, providing my interpretations of the data and establishing a strong link between the findings and the existing body of knowledge. Based on Merton (1995) remarks, the main objective of the data
discussion is to explain the phenomenon established by the data analysis. The chapter is structured in four sections, each one supported by the relevant themes, which emerge from the data.

Firstly, I present the data related to factors facilitating the formation of the speculative bubble. This section is entitled ‘The seeds of speculation: How was the speculative bubble formed?’ It is linked to the first research question and its primary objective is to reveal the factors contributing to the formation of the speculative bubble. This section consists of three principal themes, which play a pivotal role in the formation of speculative bubbles, namely, the ‘displacement’, the ‘accelerator event’ and the ‘regulatory failure’. The first theme is looking at how the scene, from an economic point of view, is set for speculators. That is what is known in the literature as ‘displacement’ (Minsky, 1982, 2008; Kindleberger 2000). The ‘accelerator event’ explains how the mania is spread among the wider public, who because it lacks experience and knowledge of the stock market investments, push the prices to unsustainable levels, inviting the professional investors through the substantial rise of volatility and the benchmarks indexes followed by institutional investors. The first subchapter is completed by the presentation of the data demonstrating the impact of ‘regulatory failure’ in the speculative manias. The theme deals with the failure of regulators to cope with the supervisory and enforcements demands imposed by the ‘enactment’ (see Abolafia and Kilduff, 1988) of a speculative bubble, which substantially differ from normal periods.

In the second section, I present the data related to the characteristics of a ‘speculative financial euphoria’, which is expressed by the phenomenon of ‘risk paradox’. The section looks at the risk attitude of the institutional investors during the speculative bubble and its subsequent burst. The analysis is based on six key themes, namely, ‘uncritical optimism’,
‘myopic focus on returns’, ‘reckless risk taking and suppression of contrary voices’, ‘overtrading’, ‘collective trauma’ and ‘risk detestation’ that governs investment decisions after the burst of the bubble. The importance of the central theme of ‘risk paradox’ lies in the fact that it actually occupies the extremes of the risk attitude spectrum. The analysis indicates that the professional investors are victims of the speculative mania, as well, failing to avoid the extreme sentiment’s swings that characterise a speculative bubble (see Keynes, 1974 and Galbraith, 1992, 1994). The second theme of the section is the ‘uncritical optimism’, which explains the strongest vicious circle present in the Cyprus speculative bubble.

The third section, entitled ‘Fallacies affecting institutional investors’ includes the themes of ‘rumours’ and ‘speculative assumptions’ during the speculative mania. As the title suggests, the section examines the impact of rumours circulated during a speculative bubble and the faulty ‘assumptions’ on which institutional investors rely during speculative manias. Its importance can be found in the stories and explanations circulated in speculative bubbles in order to explain the apparent new ‘reality’. It is actually a short term triumph of illusions over substance, in order to enforce a new, more profitable, yet almost certainly unsustainable ‘reality’.

The last section of the ‘data analysis and discussion’ examines the institutional investors’ objectives. Contrary to modern portfolio theory (Markowitz, 1952, 1991), which suggests that the objective should be a risk adjusted return, the data suggests that they are heavily influenced by the speculative bubble. The institutional investors adjust their objectives, reflecting an emphasis on playing the game (Keynes, 1974; Smith, 1998), outperforming competitors and supporting affiliate investments through ‘strange friendships’ (Loizos interview).
4.2. The Seeds of Speculation: How was the speculative bubble formed?

4.2.1. Introduction

The first theme of the data analysis and discussion is focused on the factors setting the scene and facilitating the phenomenon of speculation. This section is related to the first research question, namely, “How was the speculative bubble formed?” which addresses the events and factors that set the scene for the speculation and sustained it until it formed into a bubble. The analysis starts with the data supporting the effects of displacement (Kindleberger, 2000; Minsky, 1982) on investors’ expectations and sentiment. Afterwards, the focus is placed on to what I call the ‘accelerator event’, which, normally, is a corporate action announced during the early stages of a speculative market, acting as an advertising campaign, promoting stock market investment as short term, riskless profit opportunity. Such events invite more inexperienced players into the markets, pushing the stock prices higher, thus, luring or adding pressure to professionals, who have to catch up with the benchmarks they follow. This section concludes with the ‘regulatory failure’, which in the case of the Cyprus Stock Exchange (CSE) helped mutating the stock market into a casino.

4.2.2. Displacement

In this subsection I present the data related to the events that set the scene for the speculative period, by altering the expectations of market participants and dramatically improving investment sentiment. The importance of ‘displacement’ in the formation of speculative bubbles lies in the fact that, contrary to its consequences, it is an event with economic substance that materially alters investors’ expectations (see Kindleberger 2000, Minsky 1982,
1983, 2008). In the case of Cyprus the first event that acted as ‘displacement’ was the political decision by the government to cancel the installation of missiles on the island, which improved political stability.

Louis, who is the most senior practitioner among the informants, pays particular attention to the facts ‘igniting’ the speculation. In the case of Cyprus he suggests that it has been the political decision to cancel the deployment of the missiles to the island. Turkey, which occupies 37% of the island after the invasion of 1974, on the information that Cyprus will be supplied with S-300 missiles from Russia, immediately adopted a polemical rhetoric, openly claiming that such a move is casus belli. The fact that the Turkey officially and publicly threatened Cyprus with a pre-emptive strike in the event of the plans to deploy the missiles not being cancelled clouded the economic prospects of the island. The decision to cancel the deployment of the missiles in December of 1998 removed the political risks related to the installation of the missiles in the island, significantly improving the economic climate. In the words of Louis,

“The igniter of the stock market rally of 1999 was firstly the decision from the part of the President of the Republic of Cyprus, Glafkos Klerides, to abandon plans for launching the S-300 missiles in Cyprus.” (Louis interview)

The announcement by the Cyprus government on the 29th of December that the missiles will not be deployed in Cyprus created euphoria among the local investment community. While the return of the CSE during November and December of 1998 was 0.95% and 0.59% respectively, it climbed to 0.12% in January and 0.15% in February of 1999. And that was only the beginning. It should be stressed that the issue of S-300 missiles was directly related to the talks regarding the reunification of Cyprus, which remains split after the Turkish

invasion of 1974. Thus, taking into account that after 1974 the biggest risk to the financial community in Cyprus has been the political risk resulting from the Turkish occupation, the cancelation of the missiles’ deployment removed a substantial amount of that risk. Subsequently, it elevated, at the same time, the hopes that there would be a solution to the Cyprus problem, which would have further removed political risk, creating abundant investment opportunities in the process of the economic unification of Cyprus. As explained by Louis

“This decision cancelled any polemic development and opened a new horizon regarding a solution to the Cyprus Problem and established the confidence needed for business. Consequently, the prospects for the economic growth during 1999 were good.” (Louis interview)

Actually, the political decision drastically improved the investment climate in Cyprus by reducing the most significant risk factor facing the island since 1974. This changed the investors’ expectations regarding the economic prospects in Cyprus considerably, making investors feeling more confident with long term investments, reinforcing a positive investment sentiment. In the same vein, Marios highlights the importance the political decision to cancel the deployment of the missiles had on the investment climate at the end of 1998.

“I have to say that the fact that the S-300 missiles did not arrive at the island reduced to a large degree the political risk. Before 1998 it was the issue of S-300. When it became clear that the S-300 will not arrive, the political risk was reduced and this was one of the reasons behind the entrance of a lot of investors in the market.” (Marios interview)

To conclude with, the information provided by informants converges to the fact that the political decision acted as an ‘igniter’ to the bull market that followed throughout the 1999.
By substantially reducing political risk, it materially changed investors’ expectations about Cyprus’s economic prospects. It actually set the stage for the speculative stock market that followed, by acting as a ‘displacement’ (Minsky, 1982; Kindleberger, 2000) event. In the case of Cyprus the first ‘displacement event’, dramatically improved the internal dynamics of the market by reducing political risk and improving the investors’ expectations. What is essential from an economic point of view is that the cancellation of S-300 altered the economic reality. It was an event that, in direct contrast to its far reaching consequences, was certainly grounded on economic substance.

Based on the data generated through the interviews, the second event that acted as a displacement was the acquisition of Paneuropean Insurance Company and its two associated insurance companies, namely, Interamerican Insurance (Cyprus) and Philiki Insurance Company, by the Popular Bank Group, known in the Island as Laiki. The insurance companies, which were controlled by the Shacolas Group, were acquired at an average premium of 30% compared to the closing price of the last trading day before the announcement. Being two of the most powerful, respected and well known business groups on the Island their moves were closely watched. Louis recalls that

“The second signal of this market was given by the acquisition of the insurers companies of Siakolas group by Laiki Bank. The Siakolas insurer group consisted of Philiki Insurance, Paneuropean Insurance and Interamerican. ... This acquisition from Laiki group provided 45 million Cyprus pounds liquidity in the market. The numbers I mentioned were very important for the time under consideration. This liquidity was enough in order to initiate investors’ celebrations. The additional liquidity ignited the investors’ interest.” (Louis interview)

32 The data have been calculated using the historical prices provided by the CSE. The acquisition was announced by the Popular Bank Group (Laiki) on the 11 January 1999. The premium was 24% for Interamerican Insurance (Cyprus), 35% for Paneuropean Insurance Company and 30% for Philiki Insurance Company. The actual price paid was £47 million Cyprus Pounds. For comparison reasons, the rate at the time of the announcement was 1 CYP to 2USD. Available at: http://www.cse.com.cy/en/marketdata/downloads.asp
The acquisition drew the attention of the investment community, it provided additional liquidity to the market and most importantly it improved market sentiment. As mentioned by Louis it signalled for “investors’ celebrations”. In combination with the first ‘displacement event’ that occurred in December on 1998, it massively shifted investors’ expectations and sentiment. The importance of the acquisition is stressed by Marios, as well. He believes that the initial stock market rise in 1998 and the first couple of months of 1999 were fuelled by the acquisition. He supports that:

“Basically, 1998 was the year that the stock market started performing well. The rise was fuelled by some agreements signed, especially in the insurance sector. That is when Laiki Bank bought the insurer companies of Siacolas; the Interamerican.” (Marios interview)

The interviewees pay particular attention to the fact that the acquisition improved investors’ sentiment. Although Marios recognises the contribution of the positive climate abroad, he is convinced that the spark is particularly attributable to the acquisition agreement. In his own words,

“Now, what happened after the agreement? An enthusiasm was created, which may have been directly affected by the investment climate abroad. ... However, I would like to repeat that the positive climate in Cyprus was not created by the climate abroad. It was only positively affected. Basically, the spark was given by the agreement between the Siacolas and Laiki groups, regarding Interamerican.” (Marios interview)

The findings are aligned with the observations of Minsky and Kindleberger, who supported that the positive change in expectations is grounded in facts with economic substance. The decision to cancel the installation of the missiles in Cyprus, belong to the realm of political influences over the pricing of financial assets. As suggested by Minsky and Kindleberger, it was an exogenous event that positively shocked the macroeconomic environment, by
improving the political stability in Cyprus. Actually, the political decision under consideration lowered the risk of owning local assets. In the same vein, the acquisition, which involved two leading players of the local economy, enhanced the fuelling of improved expectations and positive sentiment, as well.

Specifically, it improved investors’ sentiment, which according to Keynes (1974), Galbraith (1994), Chancellor (2000) and Kindleberger (2000) is pivotal to any speculative market. As suggested by these authors, it is the improved sentiment that will upgrade expectations, which in turn will feed back into sentiment, setting a vicious circle in motion. Although at the stage of displacement the circuit of improved sentiment and expectations is rooted in economic events, at the stage of boom, following the process of self-fulfilling prophecy described by Merton (1948), it will reach levels unjustified by the economic fundamentals, which is by definition the stage of bubble.

The stage of boom, which follows displacement, should not be taken for granted. The displacement will not be able to transform realistic valuations into boom, unless the improved sentiment and expectations grow out of control, leading to higher prices, which in turn will feed back into the sentiment / expectation circuit. Of course, the explanation of the transition from an in part externally justifiable perception of economic reality to unrealistic expectations, which lies at the heart of speculative bubbles, can be found in the work of Thomas and Thomas (1928: 572). More specifically, as they explained, “If men define situations as real, they are real in their consequences.”

Although at the stage of displacement reality prevails over illusions, its attractiveness to investors gradually fades away, since it cannot promise the ‘get-rich-quick’ scheme
(Guenther, 1911), which thrives in the stage of boom. The ‘get-rich-quick’ objective, which overshadows sound financial objectives during boom periods, is part of the theme of the fourth research question, which seeks to explore the institutional investors’ objectives in speculative bubbles. Economic reality, which is the unfolding events per se, during the stage of ‘displacement’, was gradually replaced by an illusionary world, which comes to life, sometimes for an extended period of time, through the consequences of investors’ misinterpretations and faulty assumptions. An issue that is discussed in detailed in the third research question, which deals with the fallacies affecting institutional investors.

As highlighted by the participants, the two events acted as catalysts for the speculative bubble, which was formed in 1999 in the Cyprus stock market. They sparked a material change in investors’ expectations and sentiment, which were translated in increased investors’ interest. For example, as shown in Table 5 (p: 212) the trading activity by turnover, which reflects investors interest, for January and February of 1999 increased 496% and 646% respectively, compared to January and February of 1998. The displacement was followed by the accelerator event, which acted as a powerful marketing tool, promoting the stock market to the general public as an investment opportunity for high, quick and riskless returns.

### 4.2.3. Accelerator event

Further to the displacement, which changed the market participants’ expectations fundamentally, the accelerator event improved the market sentiment further, bringing stock market investments within the reach of all political and economic classes of Cyprus society. According to the informants, in the case of Cyprus the ‘accelerator event’ that marked the

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beginning of a period of mass hysteria, was the IPO of Louis Cruise Lines. Being the biggest tourism company in Cyprus, the Louis Cruise Lines IPO served as a powerful marketing tool for the Cyprus Stock Exchange investments and its ‘extraordinary riskless returns’ (Christodoulos interview). Because of its size and publicity, Louis Cruise Lines IPO informed economic groups with no previous knowledge of the stock market, regarding the new ‘possibilities of easy, quick and huge returns’, giving them access to the stock market, as well. It created an illusionary way to richness, by completely removing the element of risk from the investment decisions. A self-imposed illusionary investment world, which as revealed by the data analysis, lured the institutional investors, as well. The ‘accelerator event’ appears in the early stages of the speculative manias, helping the dissemination of the virus of the ‘get rich quickly’ to the wider investment and non-investment audiences. Particularly, the IPO of Louis Cruise Line was oversubscribed by a factor of 60. Investors submitted applications for 1,274,766,000 shares, £510 million worth, for an issue of £9.5 million.

Christodoulos discusses in detail the IPO of Louis Cruise Lines and how it impacted on the investing public’s sentiment. An issue that was investigated in 2002 by the Parliamentary Committees on “Development Plans and Public Expenditure Control” and “Financial and Budgetary Affairs”. The findings of the Committees’ 365 pages report are discussed in the subsequent sections. Christodoulos stresses the tremendous impact of Louis Cruise Lines IPO on the investment public in the first instance, and then upon investment professionals. As he recalls,

“As a result, we have the start of 1999, which unfortunately shocked all, when suddenly the interest moved from the traditional investors, such as institutional investors or at least medium to long term investors, and suddenly all decided, when I say all I mean the entire social spectrum of Cyprus, that through the stock market will solve all their financial problems. From my perspective the ground-breaking event was the initial public offering (IPO) of Louis
Cruise Lines. ... Suddenly, we observed a dramatic situation in Louis Cruise Lines IPO, which decisively impacted on the stock market.” (Christodoulos interview)

Christodoulos emphasizes the impact of the IPO of Louis Cruise Lines not only on the investment community, but on social groups that previously had no links to the stock market at all. For example, while at the beginning of 1999 only 7% of the 250,000 Cyprus households owned shares, the number increased almost 33% at the end of the year. To make thinks even worst, 20% used a combination of savings and borrowing, while a 10% of the households used mainly borrowed money, thinking that this is an easy way to get rich quickly. Because of its widespread publicity, it acted as a successful advertisement of stock market investments. Most importantly, it informed, or better, misinformed, the general public that someone can get rich through the stock market unusually quickly, without bearing any risks. Giannis is particularly revealing about the widespread effects of the speculative virus.

“We had a very naive market, and, at the end of the day, when everything was going up like this, people betted their lives on. So, the speculation was taken not only by people who knew about speculation and investments, but was taken by grandmothers, it was taken by housewives, it was taken by farmers” (Giannis interview).

As we will see later on in this chapter, this had a dramatic effect on the investment behaviour of institutional investors, as well. The findings of the Parliamentary Committees, which are along the lines supported by Christodoulos and Giannis, are particularly enlightening.

“During the 1999-2000 period, almost the entire Cyprus public, mainly after the Initial Public Offering of ‘Louis Cruise Lines Ltd’, fell into a mass ‘hysteria’ for stocks, either of companies that had already listed their shares in the Cyprus Stock Exchange, or companies that applied for listing their shares and were in the waiting list, or even for titles of companies that they did not even apply for listing their shares in the CSE. The only aim of the investment public,

without being liable, surely, was not the investment in shares with intrinsic and certain value on medium to long term basis, but the quick, easy and big profit.” (p: 36-37)

The ‘accelerator events’ are not only powerful advertisement tools, providing a misleading picture regarding the risks and returns of the stock market, but also constitute the gate through which the investing public will enter the speculative game. For example, the ‘hysteria’ created by the IPO of Louis Cruise Lines necessitated the holding of stocks among the investment public. Since those who managed to subscribe in the IPO made an extraordinary return, the message was that everybody should subscribe to any new issues. In case this was impossible because of the huge demand the IPOs had after the IPO of Louis Cruise Lines, the investing public felt that it should buy the shares from the secondary market, pushing the share prices even higher.

For example, the following table presents the most representative IPOs of 1999. Although Louis Cruise Lines was not the IPO with the higher first day return, it acted as the catalyst for the attitude of both the investing public and the institutional investors regarding the expected returns.

Table 4: Examples of IPOs during 1999

<table>
<thead>
<tr>
<th>Security</th>
<th>Listing day</th>
<th>IPO price £</th>
<th>Trading range of first trading day</th>
<th>Average return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sharelink Financial Services Ltd</td>
<td>5/7/1999</td>
<td>0.5</td>
<td>2.56 – 2.7</td>
<td>526%</td>
</tr>
<tr>
<td>Caramontanis Bros Ltd</td>
<td>5/7/1999</td>
<td>0.65</td>
<td>1.55 – 1.86</td>
<td>262%</td>
</tr>
<tr>
<td>Louis Cruise Lines Ltd</td>
<td>3/8/1999</td>
<td>0.4</td>
<td>2.85 – 3.8</td>
<td>831%</td>
</tr>
<tr>
<td>Severis &amp; Athienitis Financial Services Ltd</td>
<td>14/12/1999</td>
<td>2</td>
<td>18.2 – 21.5</td>
<td>993%</td>
</tr>
<tr>
<td>Glory Leisure Holdings Ltd</td>
<td>27/12/1999</td>
<td>0.62</td>
<td>5.01 – 5.8</td>
<td>872%</td>
</tr>
<tr>
<td>Blue Island Fish Farming Ltd</td>
<td>28/12/1999</td>
<td>0.4</td>
<td>3.15 – 4</td>
<td>894%</td>
</tr>
</tbody>
</table>

According to the ‘Report of the Investigative Committee for the Cyprus Stock Exchange’ (2004: 49), the IPO of Louis Cruise Lines, which took place in June 1999, “is the point in time that we lose touch with reality, the intrinsic value of listed companies. The general public wanted to believe that they will get rich quickly.”

The hysteria created by the ‘accelerator events’ can be explained by the observation of Kindleberger (2000: 15). “Monkey see, Monkey do.” For, “There is nothing so disturbing to one’s well-being and judgment as to see a friend get rich.” The position of Kindleberger is along the lines provided by Stewart’s work on the takeover boom during the 1980s. According to Stewart, “What really fuelled the takeover boom was the sight of other people making money, big money”. A close examination of the events leading to the takeover boom reveals that the ‘accelerator event’ in that case was the successful purchase and resale of Gibson Greetings by William Simon. In only sixteen months the investors involved in the purchase and resale of Gibson Greetings made a 10,000% profit on the amount initially invested. As a result, “Wall Street couldn’t stop talking.” (Stewart, 1992: 97-98). The extremely lucrative trade by William Simon offered unlimited publicity to successful takeovers, inviting into the game a broad base of investors who had no experience or knowledge regarding takeovers. A period of unbridled speculation was underway. So was the case with Louis Cruise Lines IPO regarding the CSE. As shown in Table 4 (p: 168) the IPO of Louis Cruise Lines returned 831% on its average trading price in its first day of trading.

The dramatic effects of the Louis Cruise Lines IPO transformed investment activity into a short term speculating act targeted short term profit solely. Because of their success and the subsequent extensive publicity they receive, corporate actions happening during the early phase of boom periods that are both important and successful in the local context, such as the
IPO of Louis Cruise Lines in Cyprus, have dramatic effects on public sentiment. Combination with the lack of experience and knowledge of the investing public regarding stock market investments creates an investment frenzy, which lures even the most experienced institutional investors. That, in turn, through rising prices, boosts further the public appetite for investments in the stock market, thus increasing demand for shares, which increases share prices, creating again a positive feedback.

The findings are aligned with the observations of Kindleberger (2000). The way the accelerator event impacts on the stock market prices and the behaviour of institutional investors can also be explained by the works of Marshal and Keynes. They both observed that because of the inaccuracy of long term estimations, regarding the prospective yields of an asset, even professional investors rely on short term price fluctuations of the asset prices for their ‘investment’ decisions. Although this approach is by definition speculative and, as argued by Keynes (1974) is associated with little, if any, ‘social’ contribution, it is more profitable. More specifically, Keynes (1974: 154-156) argued that because of the inaccrurateness of the long term estimation of the prospective yield of an asset, even the professional investors, rely on “foreseeing changes in the conventional basis of valuation of a short time ahead of the general public,” (ibid: 154). That means that even for institutional investors, it is easier to forecast what the public opinion will be regarding the valuation of an asset, rather than to predict the cash flows generated by the asset, let’s say, in five or ten years’ time. Subsequently, the basis for estimating the market price of an asset is not the ability of the asset to generate cash, but the public sentiment regarding the asset in question.

For example, if institutional investors believe that the public sentiment on a particular financial asset or a class of financial assets will improve in the near future, they will start
buying the asset in advance discounting the expected event in the asset’s price, as it is happening during the period surrounding the accelerator event. This, according to Keynes (1974: 156), is the first degree of anticipating the average opinion. However, the investing public, because of its inexperience and lack of knowledge, keeps bidding up the already elevated asset prices. Its only guidance is the richness provided by the ‘accelerator event’ and the improved investment sentiment. However, Keynes supported that there are professional investors “who practice the fourth, the fifth and higher degrees.” of anticipation (ibid). It seems that it is this anticipation of professionals of what the public anticipates (see the original scripts of Marshall in Dardi and Gallegati, 1992) that blurs the boundaries between reality and illusion. As highlighted by Galbraith (1994), because of the conflict of interest affecting those inhabiting the illusionary world, it is extremely difficult for those inside to find a place in which to judge it as ‘illusory’. The ‘accelerator event’ complicates the situation even further for those playing the game. It is only once outside of the ‘illusion’ that common sense prevails. However, as history has demonstrated (Kindleberger, 2000; Galbraith 1992, 1994) then it is too late.

As evident from the data analysis, the ‘accelerator event’ utterly transforms the stock market into a game of anticipating what the average anticipation about the investors’ sentiment is. For example, after the IPO of Louis Cruise Lines returned 831% in its first day of trading on August 3, the stock market skyrocketed. It returned 78% in August after a spectacular 57% in July. My analysis, also, agrees with Marshall’s unpublished work on speculation, which has been presented for the first time in its original form by Dardi and Gallegati (1992). Marshall suggested that it is more profitable, even for the ‘shrewd and wealthy’ investors “to anticipate the action of the public” rather than to buy and hold.” (ibid: 589). The importance of the ‘accelerator event’ lies in the fact that it massively shifts the investing public’s sentiment,
which sets in motion the anticipation game. Additionally, the ‘accelerator event’ as it is revealed by the data, forces the institutional investors to play the game. As we will see in the fourth research question, entitled ‘Institutional investors’ objectives in speculative markets’, the valuations *per se* do not matter. In a speculative market, the institutional investors should outperform competitors. The risks involved became irrelevant. It seems that there is only one way to survive the relentless competition of returns in speculative bubbles. That is, especially after the ‘accelerator event’ and the massive entrance of inexperienced players, to keep anticipating higher prices. An anticipation, evidently, with disastrous consequences (Galbraith, 1994).

Despite its dramatic effects in fuelling the speculative mania, the ‘accelerator event’ has not received any attention in the speculative bubbles’ financial literature. Even though I cannot be assured regarding the reasons why the ‘accelerator event’ has not been identified and examined as a distinctive phase of the speculative bubble, it seems that it is because the attention surrounding its events and development has always been placed on the speculative madness of the public, at large, more generally rather than on the characteristics of the phase *per se*. For example, in their accounts of the episodes of speculative bubbles although Galbraith (1994), Mackay (1995), Chancellor (2000) and Kindleberger (2000) dealt extensively with such events, none of the authors has identified the ‘accelerator events’ as a distinctive phase of a speculative bubble. Such distinction is pivotal in understanding how the speculative bubbles are formed. It will tremendously help regulators to better tackle speculative episodes in their early stages. The importance of the accelerator event lies in its connections to the general public. It is the event that spreads the speculative mania among population layers, which do not have significant previous knowledge about the investment world. In turn, the investment frenzy which governs the investing public affects institutional
investors in two principal ways. Firstly, through the anticipation game and secondly, it forces even the most prudent institutional investors to engage in speculative activities in order to cope with the competing returns achieved by risk-friendly investors. More research is needed in order to understand particular aspects of accelerator events. For example, is it part of Kindleberger’s irrational crowd explanation or is strategically organised by powerful players as suggested by Abolafia and Kilduff (1988)? Or does it, as I believe, starts as an unorganised event supported by the shift in market expectations provoked by the ‘displacement’ and the abundant liquidity, and afterwards became a strategic tool in the hands of powerful established players, who take advantage of the situation? These are questions that can only be answered by further research, which will shed light on the speculative bubbles. Only then, will a more complete picture of these extremely costly periods be presented.

4.2.4. Regulatory failure
The last theme of the first section of the data analysis and discussion is the ‘regulatory failure’. This is an extremely powerful consequence of speculative markets, since it is directly related to investors’ confidence. The regulatory framework sets the rules for investors and defines the investment field’s regulatory standards, which are expected to create a conducive investment environment that, at least, makes the investment game fair. Although in the financial literature the topic of regulation deals mainly with the effects of regulation as a political act on the markets, normally contrasted with deregulation, I shall restrict myself here to the spasmodic decisions of the regulators at the beginning and during a speculative bubble. My focus is not on regulation as an ideological framework, but it is rather on the regulators and the impact their acts have on the formation and development of speculative bubbles. More specifically, on the regulators’ actions and inactions during speculative bubbles that create opportunity windows to powerful speculators, in order to take
advantage of the situation. Regulators, instead of containing the speculative activities within the limits allowed by law, through their action or inaction may create the regulatory space, which is necessary for speculators in order to flourish at the expense of long term investors and the investing public.

As demonstrated by the data generated, the regulatory framework not only failed to cope with the frenetic investment activity during the speculating period, but it bolstered it, as well. As I have mentioned, it failed to provide the basic standards required by investors, which is a fair game. That is to give to all investors the same opportunities and protect them from price manipulations. The regulatory failure manifested itself mainly in three areas, caused by regulatory action or inaction during the period under consideration. More specifically, the informants argued that the speculation was fuelled by a) the introduction of electronic trading without the support of an electronic clearing system; b) not suspending trading until all the unsettled trades were cleared, which mounted pressure on the stockbrokers offices, cutting potential sellers’ access to their shares; and c) setting a limit on the number of trades conducted each trading day.

4.2.4.1. Trading electronically while clearing manually
According to all informants, the most critical regulatory failure which sparked the speculative period was the introduction of an electronic trading system, replacing the ‘outcry’ method, without the support of a central, electronic depository system. That means, “only the execution of orders was electronic. The settlement was still manual.” (Loizos interview). The main consequence of this regulatory decision was a mismatch between the capacity for execution and clearing of the trades, resulting in tens of thousands of unprocessed documents. While the new capacity created for execution was theoretically limitless, because it was
supported by the electronic system, the capacity for clearing the trades was bounded by the manual procedures, which set a strict limit on the numbers of trades that could be cleared by brokers on a single day. Louis, as all the other informants, stresses the negative impact of the introduction of electronic trading without a parallel upgrade of the clearing system. He explains that

“The next step that pushed the market into a new phase was the fact that on the 7th of March 1999 the Cyprus Stock Market abandoned the outcry system. The negotiation of prices was direct between the brokers and involved a paper war. The trading session lasted for two hours and the executed trades were in the range of 1,000 to 1,200 trades on average. Then the Cyprus Stock Market adopted the electronic trading, whereas with the press of a button you could buy all the available shares of a title at various prices. That completely changed the course of the stock market. Unfortunately, only the execution of orders was electronic. The clearing was still manual.” (Louis interview)

The emphasis here is on the disturbance of what was considered as normal by the brokers with the introduction of the electronic trading system. For example, while the average daily trades for the first four months of 1999 were 703 trades and for the entire 1998 average daily transactions stood at 300, during May 1999 which was the month during which the partial automation of the trading system was introduced, the average daily transactions climbed to 1,398. Even worst, the number kept climbing and during November, 5,699 trades daily, on average, were executed (see appendix 2, p: 311). Of course, the electronic trading system upgraded the stock market and, as Christodoulos put it, “it moved it forward”. However, the regulators failed to provide a comprehensive solution to the manual procedures of trading and clearing. By upgrading only the trading system, immediately, as noted by the informants, the capacity for trading became theoretically limitless whereas the capacity for clearing the trades remained restricted by the manual procedures. The settlement of the securities was a precondition in order to register the stocks to the new owners, giving them the opportunity to
sell them, if they wished. Practically, securities that remain unsettled for more than the regulatory timeframe allows, not only traumatised investors’ confidence, they also contribute to price manipulation, as well. Specifically an investor cannot actually sell the securities until they get settled and registered. Christodoulos expands on the subject, by giving more details. He elaborates on the enormous difficulties created by the introduction of the electronic trading system without the support of a central depository system that would have allowed securities’ clearing to cope with the increasing number of executed trades successfully.

Christodoulos argues:

“The tragedy was that although a huge interest was created, [by some popular IPOs and the willingness of the banks to finance investments in them] the necessary infrastructure to support the demand was absent. What I mean with the term infrastructure? Until then, the stock market was based on the outcry system, requiring our physical presence. Until March of 1999 we were working with the open outcry. Consequently, each stockbroking house had maximum 4-5 stockbrokers. Each of us, we had a specific capacity of communicating orders; we had the list of our orders, screaming at other stockbrokers. That means that the number of orders we could execute was limited. Around 50-60 orders each. Multiply this by 4. That is 200 orders. Now multiply this by 15 stockbroking houses. It gives us 3,000 orders maximum, which was an extraordinarily high number for the period. Suddenly, the then president of the CSE, Papadopoulos, told us that the placement of orders will be automated. ... I attended the meeting that was called for this purpose. “Are you serious?” I asked them. And the president of the CSM told me: “What do you ask? Would you like to move backward or forward?” Then I answered them: “Of course, I am a strong advocate of the automated trading system. However, you cannot automate only the front engine, leaving the back manual.” “What do you mean?” he asked me. “Can you automate today the placing of orders, leaving the settlement manual?” I replied. “Of course.” he responded. Finally, I asked “Do you realise what is going to happen?” (Christodoulos interview)

Although the stockbrokers were extremely reluctant regarding the regulators’ plans to automate only the trading system, leaving the clearing system manual, and repeatedly warned the regulators about the negative impact this may have on the smooth operation of the stock
market, the regulators totally ignored these warnings. They choose to implement their plans without consultation with the market participants directly affected by the changes; in this case the brokers. Retrospectively, it is clear that the decision of the regulators to ignore brokers’ warnings in this case was disastrous for the stock market. As informants suggest, it resulted in tens of thousands of unsettled documents mounting in brokers’ offices leading to price manipulation, since the unsettled documents restricted sellers from selling their securities. On the September 24 the uncleared documents mounted to 76,594. For example, on the Christodoulos is revealing about the problems created and the subsequent “attribution of blaming” (Abolafia and Kilduff, 1988).

“And we started. The first month we had two thousand delayed documents, which later mounted to three, five, ten, fifty thousand documents. We ended up having 112,000 delayed documents. We were yelling. However, they kept accusing the stockbrokers. I say yes, of course the stockbrokers have their share of responsibility, because their back office, three months before, had a specific capacity. Within these three months, when the execution was automated, but not the settlement, which was manual, we were forced to employ people without to have the opportunity to follow the procedures. No matter what their productivity was. If you ask if they were mistakes, of course they were. If it was correction fluid on the documents, of course it was. Because it was impossible to find the best quality of people the very moment you needed them. There was not even time for training.”

Christodoulos directs attention to the negative consequences of the wrong regulatory decision regarding the partial automation of trading. The brokers, as highlighted earlier, were unable to cope with their back office responsibilities for clearing the trades in the face of the speed with which the transactions were produced by the newly automated system. As a result, thousands of uncleared trades were accumulated in brokers’ offices. The most direct effect of all these uncleared transactions was that the investors that bought the shares could not sell them because the transactions were neither settled nor registered, thus, contributing to the manipulation and/or distortion of prices. All the informants support that the Cyprus Stock
Market Council should have never proceeded with the partial automation of trading, automating only the transactions and leaving the clearing manual. Moreover the Council, as recommended by the interviewees, once the mounting documents from the uncleared transactions became evident, should have suspended trading for as long as it was necessary in order to clear all the trades. This leads us to the next theme, which is the resistance of the Cyprus Stock Market Council in suspending trading in order to clear all the transactions.

The findings are supportive of the work of Abolafia and Kilduff (1988) about the enactment process. Although it is extremely difficult to draw a line precisely separating adjacent phases of the enactment process, it is evident that enactment “is a political process set in motion by strategic action” which comes from competitive coalitions with competitive agendas (1998: 180). Although, the agendas of the brokers and regulators seemingly appear to be aligned, a closer examination will reveal their conflicting objectives. On the one hand, the brokers wanted a well-functioning market, resisting any changes that were considered as risky to their working environment and subsequently to their income. As insiders, they were mainly concerned with the stability of trading. They felt that they would be unable to clear manually the mounting trades resulting from the automated trading. They furiously resisted the changes promoted by regulators, which retrospectively judged have been disastrous for all the market participants involved. On the other hand, as suggested by the brokers, the Council of the CSE wanted to associate its term in office with a remarkable achievement. They wanted to “move forward” (Christodoulos interview) with the partial automation of trading as a first step towards a fully automated trading environment, ignoring or choosing to ignore the risks imposed by the partial automation of trading to the smooth functioning of the markets they supposed to regulate, oversee and protect. Surely, the magnitude of the negative consequences of their decision does not allow me to believe that they understood the changes
to the market dynamics caused by the partial automation of trading? They rather appear to have simply miscalculated the impact that poorly implemented technological changes can have on market participants.

4.2.4.2. Refusing to suspend trading in order to clear all the trades

As the interviewees suggest, the decision of the CSE Council to introduce the electronic trading system without updating the clearing system resulted in thousands of uncleared trades, providing the first premise on which the regulatory failure that helped spark speculation was built upon. The second premise of the regulatory failure was the refusal of the CSE Council to suspend trading promptly and for as long as was necessary to clear the outstanding trades; a decision that increased the uncleared transactions even further. The thousands of delayed documents from these uncleared transactions were mounting up in stockbrokers’ offices. Louis recalls that

“Circa 15-20 July we observed that the amount of accumulated documents from uncleared trades was so big that it prohibited further trades. We repeatedly asked the Cyprus stock market council to suspend trading for as long as it was necessary in order to process the stock of documents from the uncleared trades and send the titles to the shareholders. Initially our request was not heard. At the beginning of August it was clear that the problem was getting bigger and the Cyprus Stock Exchange Council agreed to suspend trading for two weeks. ... It was obvious that communication between the stockbrokers and the Stock Market Council was very poor.” (Louis interview)

According to Louis, the problem created by the huge amount of documents from the uncleared transactions by the middle of July was getting out of control. Based on a Parliamentary report\textsuperscript{35}, which examined the period under consideration, on the 2nd of August

the documents from the uncleared transactions amounted to 52,138; a multiple of the 500
daily transactions as they stood in February when the CSE Council announced its decision to
implement the partial automation of the trading system. The CSE Council failed to see the
obvious. That the settlement and registering capacity of the brokers and the listed companies
respectively, which were still manual, were simply unable to keep up and to cope with the
speed of the transaction capacity introduced by the electronic trading system. As mentioned
above, the delayed documents curbed the access of buyers to their certificates. Subsequently,
thousands of buyers were unable to sell their holdings; an irregularity caused in the stock
market by regulators’ wrong decisions. Firstly, the regulators decided to automate only the
execution of trading while leaving the clearing manual. Secondly, they allowed the problem
to get out of control by refusing to suspend trading in order to deal decisively with the issue
of uncleared transactions.

At this point, the ground that would allow the ‘insiders’ to manipulate the share prices was
prepared. The regulatory failure, as manifested through the wrong decisions made by
regulators at turning points, set the seeds of the uncontrollable manipulative practices that
were exercised by major shareholders during the speculative market of 1999. For example,
the buying interest was impossible to be matched by the sellers, not only because of a number
of factors that artificially inflated buying interest, such as the ‘accelerator event’ discussed
earlier, but because a significant amount of perspective sellers could not sell as they did not
hold the certificates of the stocks they purchased during the speculative period. During that
period, the Council of the CSE asked the brokers to execute a sale order only if the seller had
the certificate of the shares she wanted to sell. As a matter of fact, beyond the major
shareholders and the insiders only a limited number of investors have been provided with the
certificates of the shares purchased. On this matter, as Louis mentions,
“We executed trades without the certificate only if the securities were purchased by the broker asked to execute the sale over the last ten days. For example, if you wanted to sell using a different broker you had to wait for the certificate to be issued. This reduced the interest from the part of sellers, but it did not solve the problem because the buyers were waiting in queues. Consequently, it was a huge buying interest with a limited selling interest. At the time, the major shareholders, who had access to the registrar, managed to sell a huge number of shares, because they could easily issue certificates for their holdings. As a result, the investing public that invested in extremely high prices because of the limited number of sellers was exposed.”

(Louis interview)

According to Louis, the CSE Council in a meeting with all the interested parties and with the consent of the Securities and Exchange Commission, decided that an investor would be able to sell only if she either has the certificate of the shares issued or there are no more than 10 days from the day of the shares’ purchase, assuming that the order would be executed by the same brokerage house that executed the buy order. Although the rationale behind the decision was to curb open short sales by investors and minimize the number of trades executed per day in order to give the opportunity to the brokers and the registrars, as well, to cope with the executed trades, according to the informants, it helped the major shareholders to inflate the share prices and offload their holdings at the artificially elevated prices. That is a malpractice that would have been avoided had the regulators ensured that all the investors would have the same rights. Given the circumstances, it seems that suspending trading for as long as it was necessary in order to give time to the brokers and registrars to clear the transactions and issue the certificates respectively, was a more prudent choice. As supported by the informants, despite the good intentions on the part of the regulators, their refusal to suspend trading for as long as was needed coupled with their decision to regulate sales strictly, as described above, allowed the major shareholders to manipulate supply and demand through the delayed certificates.
Most specifically, regardless of the regulator’s intentions, the fact that immediately before the resuming of trading on the 4th of October 1999 there were still, on the 30th of September, 711 transactions not settled by the brokers, 3,000 documents returned by the registrars to the brokers because of mistakes identified on the documents, and 40,000 transactions without the shares’ certificates issued, gave the opportunity to the major shareholders to manipulate the supply of their companies’ shares. Subsequently, once more, during the 1999 speculative market, the stock market was prone to manipulation because of regulators’ decisions which although in themselves perhaps not wrong per se, were, in combination with the prevailing circumstances and the timing of their introduction, disastrous to the market. Marios observes in relation to the new sales’ regulation:

“This because it was a difficulty in the clearing system, an anomaly in the prices was created. During a certain period, a lot of investors wanted to buy, but the investors that wanted to sell couldn’t do so because they held no certificates. This contributed to the further inflation of the prices.” (Marios interview)

Because of the regulatory failure, the issue of price manipulation was raised by other informants, as well. For example, Giannis believes,

“We had one more distortion in Cyprus that I do not think that can be seen in many other places. Because of the lack of an appropriate legal framework and because of the lack of efficient certificate management system, we are the country in which the investors were buying shares, we had the various splits and the investors could not sell their holdings, while at the same time the major shareholders could sell because they had the certificates.”

Giannis extends the argument of Marios even further, suggesting that because of the regulatory failure the investors were not issued with the certificates of the shares purchased.

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He adds that this helped manipulate supply, thus, inflating prices. It seems that the manipulation of supply and the inflation of prices were exploited by major shareholders who had direct access to their companies’ registrars. Subsequently, the certificates of their shares were issued on time, while for the certificates of the holdings of individual investors massive delays were observed. The advantage of the major shareholders was particularly evident when the companies proceeded with splits, which was a common phenomenon during the speculative market of 1999. According to CSE data, they were 28 splits in 1999 and 9 during 2000. As shown earlier, the brokers during the speculative period were not settling the transactions on time and the registrars were not registering the new shareholders in order for the certificates to be issued. That gave a time window to the major shareholders, especially after corporate events such as splits, which required new certificates to be issued to all shareholders. Since for the sale of shares the certificate was necessary, the supply and subsequently the share prices were distorted, giving the opportunity to the major shareholders to offload significant quantities of their holdings at high prices. Christodoulos observes:

“It was up to major shareholders to issue titles to new investors. They knew the investors were without titles. That means that the supply was limited because they changed the rules and you could not sell without the title and the major shareholders were in control of the supply, pushing the share prices higher, since there was no supply. When the price reached a desired level, the major shareholders sold off. ... This happened to a number of firms; millions of shares. There you could see the traditional major shareholders selling off at the expense of the new coming alevin of the CSE.” (Christodoulos interview)

It was the responsibility of the regulators to protect the investors, making sure through appropriate regulation and enforcement that such malpractices have certainly no place in the stock market. On the contrary, not only did they fail to protect the investors, through mainly inopportune regulation they created a conducive environment for the major shareholders in order to exploit the “new coming alevin” (Christodoulos interview).
The findings are consistent with the results of all the investigations and studies conducted on the CSE for the period under examination. For instance, based on the findings of the ‘Report of the Investigative Committee of the CSE’ (2004), a representative case of supply manipulation from the major shareholders at the expense of all other investors is the example of Claridge Investments Ltd. Claridge on the 23/08/1999 decided to split its shares on the 22/10/1999 from £1 nominal value to £0.20. That is 1 to 5. The share price climbed from £1.30 that was traded on the 30 July to £2.62 on the 31 August, while the highest price reached after the split was £3.40. The company’s capital consisted of 12,001,815 fully paid shares and 6,000,908 partially paid shares of which 73.5% and 95.71% respectively were owned by the major shareholders and the board of directors. After the split, during November, when the share price skyrocketed without any fundamental reason, the major shareholders and the board of directors fully paid the 99% of their partially paid shares, listing them to the stock market and offloading them on to the unsuspecting public. The report reveals that in the second semester of 1999, during which the majority of shareholders could not sell the shares because they had no certificates, the major shareholders and the board of directors of Claridge Investments sold 9,651,426 shares, cashing in £22,639,981. That is an average price of £2.35, significantly higher than the £0.97 that the share was traded at the last day of the first semester.

Evidently, such cases have existed because of the regulatory failure. Regulators through their actions and inactions, especially through inappropriate regulation, have created an investment environment contributing to price manipulation. As one of the letters sent out by a swindle team to potential customers in USA more than 100 years ago read, “You are no doubt aware
that it is the large operators who reap the profits in speculation, while the outsiders, or small traders, are the “lambs” who are shorn.” (Hill, 1904: 141).

4.2.4.3. Setting a limit on the number of trades allowed each day

The last act of the regulatory failure is the decision of the CSE Council to introduce a limit on the daily transactions. After the CSE reopened on the 4 October 1999 it became evident that the issue of the uncleared transactions was not solved. Thousands of transactions were uncleared, and as a result thousands of shareholders were without certificates, unable to sell their shares. Then, from 15 to 29 October, the CSE Council limited the number of daily transactions to 2,000. That means that the trading sessions would automatically end when the 2,000 transactions were reached. The rationale was to limit the number of trades conducted per day in order to give time to the brokers and the registrars to clear all the past transactions and issue the certificates to all shareholders. However, once again, the regulators failed because the market participants exploited the new rule for the sake of more inflated prices. As Louis informs us,

“The discussed solutions at the time were, firstly, to have three trading days instead of five and secondly to reduce the trades per day to 2,000. That effectively meant that from the orders submitted by the stockbrokers only the highest bids and the worst sellers would prevail over a trading session. We ended up with trading sessions of 3 minutes for about two weeks. The stock market during this period was not only speculative but gambling, as well. From 15 November it was obvious that the plain operation of the stock market was out of control.” (Louis interview)

An issue that strongly jumps out from the analysis of the above extract is the inflationary impact of the introduction of the limit on the number of daily transactions on stock prices. By limiting the transactions in a speculative market, in which what are eventually seen to be perverse emotional impulses prevail over common sense, regulators created for buyers a
competitive environment without any sound criteria. For example, in a speculative market the investors want to buy today because they believe that will be able to sell tomorrow at a higher price (Keynes, 1974). When the investors know that only 2,000 transactions will be allowed they bid the higher price possible in order to make sure that they will be included in these 2,000 transactions. Consequently, the market became highly speculative with investors bidding up prices, since they knew that will be able to sell in an exceptionally short period of time at a much higher price. Christodoulos is particularly critical about the decision to set a daily trade limit, providing a vivid description of the situation created after the introduction of the new rule.

“The then we had the great foolishness to set a limit on the number of daily trades; up to 2,000 trades daily. I think that in this respect we are a unique text book case study. ... [This is] the best method of price manipulation and creation of an artificial market. What was happening at the time? The general public did not want to speak to the stockbrokers in order to seek their advice. They were standing in queues out of the offices, calculating the limits up. At the time we had two limits up. They instructed the stockbrokers to buy at the second limit up. I was not visiting the stockmarket during this period, because the trading session was lasting only for the preopening. That was the time needed by the computers in order to match the prices. We placed the orders overnight. The match lasted for only some seconds.” (Christodoulos interview)

The findings suggest that in speculative markets the shortening of the time available for trading is not helpful. On the contrary, longer trading days available to market participants provide them with additional time to reflect on their speculative decisions and environment in general. Although longer trading sessions will not solve the issue of speculative manias, they can help to alleviate the buying mania. According to Keynes (1974), the main characteristic of speculative markets is that the market participants are not concerned with the long term perspectives of the financial assets bought. They are concerned only with the capital appreciation of their investments over the short term. Shortening the time available for
trading does not help at all. The views of the interviewees do not agree with the findings of Pashiardis et al (2004), who found that the impact on the general index of the limit of 2,000 trades per day was not significant. Employing an econometric analysis of the CSE data from 1999 – 2000, they found that although a positive correlation between the decision to limit the trades allowed per day impacted significantly only on the total volume per day, which increased by 24%. However, the stockmarket returned 38% during October with the daily transactions for the whole month reduced by 43% (2,783 trades per day for 18 trading days) compared to September (4,885 trades per day with only 3 trading days).

To a degree, I agree with Galbraith (1994) that regulation alone cannot protect investors in speculative bubbles. However, as suggested by the interviewees, it is better when regulators avoid acts that further fuel or facilitate speculation, or even worst, gambling. Galbraith (1994: 2) correctly contended, “There is protection only in a clear perception of the characteristics common to these flights into what must conservatively be described as mass insanity. Only then is the investor warned and saved.” It is extremely crucial, especially to institutional investors who manage money professionally, to understand that awareness of the nature and development of speculative markets is crucial to their success and, sometimes, even their survival. An important aspect of speculative bubbles is the failure of the regulators to understand the complexity of the stock markets. They fail to understand the impact of their decisions in speculative markets. Guenther (1911: 102) agrees with Galbraith that

“There is but one way for [investors] to guard themselves against outright swindles and this is by the exercise of a little common intelligence. The brief investigation before investing will, in the majority of instances, save the investor his money. But the usual practice is to invest first and investigate afterwards.”
The issue is that if the investors have always been able to exercise common sense, the speculative bubble would have never come into existence. According to the most influential authors on speculative manias (Galbraith, 1992, 1994; MacKay, 1995; Chancellor, 2000 and Kindleberger, 2000), the founding premise of bubbles is the inability of the market participants to exercise common sense, for reasons that are well founded in situ, so long as the mania lasts. That is why the role of regulators is so vital in speculative bubbles. It is the only mechanism through which investors can be protected from their own madness and the manipulating practices developed by insiders. However, unfortunately, in speculative bubbles the regulators have not proved that they can protect investors. Actually, the data suggests that regulation was a seat belt that failed in the most critical moments; during the accident. That is why in the case of CSE the insiders have been able to manipulate the share prices, offloading millions of shares onto particularly the newest and most unsuspecting of ‘investors’.

Nevertheless, the data includes no indication about purposive strategic action, as suggested by the model of Abolafia and Kilduff (1988), on the part of regulators, in order to take advantage of the market circumstances, in coalitions with other groups of market participants, such as major shareholders or other insiders. It seems that the regulators were simply unable to handle a market environment which at the time presented new challenges, resulting mainly from inadequately planned and poorly implemented technological changes. The introduction of the electronic trading without the update of the settlement system is at the centre of the feverish speculative market during 1999 and its subsequent collapse. The changes unjustifiably took regulators by surprise. The stock market is by definition a dynamic environment in which the unexpected is much more frequent than the expected. Subsequently, regulators, mainly the CSE Council, have not been prepared in terms of responding to the challenges brought by the partial automation of the trading system.
Ex post, it is obvious that the implementation of the electronic trading required better preparation in order to give the opportunity to the brokers and the registrars to cope with the increased transaction brought about by the automation of the transactions. However, I think that the key to the smooth operation of the stock market is the ability of regulators to cope with new challenges, either expected or unexpected. As articulated by Kindleberger (2000: 73) “The propensities to swindle and be swindled run parallel to the propensity to speculate during a boom.” The manipulation of prices, according to Kindleberger, is an integral part of speculative periods. He identified a positive correlation between price manipulations in periods of financial euphoria and financial distress, as well. The malpractices evidently flourish in speculative markets, fuelling speculation even further, for as long as the mania lasts, and destroying investors’ confidence in regulatory institutions and the stock market itself when the prices collapse. The findings are in accordance with the historic accounts provided by MacKay (1995), Galbraith (1992, 1994), Kindleberger (2000) and Chancellor (2000), who expose the inadequate response of regulators during speculative markets. It seems that the reason behind the regulatory failure in speculative markets, when regulators’ success is most needed, can be found mainly in the work of Galbraith. The explanation he provides regarding the role of debt in speculative markets is parallel to the role of regulators in speculative bubbles.

He contends that investors are lured by debt instruments which reappear in all speculative markets under new terminologies and formulas. Although the debt instruments, in essence, are always the same, tend to reappear in more complex forms in order to prohibit complete understanding by market participants. For example, the collateralised debt obligations (CDOs) or any other acronym from the recent, subprime alphabet soup of instruments and
special vehicles that prevailed during the last speculative market that brought the international financial system to its knees was nothing new at all, regardless of what is generally believed. In essence, it was debt. As discussed vividly by Zuckerman (2009), Cohan (2010) and Lewis (2010), these apparent innovations were pure debt instruments complicated by mathematical formulae and new terminology that prohibited understanding by investors and regulators, as well. A graphic discussion regarding the complex ways the debt is presented to investors, in order to limit their understanding, is provided by Das (2010). Having being an insider in the world of derivatives since their inception, he exposed the ways in which investors were exploited by investment bankers. The investment bankers simply used exotic and complex terminology in order to load their unsuspecting and sometimes naive customers with debt. Simply, the regulators fail to understand the impact of excessive leverage on investors and subsequently on markets. Regulators have a good understanding of the impact of excessive leverage only ex post, while it is rather their immediate response that is vital to well-functioning markets.

In the same vein, although technological changes are imperative to the organisation of modern stock markets, often, at the time of their implementations, disrupt the traditional ways in which trading is taking place with unintended consequences on the supply of and demand for financial assets, as in the case of the CSE. Although, in essence, a technological improvement is almost always translated into higher speed regarding access to information and transactions, it is rarely understood by regulators at the time of their initial implementation. Such is the case currently for example with high-frequency trading that stands accused of being behind ‘flash crash’ of 6th May 2010 that resulted in a 5.6% collapse
in market value in only 24 minutes\(^\text{37}\). The solution, of course, is not to reject technological progress, but to make sure that all the market participants and particularly regulators understand their impact on the markets under consideration, which is an extremely tough call in advance of implementation in complexly interlinked markets and institutions. That said, general lessons from earlier implementations can be learnt. Regulators would be better positioned in order to face such challenges when they are aware of the impact the technological changes have on markets in general than many recent actions on their behalf in various locations would seem to signal. The more visibly more techno-markets of today are gradually replacing the more visibly human-markets of the past bringing into the markets not only new ethos but also the opportunity to the market participants to explore loopholes revealed by new technological advances. If regulators are to continue to support this trend they need to prepare themselves more fully in order to regulate the implications of their encouragement on market action suitably.

It seems that at the level of key market players, such as institutional investors and insiders, the framework of Abolafia and Kilduff (1988) provides an accurate theoretical platform in order to understand the organised attempts by powerful market participants to take advantage of the loopholes revealed or brought into being by technological advances in trading. Because such attempts to exploit the markets will always be present in speculative periods it is better when regulators remain alert, especially after the introduction of new technologies in the markets. Their failure to deal effectively with attempts by powerful market players to exploit the markets, precipitates the problems, creating new opportunities for malpractices.

\(^{37}\) An interactive graph with a good description of the events leading to the crash can be found in the Wall Street Journal. Available at: http://online.wsj.com/article/SB10001424052748704029304575526390131916792.html?KEYWORDS=flash+crash#project%3DFLASHCRASH_CHART_1007%26articleTabs%3Dinteractive
For instance, in the case of Cyprus the regulators failed to foresee the problems or the extent of the problems created by the partial automation of the electronic trading system. After the implementation of the new technology, the brokers and the registrars were unable to cope with the workload introduced by the electronic trading system, leaving thousands of trades unsettled and thousands of mainly retail shareholders without certificates. The failure of the regulators to cope with the new challenges created the space needed by some major shareholders in order to exploit the situation at the expense of the “new coming alevin”. The major shareholders ensured that they would be the only players with the certificates to hand, manipulating supply in order to offload millions of shares onto the market at inflated prices, as attested both by my informants and demonstrated with the example of Claridge Investments. Although there is categorically no evidence of this being a strategic intention on the part of the regulators nor that they engaged in strategic action in order to harm the markets, neither can it be denied that their failure to respond promptly allowed significant market players to exploit strategically the market conditions so created.

As I have discussed, at the powerful players’ level the framework provided by Abolafia and Kilduff (1988) provides an adequate explanation of the market participants’ behaviour and impact on the markets. However, at the investing public level the approach of Kindleberger provides a much more appropriate theoretical tool. The investing public is too disparate and disorganised to engage in strategic action in order to promote its interest, especially in highly dynamic and fast moving speculative markets. The investment behaviour and impact of the investing public en masse is better understood when seen as an irrational crowd, as suggested by Kindleberger, rather than as a purposive strategic player. It seems that in speculative markets, the ability to form coalitions in order to promote the self-interest of the team is negatively affected by the numbers of the participants involved and their marginal power. For
example, as we will see in a subsequent theme - namely ‘strange friendships’ - in order to be ‘invited’ into such ‘friendships’ you need to have the power to increase materially the benefit of the team with your participation. It also seems that such friendships always try to keep the number of participants invited to a minimum, perhaps in order to protect the privacy of their targets and achieve a better coordination and control over their resources. Of course, I understand that part of the regulatory failure can be attributed to the fact that the CSE was a developing market without a long history and bullet-proof regulatory environment.

However, I would like to highlight the fact that regulators repeatedly fail even in the most developed markets of the world with long histories of speculative periods, bubbles and regulatory debates and reforms. For example, Bernard Madoff managed to escape detection while he was running the biggest Ponzi scheme in history for over 40 years. Although the money missing from his clients’ accounts mounted to $60 billion, it can be said that he was revealed only by the burst of the bubble which halted inflows of new capital and made fabrication of profit impossible. The regulators in the USA, with regard to the case of Madoff’s Ponzi scheme, were failing for over 40 years. Perhaps then there are regulatory environments that are better than others, but no regulatory environment is bullet-proofed as both Guenther (1911) and Galbraith (1992; 1994) suggest.

In order to understand better how the speculative markets are formed, we have to research more extensively into the frameworks provided by Kindleberger (2000) and Abolafia and Kilduff (1988). A qualitative approach seems much more appropriate for the tasks under consideration, since the majority of the questions are of ‘why’ and ‘how’ nature. Why and how do the dominant players in the market - such as institutional investors, major shareholders and other insiders strategically respond to speculative markets, while the general
public follows, without any strategic instincts? Additionally, more research is needed in order to understand why the regulators repeatedly fail in speculative markets. Whilst Guenther (1911) and Galbraith (1992; 1994) make clear that regulation cannot do away entirely with the speculative risks attendant upon investment, surely that does not mean that we should accept all regulatory failure equally. Is some regulatory failure related to regulators’ assumptions regarding the dynamics of the markets or do regulators not cope promptly with the technological changes introduced periodically in the markets, as in the case of Cyprus?

The informants, although rarely explicit, imply that regulators have a set of quasi-taboos that are not willing to break. For example, the regulators are not willing to halt trading for extended periods of time. Is this related to reputational issues regarding regulators or it is simply a decision with political costs that nobody is willing to bear in financially euphoric environments?

The informants of my research also suggest that experience plays a tremendously pivotal role in successfully navigating a speculative bubble. This has weighty implications, mainly, for practitioners. It is a common practice, especially for the leading international stockbroking houses, to fire en masse the stockbrokers in collapsing markets, especially those who score badly, replacing them with new graduates once the market starts recovering. That means that the stockbroking houses remain largely inexperienced in the aggregate, giving up one of the most valuable assets they have in order to succeed in speculative bubbles. In the interview series conducted by Schwager (1990; 1992), experience has been highlighted by every single trader as a decisive factor in traders’ success. However, in the financial literature it has received little or no attention at all. More research is needed in order to shed light on the impact of experience in investment success. If investment success is positively correlated
with experience, it means that the markets are capable of learning and thus improving, in terms of efficiency, as well.

### 4.3. Risk paradox

#### 4.3.1. Introduction

The main objective of this section is to present and discuss the data generated through the semi-structured interviews in order to develop a theoretical framework explaining the phenomenon of ‘risk paradox’ in CSE during the 1999 speculative bubble. According to the informants, the risk attitude of institutional investors during the CSE speculative bubble and its subsequent burst was highly problematic. They were engaging with highly risky trades when the stock prices reached unsustainable high levels, while they became, at least, excessively “wise and prudent” (Christos V interview) when the stock prices reached unsustainable low levels. The data presented and discussed in this section explains how the speculative price movements feed into the expectations, risk attitude, and frequency and size of trading of the institutional investors during the speculative bubble under consideration. This temporarily self-sustained chain reaction created a speculative bubble, which inevitably burst, causing a ‘collective trauma’ to investors, who reacted by developing a deep repulsion to stock market risks.

The section consists of six themes, namely, ‘uncritical optimism’, ‘myopic focus on returns’, ‘reckless risk taking and suppression of contrary voices’, ‘overtrading’, ‘collective trauma’ and subsequently ‘risk detestation’. It seems that a positive feedback loop was fully developed during the boom stage of the CSE speculative bubble. The analysis shows that after the ‘displacement’ events and the initial justified rise in prices the expectations became
speculative, establishing a circuit between optimism, risk tolerance, and returns. The investors became uncritically optimistic, assuming that the high rates of return is the beginning of a new era (Galbraith, 1994; Kindleberger, 2000), which justifies speculative valuations. As a result, the investors myopically focused on returns only, engaging in reckless risk taking. This period of excessive risk taking leads to ‘overtrading’, which is the heart of the speculative mania. Overtrading lured even the most prudent institutional investors, diverting their attention away from the long term investments with sound fundamentals. After the substantial increase in the frequency, size and leverage of trading, which is the final stage of the speculative bubble, prices reached unsustainable levels, even by speculative standards. Unavoidably, as argued by Keynes (1974) the market became victim of the psychological swings of the speculators, and sooner than later collapsed. Afterwards, the ‘collective trauma’ caused by the subsequent collapse of prices forced investors to reprise risk, which during the speculative bubble was heavily underpriced. Finally, because of the ‘collective trauma’ investors developed an extreme aversion to risk, which I call ‘risk detestation’.

4.3.2. Uncritical optimism

This theme deals with the unrealistic expectations or ‘uncritical optimism’ as coined by Schumpeter (1939: 746), which provides the psychological rationalisation for the speculative trades of the institutional investors. That means that the true motives behind the trades in the speculative bubble under examination were masked, in order to provide a non-threatening explanation of the speculative mania and the reckless risk taking. The excessive expectations developed during the speculative bubble, although bear no resemblance to reality, they provided the pretext with which the market participants built comfortable justifications for biding up the speculative prices. As discussed in the previous section, the ‘displacement’, which occurred at the end of 1988 and early 1999, triggered an initial rise of prices, reflecting
the improved macroeconomic environment. The perception of political risk was drastically reduced and, most importantly, the investors’ expectations and sentiment were materially improved. However, the most notable effect of the ‘displacement’ events was that it set in motion a positive feedback loop between higher prices and improved expectations. An effect with far reaching implications.

The high return provided to investors because of the ‘displacement’, were used by investors on a steady basis for adjusting their expectations of future returns. Although in the absence of a new development capable of altering the economic prospects of the assets under consideration, higher stock prices means lower future returns, the investors adopted exactly the opposite approach. They operated throughout the speculative bubble as if higher prices meant higher future returns. While the entire 1998 returned a modest 18%, following a bearing 1997 (-6.23%), 1999 returned a spectacular 688%. Characteristically, July, August, October and November, returned 57%, 78%, 38% and 46% respectively38. Christos remembers that the climate was characterised by overoptimism and unreasonable expectations.

“Regarding the investment climate, of course, it was a tremendous optimism. They were also the statements from the various officials that we are cheap and we will conquer the skies. A tremendous optimism, I would say excessive, that in hindsight, as the phrase goes ‘when the speculation is easy, it is the most difficult period’. During that period, speculating in stocks was very easy and we are well aware of the consequences.” (Christos V interview)

Christos V describes an environment in which reason had an extremely limited role. What was significant at the time was the psychological state of the people involved in the markets.

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As we are informed by Christos V, over optimism conquered not only the investors, but the ‘various officials’, as well.

For instance, a number of statements in support of the inflated share prices were made by the ‘various officials’ during the speculative bubble. Probably the most representative statement at the time is that of the Executive Chairman of Cyprus Popular Bank, the second largest bank of Cyprus. Mr Kikis Lazarides on October 1999 stated in Χρηματιστηριακή, “Cyprus Popular Bank is the strongest paper in CSE.” and the investors should not worry about their investment because the prospects are brilliant (Χρηματιστηριακή, 1999). Once the bubble started deflating, the same official returned with a new assuring statement. In March 2000, he reassured investors, “Personally, I assess that the shareholders of Cyprus Popular Bank will become very opulent from the shares we offer them, because it opens before them an avenue of high returns and profitability.” (Χρηματιστηριακή, 2000) Of course, the share price of the Cyprus Popular Bank declined from its closing high of €28.96 on 29 November 2009 to €1.72 on 10 October 2002; a decline of more than 94%.

Christos V description regarding the ‘tremendous optimism’ and the unreasonable expectations, which in hindsight, were totally impossible to meet is in full agreement with the description provided by Galbraith (1992, 1994), regarding the speculative market of 1929. Galbraith supported that the excessive optimism spread throughout the investment community, including investors, bankers, regulators, administrators and the investing public, as well. The level of uncritical optimism was so high, “There was a sharp criticism of the prophets of doom.” (Galbraith, 1992: 93) as well. Market participants were not only uncritically optimistic about the state of future returns, but they could not even accept voices

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of concern. Nyberg’s report (2011: viii) that examined the systemic failure of the Irish financial system following the property speculative bubble, reached the same conclusions. Nyberg found that interviewees’ convergent views pointed to the fact that “Domestic doubters were few, late and usually low-key, possibly because it was thought that expressing contrarian views risked sanction”.

The uncritical optimism brought in the market a culture of excessive expectations that on the one hand they fed into the prices and on the other hand they created unsustainable levels of prices, optimism and expectations. The initial effect was to push the prices substantially higher, giving to investors exceptionally high returns in a short period of time, and then to fuel optimism and expectations supporting that the same level of extraordinary returns lie ahead in the foreseeable future, as well. As stated by Giannis, “in the first six months of 1999, I remember, the climate became very positive with high acceleration of returns and expectations of returns.” (Giannis interview). This line of reasoning is reflected in the accounts of the other informants, as well, who, as they say, the returns during the speculative bubble were exceptionally high, opening appetite for even higher returns. In the words of Emilios,

“When you were gaining 600% during 1999 you were not pleased. You had to earn 1,000% in order to be pleased. This is what prevailed and I believed this is the reason the bubble was created. They were the expectations of the people.” (Emilios interview)

According to the informants one of the reasons the speculative bubble grew out of proportions was the fact that the institutional investors were lured by the rising prices, as well. They thought that the inflation of prices would continue or that they would have the opportunity to get out of the market before the collapse. This was the dominant assumption
during the speculative bubble in CSE. Actually, the higher the share prices are the stronger the assumption is that the prices will keep climbing. The main issue with this assumption, when made by institutional investors, is that it keeps dragging prospective arbitrageurs into the speculative crowd. Christodoulos supports that the institutional investors, because of their knowledge, expertise and size, should have prevented the formation of the speculative bubble by selling when the prices reached obviously overvalued price zones. However, the vast majority of institutional investors, for reasons I discuss further in the next sections of this chapter (section 4.4 and 4.5), were caught by the speculative mania. They were victims of the circuit of uncritical optimism and the rising prices. The informants support that with minor exceptions the institutional investors failed to respond to their role as arbitrageurs.

“I feel [Christodoulos says] that the institutional investors did not liquidate on time, as they should. Instead of acting as catalyst, curbing the frenzy of climbing prices, they were affected by the rising prices and they mainly focused on paper profit. They kept watching the share price of Bank of Cyprus doubling, tripling and quadrupling. However, as I have mentioned, there were personal reasons involved, as well. Nevertheless, there were some major shareholders, such as Lanitis, that cashed in. We can find more large institutional investors [that liquidated]. Of course, they cannot be more than five that reacted correctly, by liquidating on the observation of the unjustified increase in the share prices. Additionally, there were some large individual medium to long term investors that liquidated partly. However, at the main, the increase in share prices affected everybody, in the sense that ‘I have to wait because the share prices will rise more’” (Christodoulos interview)

The informants support the view that the institutional investors were victims of the same forces that captured retail investors. It seems that this is one of the characteristics of the CSE speculative bubble. If we accept the argument of mainstream finance (Friedman, 1953; Fama, 1970, 1998; Jensen, 1978) that the arbitrageurs constitute the immune system of the markets, correcting misinformed trades by speculators, then the uncritical optimism destroys the capacity of the financial markets to cure themselves. Because, during the speculative bubble,
the circuit of uncritical optimism, excessive expectations and rising prices entrapped institutional investors, as well. Instead of providing a strong defence against speculative bubbles, they gradually surrender to the speculative mania, fuelling the speculative bubble even further. Christos K argues that the institutional investors submitted themselves to the speculative mania because

“They expected more profit. They expected the market to move higher. It was clearly a matter of psychology. It is exactly the same as with retail investors. At the end of the day, an institutional investor consists of some retail investors, sitting on a round table, making investment decisions. Consequently, what was happening with retail investors was happening to institutional investors, as well. For example, ‘It will move higher and our listed companies will produce aeroplanes, spaceships and they will go to the moon, too. And company A will penetrate USA market’. Consequently, they believed that the chicken will become ostrich. So, they were waiting that they will earn more.” (Christos K interview)

Christos K emphasises the fact that the institutional investors fail to act rationally because they adopted the psychology of the retail investors. According to the findings, an important characteristic of the speculative period under examination is that it downgraded the capacity of rational reasoning of institutional investors to the level of retail investors. The institutional investors were victims of the uncritical optimism and excessive returns. They were lured by the extraordinary short term profits of the speculative period, assuming not only that the high returns will persist, but that they are fully justified by the corporate prospects, as well. Informants converge to the view that, actually, during speculative bubbles, the institutional investors fail to apply superior reasoning compared to the retail investors. Actually, they are victims of the same fallacies. For example, Michalis remembers,

“The problem is that in Cyprus in 1999 [during the speculative period], the institutional investor was the average individual. Because, when big investment companies with asset funds over half a billion pounds were making decisions based on market logic only; that is the
psychology of the day, or even worst, the psychology of the fund manager, then I cannot called this situation smart money.” (Michalis interview)

The informants support that the most obvious, and, probably, catastrophic side effect of the uncritical optimism, was the massive shift in the focus of institutional investors to the short term returns at the expense of risk. Because of the extraordinary high returns, risk became a factor that was gradually strongly linked with forgone returns. During the fever of the speculative mania risk considerations were related to uncompetitive approaches that destroy the capacity of institutional investors to compete for the high returns available to everyone. More specifically, Michalis supports,

“During the [period] of the bull market, every time someone was dealing with risk, he was reducing his returns with no effect. Why? Because the market climate was clearly positive. You either have to be very sober or to have gone through the circle at least three times, in order to realise that ‘although I can gain 100% I will not. I will make only 50% in order to be safe’. Besides, it was absolutely not a risk issue. Anyone covering his back was making less money than the others, who at the end were able to behave aggressively buying out the more conservative investors. Consequently, the risk was marginalised. ... At the time were voices supporting that Cyprus will became the next Switzerland; that things will never be the same again. We had half of the analysts in TV channels, each one with his own opinion. If we play on a video these opinions today they will cause only laughing. Consequently, the risk factor was out of the picture. It was only that ‘we will cross that bridge when we get to it.’ Taking into account risk was reducing returns. Risk appeared in the picture later on. Only the declining share prices put the risk into the picture.” (Michalis interview)

Michalis highlights the risk-taking culture developed during the speculative period under examination. The interviewees suggest that the excessive risk taking attitude of institutional investors is both a disease and a symptom of the speculative bubble. Every time institutional investors tried to deal with the risk aspect of investing in the speculative bubble they were reducing their returns. They were putting themselves at a disadvantage compare to their risk-
takers competitors. Consequently, the speculative conditions were exercising tremendous pressure on institutional investors in order to take part in the excessive returns during the speculative bubble. It seems that the uncritical optimism, which kept fuelling the share prices, raised reputational concerns among institutional investors. Those taking a more conservative stance on the increased risks were damaging their positions and status among their competitors, by achieving lower returns. It was a persisting open invitation to the more risk conscious investors to participate in the party. It opened even prudent investors’ appetite for risk.

These findings are aligned with the observations of Keynes (1974) who suggested that institutional investors, especially with the improved organisations of markets, do not base their decisions on probabilities resulting from the relevant information concerning the assets under consideration as suggested by modern finance theory (see Markowitz, 1952, 1991; Fama, 1970; von Neumann and Morgenstern, 2004), but are rather guided by their expectations of what the other players in the market will do. Keynes (1974: 154-155) supported that professional investors “are concerned, not with what an investment is really worth to a man who buys it “for keeps”, but with what the market will value it at, under the influence of mass psychology, three months or a year hence.” Practically, this means that even if an institutional investor is aware that a stock price is inflated, if she expects the price to be inflated further, she will buy rather than selling. What will further inflate an already inflated share price? Both Keynes and my interviewees argue that prices will be further inflated by the market psychology, the ignorant individuals and professional speculators, as well. My interviewees go even further than this, suggesting that even professionalism is sacrificed on the name of speculative returns.
The remarks of interviewees that dealing with risk during the speculative bubble were damaging returns, creating competitiveness issues agree with the findings of Scharfstein and Stein (1990: 465) on herd behaviour among professional investors. They found, “Under certain circumstances, managers simply mimic the investment decisions of other managers, ignoring substantive private information.” Because the “managers’ investment decisions enable the labour market to update its beliefs about their ability.” the managers are extremely concerned when their decisions deviate from those observed among their competitors. In the case of CSE bubble, even fund managers that understood that the market was well into a bubble area, were preoccupied with their reputation. They were afraid of being among the very few fund managers not participating in the extraordinary high returns.

It seems that the issue of uncritical optimism exist because investors assume that the speculative returns will last either forever or they will manage to get out of the market before it readjusts the expectations about future returns to more realistic levels. In the latter case, the prices will collapse, since investors will run for the exit almost simultaneously. To paraphrase Keynes, the boom is a situation in which over-optimism triumphs over common sense, thus, it is destined to end in a slump (Keynes, 1974: 172). This is an aspect of the speculative bubble that is discussed in detail in the subsequent section (section 4.4.1).

4.3.3. Myopic focus on returns

The ‘myopic focus on returns’ is the second piece of the puzzle which I termed ‘risk paradox’. The theme of ‘risk paradox’, which is strongly represented in the accounts provided by the informants, deals with the institutional investors’ attitude regarding risk during the speculative period under examination. In 1999, the vast majority of institutional investors, evidently, focused only on the returns, ignoring the risks related to their investments. To a
large extent, the data suggest that some institutional investors engaged with the wildest forms of speculation in terms of the frequency of transactions and the size of their positions. Their risk attitude was related to their expectations, which, as we have seen in the previous theme, were uncritically optimistic. Consequently, it seems that the reason of persistence of the speculative bubble can be found in its mechanisms that distort institutional investors’ ability to balance between risk and return. At the zenith of the bubble, they underprice risk, while at bottom they overprice it. The ‘myopic focus on returns’ is the second symptom of the speculative bubble regarding the ‘risk paradox’. It appears relatively early in the speculative bubble, signifying that excessively risk friendly periods will follow. It is actually an early warning to both regulators and investors.

During the speculative bubble the investors became gradually exclusively focused on returns, ignoring the risks associated with the potential investments. Actually, the investors, even pension funds, in their discussions with fund managers they were explicitly stating that their only consideration was their investments’ return. Nothing else! The following excerpt from Marios’ interview is particularly revealing of the prevailing attitude of investors towards risk and return.

The investment climate “... was clearly speculative. I remember that a lot of institutional investors, such as pension funds, approached us in order to manage their money. They gave us the money by saying only ‘Just gain money for us. We do not mind where we will invest. Our members press us because everybody gains money from the stock market.’” (Marios interview)

The issue with the exclusive focus on returns, especially from the part of institutional investors, is that it totally transforms the stock market investments into a game, in which according to Smith (1998) the only objective is to play. Gradually, when risk considerations
fade away, as it is happening during speculative bubbles, the stock market, as observed by Keynes (1974) is transformed into a casino. New approaches to stock market investing have replaced valuation conventions that have been tested for centuries. For example, the returns provided by penny stocks are regularly associated with fraud even in the most developed countries (see Weiss, 1997). Interest in them and their share prices rise disproportionately to their prospects. Even institutional investors, in the run for extraordinary returns provided by stock markets during the speculative bubbles, focused exclusively on the returns, choosing to myopically ignore the high risks associated with penny stocks. This is one of the symptoms of speculative manias. According to Christos K description,

“Only the cheap stocks of 1 pound existed alone with the expensive of 10 pounds. It happened to me. ‘I want you to buy for me whatever is below the pound. These 5 stocks that are below the pound.’ Or what it was less than 2 pounds. I remember that we reached a phase where a customer - actually a lot of customers, and this has not happened only to me - in which we were told ‘I want you to buy for me whatever shares are below the pound. I do not want you to report to me what you bought. Just buy them for me.’” (Christos K interview)

It seems that the speculative bubble caused investors’ massive shift regarding their risk attitude. Instead of being more careful with the unjustified rise in prices, they became more risk friendly. The assumption at the time was that if the prices of the blue chips double and triple, the peripheral stocks will follow suit. It induced investors to draw an implicit line separating stocks to cheap and expensive. The issue is that this division has been made based on the absolute value of the stocks and not on a comparison of the price an investor has to pay in relation to the prospects of the stock. As supported by the informants, the division is arbitrary and reflects the perception of the investors regarding what is cheap, based on the absolute price of the ‘expensive’ stocks. For instance, in the extract presented above, initially, the division was drawn at the £1. Those stocks below the pound were considered as cheap.
They were expected to outperform the market since expectations rooted in the uncritical optimist examined at the beginning of this section suggested that they have to move much closer to the absolute level of the ‘expensive’ stocks. In simple words, since the banking shares climbed in the area of £10 the peripheral stocks cannot remain below the pound. It is also that the volatility of penny shares becomes the interest - just because a small absolute shift in price becomes a relative large shift. And they are seen as a speculative investment on this basis. Therefore the pure risk is the reason for interest.

This was facilitated by the mass entrance of the investing public in the stock market who lacks the relevant experience and knowledge. As a result, the stock market indexes moved substantially higher, complicating the decisions of the fund managers who used these indexes as benchmarks. Although as explained by the informants, a number of institutional investors knew that the market was overpriced, they could not step back because, as I discuss in the following theme, they were afraid of losing ground to competitors. Drawing from Giannis interview,

“Investments by institutional investors were based on return. You have to look, however, on what is the benchmark an institutional investor had. If you are an institutional investor and your benchmark is the market, it takes a lot of guts and a lot of balls to call the market and say ‘I will liquidate and leave everybody there’. Because your fear is: ‘if it moves further? I will be wrong and my clients will crucify me.’ So, as long as I am with the market, no matter if it is up or down I am safer. That is the perception.” (Giannis interview)

Giannis supports that the main reason behind institutional investors’ failure to liquidate during the heights of the speculative bubble was the fact that they were afraid of missing the extraordinary returns, which were harvested by competitors. Having to choose between doing the right think, on the one hand, which is to stay out of the speculative bubble, risking to be
‘left out’ of the speculative returns in case the bubble persisted, and on the other hand, keep participating in the speculative bubble, risking to lose everything, they chose the latter. A choice consistent with Keynes (1974: 158) remarks, “it is better for reputation to fail conventionally than to succeed unconventionally.” As a result, as suggested by Marios,

“Unfortunately, instead of seeing the institutional investors rejecting those companies [with extremely poor fundamentals and no prospects], with the promise of quick profit they were investing in them. This practice contributed to the big bubble, as well.” (Marios interview)

It seems that the institutional investors, because, as supported by Giannis, they follow benchmarks which effectively represent the market, are easily drifted by the speculative returns. Again, instead of acting as arbitrageurs, as supported by the modern finance theory (Fama, 1970), they participate in the game (see Keynes, 1974; Smith, 1998), fuelling further the already inflated prices. The importance of participating in the game became even more pressing because of three reasons. Firstly, there are the expectations of investors. They expect extraordinary high returns. Secondly, there are the market returns, which validate the investors’ uncritical expectations. Finally, it is the pressure put on institutional investors by those competitors that participate in the game. Those institutional investors that chose to focus exclusively on returns, ignoring the risks, during the speculative bubble are generously rewarded by the market (Selden, 1912). Subsequently, the risk takers are considered by market participants as more intelligent and successful (Galbraith, 1994). Their investment approaches, although irresponsible, are validated by market returns, at least, for as long as the speculative bubble last. This is exactly the trap set to the prudent institutional investors. Gradually, those that chose to include in their investment decisions the factor of risk, as well, they are marginalised and proved wrong day after day. Subsequently, the rationale is to stay
invested, since everyone is participating in the game, which seems to last forever. According to Emilios, the thinking of the institutional investors is:

“Since they move up, let’s wait’. It was not only the role of speculation. A lot of funds had gains during 1999 and probably speculated, as well, gaining ever more. The point is that at the point that they had to sell, they were feeling the pressure, and they relied on wishful thinking that the shares will move higher; that ‘if we sell now what will the investment committees say.’ That is why a lot of funds stayed invested during the declined and they were found with the deficits.” (Emilios interview)

Even cautious investors during the speculative bubble progressively replaced reason with wishful thinking, which coupled with greed present a lethal trap to institutional investors (see Smith, 1998: 70). Both wishful thinking and greed are symptoms of speculative bubbles. The situation was simply exaggerated by the benchmarks, which validated the uncritical optimism, rewarding reckless risk taking, day after day. Marios explains that

“Everybody was trying to match the benchmarks, pushing the market higher. But it was absolutely no quantification of the returns in relation to the accepted risk. Everybody was obviously looking at the return only. The investment objective was clearly the big returns; nothing else. It had nothing to do with risk.” (Marios interview)

The ‘myopic focus on returns’ was the direct consequence of the uncritical optimism. Although initially it only supported the speculative mania, when it was validated by market returns it fuelled the speculative bubble even further. The critical point in this self-reinforcing spiral is the validation of the uncritical optimism through extraordinary returns, which reward those exclusively focused on returns at the expense of risk considerations. This finding is consistent with Selden’s (1912) observation that only irresponsible investors make money speedily in speculative markets. Initially, their irresponsibility allows them to ignore the risks associated with speculative markets and focus exclusively on the returns. Of course, when the
bubble burst, they will lose everything, but as long as the speculative bubble last, they are lucratively awarded by the market. On the contrary, prudent investors, make only “moderate profits in a bull market” (Selden, 1912: 94). The main side effect of the validation of irresponsible investors by the market returns was that even the prudent investors, who were cautionary because they identified the signs of unsustainable speculative mania fairly early in the circle, started questioning the correctness of their analysis. Gradually, the emotional drain from being wrong in a market where everybody else is correct gaining extraordinary returns proved decisive. At the end, even the prudent investors surrendered to the speculative mania. The findings are perfectly aligned with Nyberg (2011: viii) who reporting on the Irish property speculative bubble found “a long period of good times had reduced the numbers of those willing to continue to go against the prevailing and apparently proven consensus.”

Those investors that played the game from the beginning of the speculative circle, they gradually moved beyond the ‘myopic focus on returns’, entering a territory of reckless risk taking. The difference between the two is that the former signals the start of the speculative bubble from the part of investors, while the latter establishes it, creating systemic risks to the financial system, especially if the game is financed by borrowing. This leads us to the next premise of the risk paradox, which is the ‘reckless risk taking’.

4.3.4. Reckless risk taking and suppression of contrary voices
The reckless risk taking signifies a period of unbridled speculation during which the investors relentlessly engage in high risky trades. Not only they are myopically focussed on returns ignoring the factor of risk, but also they are transformed into risk lovers, in order to achieve even higher returns. In short, the speculation during the phase of reckless risk taking becomes pure gambling, with dramatic consequences on market’s volatility at first, and then on
investors’ physiological swings (see Keynes, 1974), preparing the ground for the subsequent collapse. It seems that the higher the gains of the market the higher the appetite for risk is. What Chancellor (2000), Galbraith (1994) Kindleberger (2000) and MacKay (1995) described as ‘madness’ it is simply a reckless risk taking culture driven by investors’ appetite for returns, which for reasons that are not clear yet to the academic community, during speculative bubbles are limited only by the sky (see Angelides 2011; Levin and Coburn, 2011; Nyberg, 2011).

According to the informants, during the CSE speculative bubble “At a point, it was not paid any attention to the relation of risk and return, especially at the peak of the market. Nobody was thinking about the risk.” (Marios interview). Initially, the institutional investors stop investing in risk free securities, signalling a shift towards more risky investments, in order to increase their participation in the speculative returns. Afterwards, they moved to much more risky securities and trades, with much shorter horizons. For example, the table below presents the five most active securities, by turnover ratio during 1999. Not surprisingly, all five securities are warrants, which are considered a much more risky security than the underline asset. Because of their speculative nature, they attracted a huge interest during the speculative period under consideration. Especially the warrants of Avacom Computer Services, Dodoni Portfolio Investment and Claridge Investments had a turnover ratio of 385.44%, 371.25%, 289.85% respectively. I mentioned these three securities, because even the underline stocks were of speculative nature.
Table 5: The most actively traded securities in 1999, by turnover ratio

<table>
<thead>
<tr>
<th>Rank</th>
<th>Name</th>
<th>Number of days quoted</th>
<th>Number of days traded</th>
<th>Ration of days traded to days quoted</th>
<th>Securities traded</th>
<th>Number of securities listed</th>
<th>Turnover ration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hellenic Bank Ltd (Warrants 1996/2000)</td>
<td>218</td>
<td>191</td>
<td>87.61%</td>
<td>31,382,714</td>
<td>8,097,531</td>
<td>387.56%</td>
</tr>
<tr>
<td>2</td>
<td>Avacom Computer Services (Warrants 1998/2001)</td>
<td>218</td>
<td>142</td>
<td>65.14%</td>
<td>4,355,444</td>
<td>1,130,000</td>
<td>385.44%</td>
</tr>
<tr>
<td>3</td>
<td>Dodoni Portfolio Investments Co Ltd (Warrants 1997/2002)</td>
<td>218</td>
<td>129</td>
<td>59.17%</td>
<td>3,309,870</td>
<td>892,000</td>
<td>371.25%</td>
</tr>
<tr>
<td>5</td>
<td>Claridge Investments Ltd (Warrants 1999/2001)</td>
<td>218</td>
<td>108</td>
<td>49.54%</td>
<td>12,527,545</td>
<td>4,322,034</td>
<td>289.85%</td>
</tr>
</tbody>
</table>

Source: Cyprus Stock Exchange (2004), Fact Book

In any case, risk understanding, measurement and control were entirely absent. As Loizos supports, “If the government bonds had been already bought, they retain them. However, they did not increase their position in such securities. They stop investing in risk free securities. They moved clearly towards more risky titles” (Loizos interview). The shift to more risky assets was not accompanied by actions measuring or dealing with risk. The interviewees suggest that institutional investors totally ignored the risk, which is a particularly interesting and important aspect of speculative bubbles. Christos K supports that the hunting for quick profit from the part of institutional investors,

“...was not rational. You cannot say that they measured the risk. If they had measured the risk, they would have looked on the variables of the market, the valuations, what was going on in the foreign markets and to act accordingly. Since they did not act, they had no understanding of the risk. They were following the wave, with the rest of the institutional investors, at least in their majority. Their way of thinking and acting was not rational.” (Christos K. interview)

During the speculative bubble, even institutional investors were deprived of their ability to think and act rationally. A direct consequence of their irrationality, which during speculative
bubbles rewards lucratively its adherents, was to adopt new approaches to risk dealing. Interestingly, it seems that it was a common practice to ignore it altogether on the name of the new economic order which could not be understood using the obsolete valuation and risk methods of the past. The tendency of the market participants to think “this time is different” has been well documented by Reinhart and Rogoff (2009) using the case of sovereign debt in both developing and developed, as well. They found that sovereign market, which is almost exclusively occupied by large professional investors, is characterised by a remarkably persistent regularity. The market participants during debt speculative bubbles assume that “this time is different”. At the end, as the authors suggest in the title of the book the result is “Eight Centuries of Financial Folly”, which cost dearly to borrowers, lenders and taxpayers, as well. What is the lesson from all these financial disasters? It is fairly straightforward. It is never different. Simply, during speculative bubbles investors are entirely consumed by the quick stratospheric profits available, choosing to ignore the risks that lie in the not too distant future. As revealed by Nyberg (2011: 94) regarding the case of Ireland collapse, “irrational forces were also present. ... Warning signs were ignored as continuing economic stability was confidently assumed.” And most importantly “Traditional values and practices were seen as less relevant in the new financial order.” The consequences are now well known; a government that fell apart and a country that surrendered its economic policy to a group of international creditors, including the IMF and the European Central Bank.

It appears that one of the most influential factors with regard to the reckless risk taking is the fear that the rules of the games have changed and the only way for the market to go is up. Subsequently, in such a market, the fear is that if someone liquidates, he will be left out of the game, which rewards all players with hefty short term returns. As Marios explains,
“When I say they were drifted by the quick profit; it was the pressure for performance, as well. Do not forget that, as I have mentioned, the main institutional investors were the insurance funds in which participated individual investors to whom the insurance agents sold investment plans. They were drifted in a sense that everybody was making money, so they could not be left out from the game. Certainly they were drifted by the quick profit, but it was this pressure of not been left out of the game. (Marios interview)

The pressure of avoiding being left out of the game in combination with the isolation and rejection of voices of concerns leads to what Nyberg (2011) called ‘conformity of views’. Again, the anxiety of playing the game and the rejection of contrarian views are reinforced by the validation of speculative returns that reward reckless risk takers. Although this seems to be one of the more powerful mechanism of speculative bubbles, it has been given little to no attention at all by the academic community (see Smith, 1998). Understanding how and why anxiety of playing the game is so powerful in fostering financial bubbles is pivotal in understanding and preventing speculative bubbles.

Galbraith (1994) identified the phenomenon of isolation and rejection of contrarian views during speculative bubble, having a personal experience of the phenomenon. In two occasions during financial euphoric mood, in 1955 and 1986, he publicly expressed the view that because of the excessive speculation “a crash was inevitable” (Galbraith, 1994: 10). In both occasions, his views were seen as an expression of jealousy about those making money. Condemnation, marginalisation and threats followed his public predictions that the party cannot last for long. As he suggested, vested interest from market participants does not allow them neither to see that widespread speculation is not sustainable nor to discern the circumstances associated with speculative bubbles.
In the same vein, Nyberg (2011) identified the phenomenon of isolation and rejection of contrarian views in examining the property speculative bubble in Ireland, commending on the phenomenon’s workings and severity. Similarly, he found that, especially, during a prolonged period of financial euphoria, people expressing contrarian views put “their jobs, positions, or reputations” on risk (Nyberg, 2011: iii). To conclude with, the CSE speculative bubble developed an internal mechanism which contemned threatened and marginalised contrarian views expressing concerns regarding the sustainability of the speculative bubble. This seems to be the case with every speculative bubble.

4.3.5. Overtrading

The phase of ‘overtrading’, according to Minsky and Kindleberger, lies at the heart of speculative manias. Investors engage in ‘reckless risk taking’, which in combination with extremely short term investment horizons and large positions on frequently illiquid assets financed by credit create an unsustainable market. The identification of overtrading periods offers a reliable sign to regulators that they need a plan for dealing with the consequences of the subsequent collapse. It is also a warning to investors that the music will stop sooner than later, and as Keynes (1974) correctly supported, there are not enough chairs for all participants. Actually, according to the informants, there are only a few chairs. It seems that the increased market activity, which is caused by speculators’ short term trades, provides the necessary liquidity and volatility needed by speculators, thus inviting more speculators to participate in the mania. The table below compares the turnover in value of 1999 with 1998 on a monthly basis. The turnover increased more than 1,000% for the year, indicating a 10 fold increase in the trading activity.
Table 6: Trading activity by month, by turnover value

<table>
<thead>
<tr>
<th>Month</th>
<th>Turnover in Value £</th>
<th>Change %</th>
<th>Monthly Return %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1998</td>
<td>1999</td>
<td></td>
</tr>
<tr>
<td>January</td>
<td>13,351,586</td>
<td>79,610,536</td>
<td>496.26</td>
</tr>
<tr>
<td>February</td>
<td>17,248,185</td>
<td>128,723,205</td>
<td>646.30</td>
</tr>
<tr>
<td>March</td>
<td>37,680,001</td>
<td>140,510,447</td>
<td>272.90</td>
</tr>
<tr>
<td>April</td>
<td>45,550,117</td>
<td>95,087,991</td>
<td>108.75</td>
</tr>
<tr>
<td>May</td>
<td>36,477,874</td>
<td>233,937,218</td>
<td>541.31</td>
</tr>
<tr>
<td>June</td>
<td>22,195,648</td>
<td>227,194,199</td>
<td>923.60</td>
</tr>
<tr>
<td>July</td>
<td>20,573,090</td>
<td>480,316,425</td>
<td>2,234.68</td>
</tr>
<tr>
<td>August</td>
<td>25,203,419</td>
<td>666,150,693</td>
<td>2,543.10</td>
</tr>
<tr>
<td>September</td>
<td>26,752,728</td>
<td>172,059,892</td>
<td>543.15</td>
</tr>
<tr>
<td>October</td>
<td>24,910,435</td>
<td>331,768,572</td>
<td>1,231.85</td>
</tr>
<tr>
<td>November</td>
<td>36,790,745</td>
<td>818,979,156</td>
<td>2,126.05</td>
</tr>
<tr>
<td>December</td>
<td>40,615,321</td>
<td>484,148,567</td>
<td>1,092.03</td>
</tr>
<tr>
<td>Total</td>
<td>347,349,149</td>
<td>3,858,486,902</td>
<td>1,010.84</td>
</tr>
</tbody>
</table>

Source: Cyprus Stock Exchange (1999), Fact Book

In this regard, Loizos supports,

“Suddenly, the facts changed considerably. I think that [institutional investors’] investment strategies changed in a way that reflected a more liquid market; they increased trading and were able to open big positions for short term profits. Because markets volatility drastically increased, someone could achieve significant profits through intraday trading.” (Loizos interview)

The speculators adjusted their trading behaviour to a new environment which was created by their own actions. For example, as shown by table 6, the new environment reflected better liquidity conditions, which allowed for bigger positions and frequent trading. Although when examined in isolation liquidity, bigger positions and frequent trading are signs of a vibrant market, when seen in the context of a speculative mania they are symptoms of a self-reinforcing spiral with systemic risks. When the majority of investors, as in the case of CSE, focus on large short term positions financed by credit, then they do not serve the liquidity needs of the market any more. They simply, as supported by Keynes (1974) transform the
market into a casino for their own benefits, because a liquid market is needed in order for speculators to thrive.

The following table presents the 10 most advanced securities during 1999. Again, not surprisingly, all ten securities listed are warrants. At the top of the list is Frindlays Investments, which is one of the most speculative securities of dubious quality of the period under consideration. Frindlays Investments climbed from 3 cents to 2.9 pounds; a return of 9,567% in less than 11 months.

Table 7: The 10 securities with the highest return during 1999

<table>
<thead>
<tr>
<th>Rank</th>
<th>Securities</th>
<th>Starting Price</th>
<th>Last Quoted Price</th>
<th>Return %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Frindlays Investments Ltd (Warrants 1997/2002)</td>
<td>0.030</td>
<td>2.900</td>
<td>9566.67</td>
</tr>
<tr>
<td>2</td>
<td>Era Split Capital Ltd (Warrants 1997/1999)</td>
<td>0.100</td>
<td>5.900</td>
<td>5800.00</td>
</tr>
<tr>
<td>3</td>
<td>Regallia Holdings &amp; Investments Ltd (Warrants 1999/2003)</td>
<td>0.250</td>
<td>13.940</td>
<td>5476.00</td>
</tr>
<tr>
<td>4</td>
<td>Era Portfolio Investments Ltd (Warrants 1998/2001)</td>
<td>0.145</td>
<td>7.720</td>
<td>5224.14</td>
</tr>
<tr>
<td>5</td>
<td>Apollo Investments Fund Ltd (Warrants 1996/2001)</td>
<td>0.230</td>
<td>12.070</td>
<td>5147.83</td>
</tr>
<tr>
<td>6</td>
<td>Knossos Investment Co Ltd (Warrants 1998/2003)</td>
<td>0.054</td>
<td>2.700</td>
<td>4900.00</td>
</tr>
<tr>
<td>7</td>
<td>Dodoni Portfolio Investments Co Ltd (Warrants 1997/2002)</td>
<td>0.150</td>
<td>7.380</td>
<td>4820.00</td>
</tr>
<tr>
<td>8</td>
<td>Athina Investment Co Ltd (Warrants 1996/2001)</td>
<td>0.231</td>
<td>10.990</td>
<td>4657.58</td>
</tr>
<tr>
<td>9</td>
<td>Cyprus Trading Corporation Ltd (Warrants 1994/1998)</td>
<td>0.270</td>
<td>11.000</td>
<td>3974.07</td>
</tr>
<tr>
<td>10</td>
<td>Minerva Insurance Company Ltd (Warrants 1999/2001)</td>
<td>0.184</td>
<td>6.400</td>
<td>3378.26</td>
</tr>
</tbody>
</table>


My findings are better understood when seen through the lenses of Selden (1912). During the phase of ‘overtrading’ the market, temporarily, is entirely in the hands of irresponsible
speculators, who as discussed in the previous theme, are richly rewarded by market returns, offering a strong motive even for prudent investors to follow. Since speculative investment approaches overwhelmingly dominate investors’ practices, they create a more liquid and volatile market, which in turn generates a more favourable environment for speculators. We can see in Table 5 (p: 212) that not only the 5 most actively traded securities in 1999 are warrants, which are much more risky than the underline security, but that the 10 securities with the highest return are warrants, as well (see Table 7, p: 217). At the bottom of the list are the Warrants of Minerva Insurance Company with an almost 34 fold increased. At the top of the list, we find Frindlays Investments’ Warrants with a 95 fold increase. These returns not only rewarded irresponsible investors who kept ignoring risk, but they put a lot of pressure on prudent investors who stayed out of the game. However, as Selden (1912) supports, this is a strong indication that the game will soon be over.

For example, during the overtrading period in CSE’s speculative bubble, the institutional investors gradually moved from the blue chips with sound fundamentals to peripheral stocks, which were, at least, of uncertain prospects. Emilios commends that, as happens in developed countries, as well, institutional investors preferred the speculative nature of the new listed stocks to the relatively more secure status of blue chips. This creates a materially weaken liquidity base.

Looking at Table 8 (p: 219), we see that while Treasury Bills and Government Bonds constituted 93.96% of the total funds raised in 1998, the amount declined to 60.03% in the speculative market of 1999. Also, IPOs almost doubled in 1999, accounting for 6.81% (£29,300,122) of the funds raised. The rights issues, which reflect investors’ appetite for shares and managers’ views on valuations, climbed to £77,115,129 (17.21%) from a tiny
£2,250,000 (0.48%). Additionally, although in 1998 listed firms did not raise any new funds with corporate bonds, in 1999 an amount of £77,115,129 was raised, at the expense of government securities, reflecting investors’ appetite for more risky assets, compared with their preferences in 1998.

Table 8: New funds raised in 1998 and 1999

<table>
<thead>
<tr>
<th></th>
<th>Fund raised £</th>
<th>% of total</th>
<th>Fund raised £</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Share Issues (IPOs)</td>
<td>17,015,625</td>
<td>3.65</td>
<td>29,300,122</td>
<td>6.81</td>
</tr>
<tr>
<td>Rights Issues</td>
<td>2,250,000</td>
<td>0.48</td>
<td>77,115,129</td>
<td>17.21</td>
</tr>
<tr>
<td>Corporate Bonds</td>
<td>-</td>
<td>-</td>
<td>71,500,000</td>
<td>15.96</td>
</tr>
<tr>
<td>Treasury Bills / Government Bonds</td>
<td>438,117,300</td>
<td>93.96</td>
<td>269,000,000</td>
<td>60.03</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>457,382,925$^{40}$</td>
<td>98.09</td>
<td>446,915,251</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Cyprus Stock Exchange (1998), Fact Book; Cyprus Stock Exchange (1999), Fact Book

More specifically, he supports,

“Because this is happening in more developed markets, as well, surely at a point, the liquidation of banking shares, which previously were the main investment choices of some funds, ended up liquidating them and investing in peripheral shares. It was a widespread feeling that since the banking shares have climbed, the other shares will climb, as well. As a result, we observed all these titles, immediately after the IPO; let’s do not forget that they listed during this period, to start a crazy ceremony. ‘Let’s buy and they will move up.’” (Emilios interview)

As we have seen in the theme of ‘myopic focus on returns’, the investors assumed that the peripheral stocks will follow the rally of the blue chips and since their price in absolute terms is remarkably low, the returns to the followers will be exceptionally high. However, it seems that this is the more risky phase of the speculative bubble. When speculators’ interest moves

$^{40}$ The total amount is 466,300,067, which brings the total percentage to 100%. The difference between the 100 and the stated 98.09% includes £3,388,891 (0.73%) for Conversion of Bonds and Warrants into Shares and £5,528,251 for Instalments on Partly-Paid Shares (1.19%)
to second tier companies, the structure of the speculative market becomes even weaker, bearing close resemblance to a casino (see Keynes, 1974: 159). This is demonstrated by the most actively traded securities (Table 5, p: 212) and the type and quality of securities with the highest return (Table 7, p: 217) during 1999. Giannis argues that according to speculators this is logical. As he explains

“... the fact that a bull market is deemed to start with the blue chips and to end with the peripheral stocks is not accidental. That is because at the last stage of every bull market, we have the speculation of what has not risen. For example, since the Bank of Cyprus was €2 and climbed to €10, there is no reason a peripheral stock to be below a Euro or not to increase fivefold. This is the most dangerous stage.” (Giannis interview)

As I have argued, the gradual shift of institutional investors from the blue chips to the periphery weakens the market structure. The market becomes excessively sensitive to speculators’ psychological swings. Especially those speculators that do not have the luxury of keeping the shares for too long. Most importantly, investors speculate now with stocks that under normal or negative market conditions do not have the liquidity or the quality needed in order to absorb selling waves resulting from investors’ psychological swings. Subsequently, when the mood turns negative the peripheral stocks cannot absorb the selling interest, signalling to speculators who are overloaded with such stocks, that the buyers’ interest cannot be taken for granted. The result is a sudden loss of confidence, which force speculators to run for the exit. Once more, as explained by Keynes (1974) there are not enough chairs.

The findings agree with Kindleberger and Aliber’s (2005) analysis that supported that overtrading is the most dangerous phase of the mania and when it “reaches sufficient dimensions” unavoidably prices will reverse course. For example, in USA in 2007 even if it is considered the most efficient market, all its systemically important financial institutions
presented the symptoms of ‘overtrading’. They overstretched their investments beyond their limits, they used excessive leverage and they were myopically focused on short term profit. On the top of that, a great proportion of their investments were on illiquid assets, which did not have the capacity to absorb any sellers under negative market conditions. The results are now publicly known. A bankrupted financial system, at least, in Europe and USA, which required and still requires trillions of taxpayers’ money in order to stay afloat. Regulators failed to protect the economies because they failed to see the overtrading symptoms.

According to the interviewees, ‘overtrading’ infects institutional investors, as well. As a result, they failed to act as arbitrageurs when the prices “reached crazy levels”. Instead they played the game along with retail investors (Michalis interview). They even overstretched their investments, especially in the case of insurance companies, making the market more vulnerable to psychological swings. Marios believes,

“The big increase in share prices was caused by the entrance of a huge number of retail investors. However, the institutional investors instead of controlling the market when the valuations reached crazy levels, they contributed to the euphoric climate, as well. They invested in the stock market beyond the percentage that they were allowed by the regulations. They overinvested in the stock market.” (Marios interview)

When systemically important financial institutions, which by definitions are institutional investors, finance their overstressed investment positions with leverage, then the financial system’s structure becomes unstable. Angelides (2011) found that Wall Street firms had leverage of up to 1 to 40. That means for every one dollar of their own capital invested they had borrowed and invested 40 more dollars, in order to leverage their upside. Of course the question from risk management perspective should be about the downside. At this ratio, a 2.5% decline in the investments’ values is enough to wipe out all the firm capital. Angelides,
also reported that the leverage of Fannie Mae and Freddie Mac had a combined leveraged ratio of 75 to 1. That means that a reduction of 1.34% was enough to wipe out all their capital. On the top of that they had a 5 trillion exposure to the mortgage market, which is almost 35% of the USA GDP. Having the regulators identified that all these are symptoms of ‘overtrading’ which inevitably lead to a crash, they would have been better prepared to deal with the ensued crisis. The issue is that when this is happening to large players, because of the huge size of their positions and their interconnectedness with other significant players they impose systemic risks to the overall economy. Thus, the price of not identifying and understanding the phase of ‘overtrading’ according to Angelides is unbearable.

“A series of actions, inactions, and misjudgements left the country with stark and painful alternatives - either risk the total collapse of our financial system or spend trillions of taxpayer dollars to stabilize the system and prevent catastrophic damage to the economy.” while still millions of Americans lost everything. (Angelides, 2011: 386)

### 4.3.6. Collective trauma

The analysis and discussion of ‘collective trauma’ is pivotal in understanding the concepts of ‘risk detestation’ and ‘risk paradox’, which is the main theme of this section. The collective trauma is the result of a price shock, which pushes the prices to previously unthinkable price levels. In a speculative bubble the prices climb to a higher level day after day, convincing investors that there is no return. The worst case scenario under the influence of positive collective trauma is a soft landing (see Nyberg, 2011). The negative collective trauma, which is the outcome of a violent bear market, in terms of emotional and financial strain, leads to ‘risk detestation’. The analysis and discussion starts with how the collective trauma was reinforced by the market collapse.
The negative collective trauma, which is the object of discussion because it leads to risk detestation, is a complex process, which is concluded with the collapse of prices to previously unthinkable levels. It is actually a shock that leaves impulsive memories to investors, associated with disastrous financial losses and emotional strain that according to Galbraith (1994) and Selden (1912) accompany investors for, sometimes, long periods of time. The emotional strain is not the result of the financial losses only. It is a combination of being wrong in a number of times regarding the bottom of the market and the accumulated losses resulting from being wrong. Emilios suggests that this process unavoidably leaves its marks to investors’ perceptions about the stock market. More specifically,

“...when the general index stood at 300 points, a lot of institutional funds re-entered the market, on the hope that the bottom was reached and a positive market was on the rise. Then, the index climbed from 300 to 370 points, where a second wave of liquidations started in combination with the international environment which was not good. Consequently, the index declined up to 72 points. ... You understand that at 72 points, nobody was interested in shares. Nobody! It was something that was not discussed any more. Nobody was interested.” (Emilios interview)

Although the institutional investors were positive at 300 points, which is 65% decline from the 850 points that was the highest level reached by the CSE during the speculative bubble, the next wave of liquidation, which brought the general index to 72 points, exhausted investors’ financial and emotional stamina. As we will see in the following paragraphs, for the following years investors could not detach those damaging memories, leading to the main symptom of the collective trauma, which is what I call ‘risk detestation’. Investors lose interest in the stock market, preferring non risky investments, because they overweight the possibility of slumps. Marios commenting on CSE’s speculative bubble of 1999 emphasises,
“Four years later, they were not willing to accept any risk. Absolutely no risk at all. Additionally, we had some institutional investors deciding that they will never invest in the stock market again; mainly pension funds. We have a lot of pension funds in Cyprus. In a number of them the investment decisions were made by people without any understanding of the markets. As a result, they had very negative experiences, because they deal with money deposited for their future, they decided not to invest in the stock market again. Regarding the cost of this crisis in terms of institutional investors, was that a number of institutional investors decided not to invest again in the stock market.” (Marios interview)

Marios argues that after the crash following the speculative bubble of 1999, investors were extremely negative regarding stock market investments. They actually were shocked by the magnitude of the losses. More importantly, during the years following the crash, they remained negative about risky investments, thinking that heavy declines are now possible. A possibility not seen during the speculative bubble, irrespective of the stratospheric level of stock prices. Collective traumas remain with investors until to be replaced by a new trauma which has exactly the opposite effects. For example, the negative collective trauma of the crash following the 1999 speculative bubble faded away and actually was replaced by a positive collective trauma caused by a nearly sevenfold increase in the prices of the two main banking institutions in Cyprus which affect heavily the general index. According to Marios, by the middle of 2007 investors start flooding the CSE again, with the prevailing perception being that ‘we have reached a new plateau of valuations and the worst case scenario is a soft landing’ (Marios Interview). Of course, the positive collective trauma is in a replacement process at the time of writing. It will be replaced by a negative collective trauma, which will be caused by the severity and persistence of the prices’ crash rooted in Greece’s economic problems. By the end of the current slump investors, once again, financially and emotionally drained by the losses, will be disinterested in stock market investments. Once again they will move from the ‘uncritical optimism’ to ‘risk detestation’.
As I have discussed in the previous section, the collective trauma is not only associated with the phenomenon of ‘risk paradox’, but it also has a therapeutic effect. Investors for as long as the effects of the collective trauma last are more prudent and sceptical, preventing speculative bubbles from happening. According to Christos, “All, to an extent, became more wise and prudent after this experience.” (Christos V interview). A statement which is in full accordance with the observations of Galbraith (1994) and Selden (1912). Emilios, referring to the therapeutic effects of the speculative bubble of 1999, supports that a speculative bubble of this magnitude,

“…will not happen [again] because you feel it. You are thinking what happened in 1999. ‘If I wait I will lose everything. Let’s get a 10, 15, 20 and 30 or 50% and I am pleased.’” (Emilios interview)

Investors are willing to take their profits, rejecting the possibility of new valuation plateau. The collective trauma, which dominates investors’ memories and guides investors’ decisions after price shocks, is the result of a financial shock caused to investors in terms of forceful memories. In a bear market, the shock can be a panic, causing widespread, previously unthinkable losses to market participants. The market participants that personally experienced the panic will not be able to get rid of the repulsive memories. The findings are in line with the reasoning developed by MacKenzie and Millo (2003) who observed that after the negative shock caused by the previously unthinkable decline in October 1987, investors reprised the possibility of events with devastating financial consequences. For example, the traders in USA priced in the options the possibility of a new crash of the same magnitude (ibid). In the aggregate, these repulsive memories will dictate investors’ behaviour for a long time after the event. It seems that the memories fade away only under two scenarios. They either have to be replaced by memories caused by a new shock that lies at the other end of the
positive / negative spectrum, or the market participants with direct experiences of the shock that caused the collective trauma should be gradually preplaced by market participants who have no personal memories of the shock that caused the collective trauma. Galbraith (1994) mentioned the South Sea Bubble and the 1929 crash while Selden paid attention to the panic of 1907 as the events with long lasting therapeutic effects. It seems that the phenomenon of collective trauma is essential in understanding the subjectivity of expectations, the risk paradox and the level of investors’ irrationality. Areas on which additional research needs to be done.

As discussed, it seems that the occurrence of a market shock prevents it from happening again. That is because investors are mainly concerned with what happened in the past, rather than what is possible to happen in the future. As explained by Arthur (1994, 1995) with the Bar example, following the reasoning of Selden (1912) and Keynes’ (1974) ‘guess game’ regarding speculative bubbles, the attempt of market participants is to guess what the other participants guesses’ are. In the Bar example, there are 100 potential visitors. However, they will visit the Bar only in case they believe that fewer than 60 people will visit the Bar. That means that when everybody predicts that everybody else will visit the Bar, nobody will attend it, because everybody estimates that the Bar will be crowded. In the same vein, when the vast majority of potential visitors predict that very few of the potential visitors will attend the Bar, they will adjust their actions accordingly, thus visiting the Bar. In this way, the subjective individual expectations invalidate the expectations shared by the majority of market participants.

After a negative collective shock, the impulsive memories enforce the conformity of views, exactly the same way as the conformity of views observed during the speculative bubble.
Affected by the previously unthinkable retreat of price levels, the subsequent losses, emotional drain and liquidity issues, the market participants keep thinking in these terms even when it is clear that they do not hold true anymore. It is extremely difficult for someone to express a contrarian view under these circumstances. According to Galbraith (1994: 88), the severity of the irrationality prevailing in speculative bubbles, such as “those of John Law, the South Sea Bubble, and the crash of 1929”, determines the violence of the collective shock. In turn, the violence of the collective shock determines the longevity of its effects on market participants. Regulators are more suspicious and alert, legislators are more active and investors, as observed by Galbraith (1994: 88) go through “a somewhat longer period of doubt, caution, and comparative sanity.” This is what I call ‘risk paradox’.

Is the transition from local markets to a single global market going to change this? Or is it going to increase the severity of ‘collective trauma’ through a stricter control of the conformity of views? It seems that the latter is more likely to happen. A single place for investors probably means that psychological swings will be more violent, inviting more speculative activities at the expense of long term investors (see Keynes, 1974).

While market participants have adopted uncritical optimism throughout the market rise, engaging in reckless risk taking, after the collective trauma which has been caused by the previously unthinkably low prices, according to my informants they avoided risk at any cost. This behaviour is irrational because, at first place, investors should have never ignored the stratospheric price levels during the speculative bubble, and secondly after the panic, which pushes the prices to unsustainably low levels, forcing out from the markets those investors that are weak financially and emotionally, as well, at least the institutional investors, should have been much more positive to risk. However, they do exactly the opposite. Investors
engage in reckless risk taking when prices are unsustainably high and they recite in ‘risk detestation’ when prices are unsustainably low. This behaviour, which is what I call ‘risk paradox’ has dramatic effect on volatility and price levels. ‘Reckless risk taking’ intensifies speculative episodes and ‘risk detestation’ curtails recovery of prices.

In the case of the CSE the first positive collective trauma was caused by the unprecedented stock prices rises during the speculative bubble of 1999. Although at a point, especially the institutional investors knew that the market was overvalued, every time they reduced their positions they were hurting their returns and damaging their positions among their competitors, shareholders and customers. As Loizos emphatically says “I am not afraid saying that I personally shouted that we have to sell. I think that this signal was close to 400 points. However, the market climbed an additional 400 points.” (Loizos interview). The main risk facing those who are brave enough to call an overvalue market and act accordingly is that the speculative mania can last well beyond investors limits, causing substantial financial and emotional strain to those not participating in the bubble. The findings are in consent with the observation of Keynes that the market can remain irrational for much longer than the rational investors can remain solvent, financially and emotionally, as well. A case perfectly demonstrated with the collapse of Long Term Capital Management (Perold, 1999; MacKenzie, 2003).

4.3.7. Risk detestation

The concept of ‘risk detestation’ concludes the theme of risk paradox. Along with ‘reckless risk taking’ constitute the two extremes of the investors’ risk attitude spectrum. By the end of the bear market following the speculative bubble investors’ attention was disproportionately consumed by risk considerations, at the expense of return. After the bubble collapse has taken
its toll, investors were strongly disappointed by the massive losses they experienced, engaging in de-risking, which is a new unexploited concept. It seems that at its extreme it takes the form of ‘risk detestation’, since a major part of institutional investors, such as pension funds avoid stock market investments at any cost. According to Charis, institutional investors

“...became much more risk averse. After this period, a number of institutional portfolios hold an important part of their assets in cash. ... Essentially, some fund managers became risk averse, by accepting no risk at all, and some fund managers tried to develop investment strategies that deal with risk management.” (Charis interview)

Although investors’ appetite for risk should be contrarian to the level of prices, actually, as in the case of credit (see Minsky, 1992; Kindleberger and Aliber, 2005) it is pro-cyclical. Institutional investors, according to the informants, became risk averse simply because of the negative collective trauma caused by the dramatic drop in prices, and not because of their expectations regarding the future cash flows of stocks. Charis distinguishes those institutional investors that totally avoided stock market investments because of the losses they experienced during the crash from those that understood that the problem is not the risk per se but the way they dealt with risk during the bear market. Subsequently, the latter group tried to deal with risk by developing risk management strategies. This behaviour is consistent with what happened in developed markets after the prices recovered from the bottom of March 2009. At this stage, the framework of Minsky and Kindleberger provide a sufficient explanation regarding the behaviour or institutional investors. At this stage, they are not the strategic actors that we meet during the ‘displacement’ that exploited the phenomena of ‘regulatory failure’ and ‘accelerator event’ at the expense of individual investors. Now they are victims of their own actions that created an unsustainable bubble that during the phase of ‘overtrading’ dragged in even institutional investors that remained prudent during the initial
stages of the bubble (Galbraith, 1992; 1994). It seems that the institutional investors at the end of the phase of ‘overtrading’ are part of the crowd and as such are treated, in terms of financial losses.

Financial institutions in USA, from the American International Group in insurances to Moody’s in credit rating industry have reworked their risk strategies in order to understand better, capture and manage financial risks. However, they have reworked their risk strategies in a way that does not reflect a risk detestation culture. Is this because developed countries experience less dramatic crashes with subsequently not so dramatic collective traumas? If this is the case, the financial and emotional drain caused by prices’ slumps in developed countries are not so deep in order to prevail the memories of the investment professional for an extended period of time, as suggested by Galbraith (1994). Or it is simply, as supported by Emilios in the discussion regarding the ‘collective trauma’, that we have only observed the first wave of liquidation caused by the credit crunch? It remains to be seen. Real time economics is the best experiment a financial researcher can ever expect.

In the case of CSE, the majority of institutional investors avoided risk at any cost because of the negative collective trauma. Charis explains,

“After 1999-2001 and until 2005-2006 nobody wanted to listen about investments. It was a period that the investors wanted in order to recover from the shock of the huge losses incurred during 1999 period. When the market start entering a normal phase again, the institutional investors start thinking that ‘I want to invest this amount, but what can I do in order to protect my capital if things go wrong?’” (Charis interview)

The information provided by Charis converges with the observation of Marios that for four years after the bear market nobody wanted to listen about the stock market. The investors
demanded a period in order to cope with the devastating losses experienced during the crush that inevitably, as observed by Keynes, Kindleberger and Galbraith, follows speculative bubbles. It seems that investors need a period, in order to recover, which according to Galbraith is proportional to the severity of the crush, which in turn is proportional to the severity of the speculative bubble. What is not clear yet, is if the main reasons behind investors’ ‘risk detestation’ are the financial losses per se, which make capital to invest scarce and expensive, or it is because of the emotional strain associated with the financial losses? This is an insufficiently researched area that needs more attention in order to gain a more complete picture of investors’ risk appetite pro-cyclical nature. Why are they so negative when they should be buying and are uncritically optimistic when they should be selling? Of course these questions, at least in the literature, are as old as MacKay’s (1995) classic ‘Extraordinary popular dilutions and the Madness of crowds’. Economists at the beginning of the previous century (Gibson, 1907; Selden, 1912; Butler, 1922), financial historians (Galbraith, 1992, 1994; Kindleberger, 2000; Chancellor, 2000) and more recently behavioural financial economists (Shefrin, 2002; Shiller, 2005; Akerlof and Shiller, 2009) blame it on emotional swings, which according to Keynes (1974) are parts of our animal spirit. All these authoritative sources converge to the fact that we are unable to control our emotions. This is what is supported by my informants, as well. Once again I would like to return to Keynes (1974) who masterfully described what is going on in markets without to fall victim of normative models. As he observed, speculative activities are reinforced by the improved market structure who allows speculator to employ their capital easily, quicker and for shorter periods. Coupled with the rediscovery of debt instruments (Galbraith, 1994) in more complex forms, which are always misunderstood by market participants at the time of their introduction seems to provide discernible parts to the puzzle.
At the bottom of the prices even institutional investors are too scared in order to invest. Instead they are heavily risk averse because of the powerful effects of the negative ‘collective trauma’. On the other hand, at the heights of the bubble investors are uncritically risk takers, because are uncritically optimistic and greedy. As observed by Butler (1922: 36) “the prediction of higher prices is advanced more rapidly than the prices.” Then the question is why? Why in emotionally laden periods, such as the speculative bubbles and the bottom of the busts, institutional investors fail so spectacularly. We have to take into account only the current credit crunch in USA in order to contextualise the magnitude of failure. The eighteen biggest financial institutions in USA were bailed out by taxpayers’ money. An issue discussed in more detail in the literature review. Galbraith (1994) Kindleberger and Aliber (2005) and Selden (1912) suggested that traumatic memories resulting from financial panics remain in investors’ memory because of the fear that this may happen again. An observation in consent with the MacKenzie and Millo (2003) who supported that institutional investors overweight the possibility of events causing traumatic memories. After all, as Keynes argued, (1974) our investment activity is the result of our psychological state rather than the outcome of calculated mathematical expectations.

The information provided by the informants is in full support of the critical impact of emotions regarding the phenomenon of ‘risk detestation’ developed during the last stage of the bear market, following the burst of the speculative bubble. Regarding the case of CSE, Christodoulos adds that after the bear market ran its course,

“The stock market as institution was distained. We reached a point whereas everybody on listening about the stock market wanted to vomit, because it created psychological problems, social problems and family problems, which to a different degree affected everyone. Do not forget that what we call institutional investors, are run by people. This thinking reached the
bone of every one. I tell you that the stock market was dramatically distained.” (Christodoulos interview)

Christodoulos emphasises the enormous physiological impact the negative collective trauma had on investors’ perception regarding not only risk, but the stock market as institution, as well. The findings are in complete accord with the observations of MacKay (1995), Galbraith (1992, 1994), Chancellor (2000) and Kindleberger (2000) who concluded that the popularity of the stock market moves in line with the level of prices. It is not accidental that, as discussed in the previous themes of this section, the mass entrance of investors to the stock market is observed when the stock prices have already left the ground. During speculative bubbles, as we have seen, stock market discussions is the main topic in social gatherings, leading to a proliferation of the media claiming expertise on investing. Nevertheless, it seems that after the ‘negative collective trauma’, the stock market and everything related to it is a curse. It is a subject which is not discussed any more. Not to mention practicing it. The informants also emphasise the human nature of institutional investors. It seems that they are not, contrary to what Keynes (1974) suggested, rational investors looking at the long term prospects of the stocks. They are speculators, or in the best case, they are investors, who invest based on their expectations regarding speculators actions. As Keynes argued, professional investors are excessively consumed by the mass psychology of the market rather than by “quantitative probabilities” (Keynes, 1974: 161).

As I have discussed, the ‘collective trauma’ which is proportionate to the severity of the bear market, damaged the psychology of institutional investors, as well. Because they could not get rid of the impulsive memories inherited from the bear market’s unthinkable losses, they are uncritically cautious. In short, we observe what I call ‘risk detestation’, which is the avoidance of stock market investments at any cost. The phenomenon of ‘risk detestation’
fades gradually with the passage of time. Actually as observed by Galbraith (1994) its durability depends on the severity of the losses. The data I generated also suggests that the ‘risk detestation’ disappears during the phase of ‘uncritical optimism’ of the next bubble, which it is only a matter of time. However, it kept out of the initial stages of the next bull market the majority of institutional investors, or at least limited their exposure to the market. For example, the bull market in CSE which started in the beginning of 2003 and lasted until the end of the summer of 2007 was missed by the majority of institutional investors. Michalis stresses the fact that

“A lot of institutional investors missed the second bull market of 2007 to a large degree because they were more risk cautious than they should. It is one thing being risk averse and it is another thing being risk cautious. Risk-averse means that I want risk weighted returns. This is different from looking only at risk. While during the market highs you were trying to stop people from investing, after the collapse you were trying to convince people to invest, but they remain unconvinced. ... Because a fund manager who went through the circle of 1999, reaching the bottom of 2002, and then a gradual advance starts in 2003, 2004, 2005 that leads you to 2007, and he has not enough market exposure, at a point, he starts feeling the pressure of his superiors, shareholders, the board of directors, who ask “why do we have returns below the returns of the market?” His return is below market returns because he has not invested the entire fund because he is risk cautious or at least risk averse.” (Michalis interview)

Michalis explains the impact of ‘risk detestation’ on institutional investors. While during the speculative bubble it was impossible to convince investors that they have to be cautious because the prices are inflated, after the collapse of the market it was impossible to persuade investors to invest because the psychological marks of the ‘collective trauma’ were still there. This is by definition the phenomenon of ‘risk paradox’. According to Michalis, investors start examining the possibility of getting or increasing their exposure to the stock market only when market returns rewarded with extraordinary profits those already participating in the
game. That means that the majority of institutional investors returned to the market only when the prices were already inflated.

4.3.8. Conclusions
To conclude with, the focus of research regarding risk in financial markets should be on how to increase risk understanding in order to prevent financial crises. As supported by the investigative committees set on both sides of the Atlantic regarding the last credit crunch (Angelides 2011; Levin and Coburn, 2011; Nyberg, 2011) and the testimony of the high ranking credit rating officials before the parliamentary committees in USA (Egan, 2008; Fons, 2008; Joynt, 2008; McDaniel, 2008; Raiter, 2008; Sharma, 2008) unfortunately we have devoted excessive resources in modelling risk without understanding it, assuming that the markets are efficient with inherent self-correcting mechanism. Consequently, a culture of risk justification rather than risk management was created (Angelides, 2011: xix) which proved to be disastrous for investors, regulators, main street and the free market per se⁴¹.

Even if it is not possible to prevent financial crises, as I am afraid that the case is, at least, we have to make sure that they will be less expensive and painful. However, in order to respond to this herculean task we have to accept, as recommended by Galbraith, Keynes, Kindleberger, Minsky and the abovementioned investigative committees that the financial system is prone to systemic errors. In short, the propensity of market participants to speculate should be accepted a priory. Not because we need it as a working hypothesis, but because this is what we observe for centuries in every aspect of finance. For example, both the narrative accounts of MacKay (1995) and the quantitatively based work of Reinhart and Rogoff (2009) leave no doubt about the regularity with which market participants speculate for centuries.

⁴¹http://www.globescan.com/news_archives/radar10w2_free_market/ (accessed on 15/02/2011)
now. It is truly remarkable that all these episodes of speculative bubbles share some common characteristics. For example, reckless risk taking is unsurprisingly always present. The same happens with the phase of ‘overtrading’, as it does with the concept of ‘risk paradox’, as well. They are integral parts of speculative bubbles. Local context always leaves its own marks, but the boom and bust circle is always the same. Charis emphasised the fact that the institutional investors during the CSE speculative bubble, with regard to risk, behaved

“... like someone who is drunk. A drunken guy can do things that would have never done in a normal state. In such periods, regardless of the fact that they are institutional investors, generally speaking, with only a few exceptions, they accept risks that under normal circumstances they would have never accepted.” (Charis interview)

Can we assume that in USA or in UK, for instance, institutional investors were sober and prudent during the last credit bubble? I am afraid that the answer is no. Can we assume that they are now, with the money that is flowing to the latest ‘safe, high return’ zones? It remains to be seen, but history does not allow us to be optimistic.

4.4. Speculative illusions affecting institutional investors

The third section, namely, ‘Speculative illusions affecting institutional investors’ is split into two themes. The first theme deals with the ‘assumptions’ on which the investment world of institutional investors is based on during speculative bubbles. According to the informants, during speculative bubbles, the institutional investors believe that the extraordinary rate of returns is a valid projection for the future. Additionally, they assume that the prices cannot collapse and in the rare case they do collapse, they will ‘get out first’. Evidently, the results of these assumptions have been disastrous. The second theme I present and discuss in this
section focuses on market ‘rumours’, which seems to be an integral part of the speculative bubble under consideration. The institutional investors during the speculative bubble of 1999 played the game of rumours. That means that they were heavily involved in fabricating, circulating and exploiting rumours related to investments they were interested in.

4.4.1. Unrealistic assumptions: when reasoning becomes a bubble

As discussed in the previous sections, the speculative bubble limits the ability of institutional investors to think and act rationally. The development of the speculative bubble comes along with a number of forces that negatively affect the capacity to see things as they actually are (MacKay, 1841; Galbraith, 1992, 1994; Kindleberger, 2000). Instead, the institutional investors found comfort into a number of unrealistic assumptions which helped justifying their ‘uncritical expectations’. The first assumption, which was met and adopted by institutional investors, thoughtlessly, eroded fact-based thinking, creating ample space for the illusionary world of speculative bubbles. As the informants support, there is an exceptionally strong link between the speculative bubble and the unrealistic assumptions. For example, Charis says,

“I think it [the environment] was clearly speculative, because no investment was based on any analysis or the prospects of the firms but the investments were based on the belief that the uptrend will continue. Investors accepted the risks of such a high valuation, because they would generate high profit by selling at a higher price to someone else.” (Charis interview)

The description provided by Charis includes two interlinked assumptions made by institutional investors, which are fundamental for the creation and then the prolongation of the bubble. Firstly, the institutional investors assume that the speculative rate of returns will
continue indefinitely. They do not set any specific targets regarding their projections for the continuation of the trend. They simply assumed that the speculative trend will continue. The specific attitude of the institutional investors can be explained by extending the analysis of Keynes (1974) into speculative markets. Keynes supported (1974) that because we do not know what is going to happen in the future, we simply project our current estimates about the rate of returns into the future, altering them only to the extent that our knowledge regarding the asset under examination is amended. That means that if the growth rate currently is 10%, we assume that the growth rate next year will be 10%, as well, unless we acquire a new piece of information which alters what we already know. In Keynes words (1974) we assume “that the existing state of affairs will continue indefinitely, except in so far as we have specific reasons to expect a change.” However, the issue in the case of speculative bubbles becomes exceedingly complex, since the main actors do not want a change. As I have discussed in sections 4.3.3 to 4.3.5 the institutional investors are lucratively rewarded by the speculative returns, so they have certainly no reasons to want a change. This point was raised by Galbraith (1994: 5) who observed, “the powerful personal interest that develops” during speculative bubbles makes investors overly optimistic about the future.

Actually, it is particularly convenient for institutional investors to assume that the speculative rate of returns will continue indefinitely. Not because they do not have the information needed in order to see that the bubble is unsustainable, but because they have a material interest in believing that the prices’ rate of growth will remain constant in the future. The wishful thinking results from the fact that they are already heavily invested. Additionally, as shown in section 4.3.4, a ‘conformity of view’ is imposed by speculative markets (Galbraith, 1994; Nyberg, 2011); an area that has been overlooked by practitioners and academics, as well. Subsequently, they have all the reasons, although the wrong ones, to believe that the
speculative returns will continue in the future, as well. In simple words, according to Keynes (1974) “We are assuming, in effect, that the existing market valuation, however arrived at, is uniquely correct in relation to our existing knowledge”. Of course, in speculative bubbles, all we know is that the uptrend should continue. Why? This is a question that is never asked during speculative markets. An attitude first recognised by MacKay as early as 1841.

According to Christodoulos, the unrealistic assumptions were not adopted only by institutional investors. They were fostered by lenders, as well, creating a situation where the prevailing of reason over wishful thinking would have had disastrous consequences to the all market participants. Subsequently, reason seems to be an enemy of speculative bubbles and its followers. That is why it is so forcefully ignored during speculative bubbles. Christodoulos supports,

The banks “allowed the investing public to borrow, and they tried to support the prices with whatever insubstantial statements they could think, because [in the first place] they could not even believe that the stock market could decline [substantially].” (Christodoulos interview)

Christodoulos’ observation points to Minsky’s financial instability hypothesis (1992) where after prolonged periods of prosperity complacent lenders relax their lending standards. Actually, they speculated, as well (Minsky, 1992; Galbraith, 1994). As stated by Christodoulos, they lent to not qualified borrowers for not qualified purposes, as it is the case of lending money to the investing public in order to invest in the stock market, especially during speculative bubbles.

The excessive lending by the commercial banks forced the Central Bank of Cyprus to send a number of circulars during the second half of 1999 and at the beginning of 2000, asking them
to terminate, with immediate effect, “credit lines, which under the existing conditions will end up in clearly speculative positions in the stockmarket.” Although the instructions of the Central Bank prohibited the provision of credit for stockmarket investments, which the Central Bank called “irrational short-term investments, which target at opportunistic profits of speculative character.” (ibid). The Central Bank returned with a new circular on the 24 November 1999, classified as urgent, instructing the commercial banks to stop, with immediate effect, “any provision of credit, when they know or there is reasonable ground to believe that will be used for the purchase of shares.” Ironically, the Central Bank of Cyprus sent a new circular on 29 November 1999, the last day of the bull market of 1999, instructing them to increase the margin requirement provided by existing investor accounts to 100% within six months.

To paraphrase Minsky (1992: 6) “Investment takes place now because [investors] and their bankers expect investment to take place in the future.” Lenders and borrowers share a common belief. ‘The stock prices cannot decline substantially’. But what if they do, as they actually always do after periods of excessive speculation? The informants suggest that everybody stampede to the exit, causing prices to collapse, which send more investors to the exit, which, in turn, drive prices even lower. A vicious circle that according to Kindleberger (2000) can only be brake by a combination of unreasonably low prices and liquidity injection by the lender of the last resort. It seems that the unrealistic assumptions inflict all market participants. It seems that the lenders’ only plan is that ‘we will cross that bridge if and when we come to it’. Evidently, this is a plan that always involves taxpayers’ money. According to

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42 Central Bank of Cyprus (12 October 1999) Circular Letter 6050/10, Accounts for Stockmarket transactions: trading accounts and investor accounts, Nicosia  
43 Central Bank of Cyprus (24 November 1999) Urgent / Circular 6050/10, Determination based on the article 38 of The Central Bank of Cyprus Law, Nicosia  
44 Central Bank of Cyprus (29 November 1999) Circular Letter 6045/10, Accounts for investment purpose: Investors or margin accounts, Nicosia
Christodoulos, “... at the main, the increase in share prices affected everybody, in the sense that ‘I have to wait because the share prices will rise more.’” (Christodoulos interview). A fatal assumption that trapped even the shrewdest of the investors. That is the point where wishful thinking transforms into greed, destroying investors’ entire mental and cognitive lines of defence.

The second assumption that is used by investors in order to rationalise their reckless risk taking attitude is that ‘even if the market collapses, we will get out first’. This is an assumption that entered the game at the highs of the speculative bubble. The reason is that at the highs of the bubble it is obvious to investors that the market is overvalued. This is especially true for institutional investors, because they have the expertise and knowledge in order to identify an overextended speculative bubble (Giannis interview). The issue is that they are not prudent enough in order to draw a line and get out of the market before the imminent collapse. The main characteristic of a bubble in such a saturated stage is that the valuations according to some extensively used quantitative measures, such as the book value and the P/E ratios of the listed companies are richly inflated (Giannis interview). For example, while at the end of 1998 the price to earnings ratio stood at 15.8 which is close to the historical average of developed markets, at the end of 1999 it climbed to 87. In the same vein, the price to book ratio increased from the moderate 1.6 to the inflated 8.4. A year later, at the end of 2000 the ratios deflated along with the share prices.

Table 9: Simple valuation metrics for CSE

<table>
<thead>
<tr>
<th>Valuation metric</th>
<th>31/12/1998</th>
<th>31/12/1999</th>
<th>31/12/2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>P/E</td>
<td>15.8</td>
<td>87</td>
<td>25</td>
</tr>
<tr>
<td>Price to Book</td>
<td>1.6</td>
<td>8.4</td>
<td>2.1</td>
</tr>
</tbody>
</table>

Source: Sharelink Securities and Financial Services (2001)
This is a case that has been well documented by Hussman weekly reports\textsuperscript{45} regarding the Standard and Poor’s 500 index in USA for the last 100 years. At this stage, the institutional investors knew that the market was overpriced beyond any financial justification. They even knew that it was overpriced even by speculative standards. Subsequently, a new assumption was needed not in order to replace the first assumption, but in order to strengthen its appeal, which started fading. The assumption supporting that ‘the growth rate in prices will continue indefinitely’ started fading in the eyes of institutional investors. A complementary assumption was needed. Therefore, the new motto was that ‘we will get out first if the market collapses’. This assumption created an increased comfort zone to institutional investors speculating in the bubble, extending the period of their gambling operations to the infinite future. According to Giannis, the ill fed assumptions kept all institutional investors in the game.

“So, it creates a situation where everybody knows that the market is overvalued, and there are no stupid investors, they all knew it was overvalued; everybody without exceptions. All institutional investors knew that the market was overvalued, all. But they believed that they will be able to beat the other ones. ‘The other guy is going to pay for it.’” (Giannis interview)

It seems that overconfidence is well settled during the late stage of the speculative bubble. Investors assume that they will be able to get out first in case there is a substantial decline in the market. The institutional investors are well aware that it is impossible for all investors to liquidate timely, however, they assume that will not be the ones left without a chair when the music stops. The findings suggesting that overconfidence is part of the investment game is consistent with the discussions and argument provided by DeBondt and Thaler (1985), Daniel, et al. (2005) and Odean (1999). The institutional investors, as supported by the

informants, overestimated the level of their knowledge and skills regarding their ability to exit a bursting bubble timely. The question that remains to be answered is whether their overconfidence at the later stage of the speculative bubble can be attributed to ‘biased self-attribution’, which was introduced by Daniel et al. (2005) or is an emotional and cognitive combination of risk ignorance and greed, which is rationalised through overconfidence and biased self-attribution? According to Daniel et al. (2005), the biased self-attribution is a situation where the confidence of investors grows when public information validates their private information, but it fails to retreat when their private information is contradicted by publicly available information. It seems that in the context of speculative bubbles, the institutional investors are concerned only with the level of asset prices. As long as the prices keep climbing their confidence follows suit. They become overconfident, believing that the extraordinary returns achieved are attributed to their superior skills (see Galbraith, 1994), ignoring the fact that it is simply a speculative bull market. An observation fully aligned with the answer given by old Mr Partridge to his fellow investors in Lefèvre’s (2005: 75) ‘Reminiscences of a Stock Operator’. “It’s a bull market, you know.”

However, the institutional investors believe that the extraordinary returns achieved during a speculative bubble are not because of the bull market, but they attribute them to their superior skills and knowledge. Marios is revealing about the level of institutional investors narcissism and arrogance in speculative bubbles.

“Firstly, they thought to special. That is because institutional investors with £50 million under management, suddenly they found themselves [fund manager] with £300 million. This created a feeling of success. They thought that ‘we made it’. Consequently, ‘we did something correctly’. They never attributed their success to the markets. They never thought of it as a divine gift. They are simply markets, and we were on the right side of trading in a bull market. They thought that ‘we did something right.’ This brought a piece of arrogance into the picture,
leading to an attitude, which rejected advices from third parties. ‘We know what we are doing. At the end of the day we are making money. How much money has this gentleman from Deutsche Bank made in order to advise us?’ This was the first symptom.” (Michalis interview)

The findings agree with Galbraith (1994) observation that investors achieving extraordinary returns in speculative markets attribute it to the superior skills and not to the inflationary pressure on the share prices because of the euphoric climate. According to Galbraith (1994: 5), “No one wishes to believe that this is fortuitous or undeserved; all wish to think that it is the result of their own superior insight or intuition.” Galbraith attributed it to the personal interest the investors have developed during speculative bubbles. As have discussed above, if you are heavily invested and making money, it is difficult to believe that the market can collapse. Actually, by accepting that the market will collapse equals with accepting that you will stop making money. In the same vein, Selden (1912: 93-94) supported, “These imaginary millionaires [are the by-product of] every prolonged bull market, only to fall with their wings singed as soon as prices decline.” It seems that wealth creation in financially euphoric periods is an illusion attributed to the speculative market, rather than to a superior skill possessed by investors.

Giannis raises one more fundamental issue with regard to the institutional investors’ assumption that ‘they will manage to get out first’. It is the aspect of practicality. Even if the institutional investors were able to time perfectly their exit from the speculative bubble, their size would not allow them to do so. For example, the supply provided by institutional investors would not be able to meet the necessary demand. As a result, the market will collapse without being able to sell. As articulated by Giannis,

“So, if there is a trend for a market to move up, just jump on the back wagon, get off the back wagon and you see that historically if you follow trends you make a lot of money just by
following trends. Just get off the right time. The problem is getting off the right time if everybody has to get off. If you are a small player, in this kind of circumstances, you may be able to get off [a small player can unwind its position without turning the market against him]. A big player cannot.46* (Giannis interview)

The assumptions are part of the illusionary mechanism of the bubble which distorts reality, providing comfort and justifications to those gambling. For example, especially the institutional investors, because they report to other stakeholders, such as investors that committed their money and the investment committees, they have to be able to justify their investment decisions. The assumptions examined above provided the mental justifications needed to the institutional investors in order to keep playing the game. Although Galbraith (1994) identified the two assumptions discussed above it attributed them to two different groups of investors. The first assumption of indefinitely speculative rate of returns was associated with the vast majority of investors. The second assumption, that the investor would be able to get out before the collapse, was associated with the “superficially more astute and generally fewer in number” (Galbraith, 1994: 3). This group, according to Galbraith’s analysis, is the one that normally sells to the top. Although Galbraith’s theoretical model provides powerful insight into the workings of assumptions during speculative bubbles my data do not suggest that a thick line can be drawn between those who adopt the two assumptions. It seems that the permanent nature of the speculative rate of returns is appealing even to professional investors. The second assumption of the ability to get out first appears to be supplementary to the first one. It enters the scene when prices are overinflated even by speculative standards. It is actually a rationalisation of second level. That is a mental and psychological attempt to justify the excessive risk taking that was so far based on the assumption that the prices cannot collapse, which was a first level of psychological and

46 For a detail explanation of this argument, see Lowenstein’s (2000) analysis of the failure of Long Term Capital Management to unwind its huge positions.
mental rationalisation. Therefore, when the assumption on which the first level of rationalisation starts fading, a new rationalisation is needed in order to reinforce the first one. At the top of the bubble almost no one expects the market to collapse. The assumption is that ‘in the rare case the market declines substantially, I will get out first’. That is why in the recent credit crunch everybody was taken by surprise. Only a handful of people were prepared for this; actually, people with socialization issues (see Zuckerman, 2009; Lewis, 2010).

4.4.2. Rumours: reason has no place in the realm of bubbles

According to the informants, the investment game during the CSE speculative bubble of 1999 relied heavily on rumours, as well. The theme of ‘rumours’, although it has not been given the attention it deserves by the finance literature, it seems to be present in every speculative episode (see MacKay, 1841). It appears to exert powerful forces even on institutional investors during the speculative bubble and its subsequent burst. The rumours are employed by key players in financial markets in order to manipulate demand and supply of stocks which interest them.

As we have seen so far, the willingness and ability to reason during the CSE’s speculative bubble diminished in direct proportion to the level of prices. The higher the level of share prices the less the reason found in the investment decisions. More specifically, “The investments decisions in this particular period were not based on fundamental data or on any quantitative or qualitative analysis, but they were based on market rumours, speculating what may happen with particular firms” (Charis interview). The informants’ views reflect an environment where rumours rather than any kind of economic or financial analysis were guiding investors’ decisions. In short, “the market was full of rumours that a lot of times were
false.” (Marios interview). Basically, the rumours are a practice as old as the markets, employed by large operators in order to manipulate investors’ decisions for their own interest (MacKay, 1841; Moses, 1887). However, because of the lack of relevant research, the mechanics of rumours generation, dissemination and influence over investors are largely undocumented. However, the decisive and illusionary nature of rumours was brought up by all informants. For example, according to Giannis,

the rumours “... are the nature of very speculative action. They are created because there are some truths or there are no truths at all. For example, if someone wanted to offload, he was spreading the opposite rumour. And it did happen. Usually this happens with people who want to deceive the market. It is market manipulation. And there have been market manipulations. Even if they were not [market manipulation], because of the speculation that was up there, everybody was to take a hit.” (Giannis interview)

The rumour or ‘false rumour’ as it is refers to the literature (Brace, 1913) is associated with attempts to manipulate asset prices. The practice consists of spreading to the market misleading information. However, there is no consensus among the informants regarding the conveyors of rumours.

For instance, Charis supports that the rumours were mainly spread by retail investors in order to influence the investing public rather than the institutional investors. In his own words, “Regarding the rumours that some people spread in the market, basically were spread by the investors themselves. It was a practice that guided the investment decision of the individual investors rather than the institutional investors (Charis interview). On the other hand, Marios believes that the rumours were fabricated and spread by stockbrokers. When describing the mechanics of rumours he says, “Look, the rumours were generated not so much from the institutional investors, but from the stockbrokers.” (Marios interview). A view consisted with
the limited literature on the subject. MacKay (1995), Moses (1887), Brace (1916) and Lefèvre (2005) all suggested that the rumours fabricated by insiders, large operators and brokers who have an interest on particular stocks or market. However, he continuous, “Even institutional investors bought on hearing the rumour.” (Marios interview). Because of the short term orientation of institutional investors during speculative bubbles they cannot resist the temptation of easy profits. Instead of acting against the false rumours, which lead share prices away from the fundamentals, in the traders’ language they ‘ride the wave’ offered by rumours. They simply trade the rumours. According to Charis, the institutional investors play the game because of

“The desire of the fund manager to take advantage of the market conditions that allow for quick and easy profit. For example, company X, which had no operations, was limit up because of market rumours. The fund managers traded the rumour in order to achieve in a couple of days 20 to 30%. Under normal market conditions they would have never even thought to invest in such companies.” (Charis interview)

The generally unofficial channels of rumours fabrication and dissemination, coupled with the fact that rumours are manipulative, complicates the workings and understanding of rumours even further. As I have suggested with the theme of assumptions, rumours are also used by institutional investors in order to rationalise their reckless risk taking behaviour. That means that when the prices are well overinflated, the institutional investors are looking for ways to justify their myopic orientation on returns and reckless risk taking attitude. It seems that the rumours provide a perfect excuse. According to Marios,

“When the market is a bubble, everybody that understands a couple of things about the financial statements knows it. We all understood that the valuations were inflated. From the moment the prices are inflated and there is no logic in the valuations, you try to find an excuse in order to invest. These excuses in a number of times are the rumours.” (Marios interview)
Giannis introduces the idea of rationalisation, from a psychological point of view, as being one of the purposes served by rumours regarding the institutional investors. It seems that rumours are used as an emotional tool, for those institutional investors trading on them, justifying the enormous risks to which they were exposed during the speculative bubble. On the other hand, it was used as a deceiving tool by those fabricating and spreading them to the targeted groups. According to Giannis, the rumours became tremendously popular and powerful during the fever of the speculative bubble. For example, during the stage of ‘displacement’ was no need of the rumours because there were plenty of economic reasons to push the prices higher. Reasons that were totally absent during the stage of excessive risk taking.

According to Michalis, rumours are extremely damaging when they are directing investors to firms with no sound fundamentals or trading liquidity. That is because when the bubble bursts, it will be impossible for institutional investors to liquidate their holdings even at substantially lower prices. That is how the vast majority of investors after the speculative bubbles burst find themselves trapped in assets with collapsing prices and no liquidity at all.

However, it is vital to understand how the rumours were fabricated and disseminated during the speculative bubble in CSE. It seems that established socioeconomic circles among participants constituted the building blocks on which the game of rumours was based, allowing key players to fabricate and disseminate rumour to the targeted audience. Michalis description of the process which rumours were fabricated and disseminated with offers a plausible explanation of rumours, which can be used as a working hypothesis in understanding rumours in financial markets. Speaking of institutional investors, he suggests that
“On this level, we had the rumours, as well, since we cannot forget that rumours come from the head, not the feet. Rumours do not stem from the investing public. They came from the institutional investors. Of course, through the rumours, the institutional investors were influencing each other. In the old days of the trading floor, which I am convinced that it was a very bad thing, we had huge influences between the houses. Because you were observing CLR buying CLR. You were listening to your friend in the coffee shop of the stock market talking about possible mergers and acquisitions. As we have mentioned earlier, when you have 10 trusted persons from the 10 biggest broking houses, not because they had the knowledge, but because they are loyal to their house and they will not spread important information; when you have these 10 people influencing each other, who among them were considered equals regarding market issues, or at least each knew his field, and they had put a couple of deals together, buying some assets, which because of the common effort they rise even more, benefiting everybody involved, at the expense of course of the investing public, which bought at very high prices, allowing those putting the deal together to unload their holdings. Then, you start getting influenced on decisions that are not correct, which will lose money. Consequently, the concept of trading floor was only a lobby of stockbrokers and representatives of big institutional investors, which, at the end of the day, was disastrous for both the stockbrokers and the big institutional investors because everyone, at some point, was using this relationship in order to spread information, which I would not say that it was necessarily erroneous, but it was misleading.” (Michalis interview)

The description offers a unique insight into the process through which rumours were generated and disseminated in the CSE during 1999 bubble market. It suggests that established relationship networks between key players play a very important role. In the field of finance rumours may take the form of organised attempts by key players in order to manipulate the market by spreading misleading information. It seems that rumours are strategically organised, in an Abolafia and Kilduff (1988) sense. According to Michalis, the rumours originate from the ‘head’ of the investment community and not the investing public. That means that as with other manipulative practices (see section 4.5.2) rumours, in order to be effective, need the financial strength and the appropriate channels of dissemination in order to be economically effective.
For example, retail investors with a small stake invested do not have the motive in order to fabricate and disseminate rumours. Firstly, any benefits because of the size of their portfolios will be kept to a minimum. Secondly, retail investors can easily open or close a position without the need to manipulate the demand or supply of the stock under consideration. On the other hand, a big player, with a huge stake on the table, she has a strong motive to spread rumours. Firstly, the expected benefits are enormous. Because of their size, important players, including institutional investors and insiders, can take very big positions on stocks. Secondly, by manipulating supply and demand through rumours they expect that they will be able to take a very big position on the stock under consideration at favourable prices. Regarding the involvement of institutional investors, in the words of Giannis, “Nobody can say that officially the institutional investors were involved. However, somebody from the institutional investors, either for his private wealth or his employer’s was spreading rumours.” (Giannis interview).

The impact of rumours depends largely on the emotional state of the market under attack. It also seems that rumours are more effective when they are aligned with the psychology of the market. That means that rumours have a significant impact when they follow the trend. For example, in a bull market, such as the CSE during 1999 any rumour suggesting positive developments at corporate level was enough in order to give an extra boost to the share prices. In the same vein, in a bear market, such as the CSE during the year following the bubble, from 2000 - 2003, or the Athens Stock Exchange currently any rumours related to negative developments at national or corporate level pushes the market lower.

Regarding the dissemination of rumours, the data agrees with the analysis of Knapp (1944: 22) who suggested that the rumours are spread mostly “by word of mouth”. This is a
remarkably effective transmission channel, since coupled with the absent of formal verification, they allow for the imagination and emotions of the transmitters and the targeted group to overstress key points in the ‘story’, increasing the success of rumours.

Although rumours have always been part of speculative episodes (Mackay, 1995; Chancellor, 1999) they have been provokingly ignored by the academic community. I suspect that this is because they are the direct opposite of information, which according to the modern finance theory it is the only variable responsible for changes in price levels. By accepting the existence and significance of rumours, is the same as questioning the absolute control of genuine information over prices, which directly feeds into the long standing argument against the efficient market hypothesis. In short, if the rumours are an indispensable part of every speculative episode, then part of the attention should be moved from the genuine information to the organised misleading stories circulated in order to direct market participants to a particular trading action. The understanding of the fabrication and dissemination of such stories is extremely valuable in studying speculative bubbles. Actually, rumours are one of the tools used in order to spread buying interest during financial euphoria and fear after the bubble has been burst. Stories, which although can have their roots in real facts and data are always characterised by “misinformation and exaggeration” (Lefèvre, 2005: 128). A practice that has been placed along manipulation and trickery by Moses (1887).
4.5. Institutional investors’ objectives during the speculative bubble

4.5.1. Outperforming competitors and playing the game of speculation

The main objective of the fourth and last section of the ‘Data analysis and discussion’, entitled, ‘Institutional investors objectives during the speculative bubble’ focuses on the priorities of institutional investors during the speculative bubble. Not surprisingly, the findings are in direct opposition to the claims of modern finance theory. The institutional investors, instead of directing their attention in achieving risk adjusted returns through diversification (see Markowitz, 1952, 1959; Treynor, 1999; Sharpe, 1964; Lintner 1965; Mossin 1966; Fama, 1970) that responds to the risk profile of their stakeholders, they are consumed by objectives that cannot be either explained nor recognised by the modern finance theory. More specifically, the institutional investors’ priorities during speculative bubbles seem to be to outperform competitors at any cost and to support affiliate investments, especially those that are already included in their portfolios. These anomalous objectives, from a practitioners’ point of view have serious implications for institutional investors and regulators, as well. The institutional investors seem to limit the likelihood of navigating successfully the speculative bubbles, while regulators, especially regarding the support of affiliate investments, seem to be presented with one more regulatory challenge during speculative bubbles. For academics it means that the well-established theories of finance do not offer adequate answers of the observable financial phenomena, at least during the recurrent episodes of speculative bubbles. According to Charis, the institutional investors during the speculative bubble were focused on outperforming competitors and playing the game of speculation. More specifically, he says:

“I think that the investments of the institutional investors over the examined period were based on two factors. The first factor was that they had funds invested because they were afraid of
underperforming other fund managers had they remained out of the market. Because nobody knew were the speculative market would end.” (Charis interview)

Charis suggests that the reputational concerns are pivotal in institutional investors’ decision making. However, as with all aspects of the speculative bubble, it cannot be explained using a single variable (Merton, 1995); in this case the reputation concerns. As we will see in the subsequent paragraphs, although the reputations concerns play a pivotal role at the initial stage of the speculative bubble, at the high of the speculative mania, investors, as suggested by the informants, are only concerned with their own returns. As we have seen (see sections 4.3.3 to 4.3.5) they simply want higher returns, without interest in defining what ‘higher returns’ means. As noted by Charis, probably the main issue faced by prudent fund managers who understand the risk associated with the speculative mania, is that they do not know when “the speculative mania would end.” As found by Nyberg (2011) regarding the Irish property bubble, had the fund managers exited the speculative bubble early would have caused them reputational damage or even they may have lost their jobs or positions. Subsequently, regarding the initial stage of the bubble, the findings are consisted with the famous quotation from Keynes (1974: 158) saying, “it is better for reputation to fail conventionally than to succeed unconventionally.” The reason is that the blame, in case of failure, is shared collectively among those who fail. The greatest the number of those who fail, the lesser the perceived share of responsibility. Those who dare to be contrarians during the speculative bubble will be crucified by the time the bubble ran its course. For example, as highlighted by Nyberg’s (2011) report,

“A number of people stated that had they implemented or consistently supported contrarian policies they may ultimately have lost their jobs, positions, or reputations. Other signs were also noted pointing to sanctioning of diverging or contrarian opinions, as well, as self-censorship because of this.”
A possible explanation regarding the unwillingness of the fund managers to sell is provided by Christos K, who supports that the structure of the decision making regarding institutional investors’ portfolios makes it almost impossible to be contrarian during the speculative bubble. Particularly, Christos K emphasises the difficulties of fund managers who want to be contrarian during speculative bubbles.

“We had institutional investors that wanted to sell, but this is not a single person decision. A fund manager may want to sell, but in the board were 10 more people that aggressively questioned him. “How can you sell in such environment?” As a result, it was a matter of majority, and the majority was with the wave.” (Christos K interview)

At institutional level, even if the fund manager believes that the market is materially overpriced, she has to convince a group of other people that they have to distance their investment from the speculative environment, which makes everybody rich and happy. Evidently, not an easy task. According to Giannis, that is

“Because if the market makes another 50% and I make only 20%, my clients will leave. They will move their assets because I am not good at it. So there is an issue there. I am not saying that everybody was operating under this assumption.” (Giannis interview)

The findings up to this point are consistent with Scharfstein and Stein (1990: 466) who found “that, under certain circumstances, managers simply mimic the investment decisions of other managers, ignoring substantive private information.” Evidently, the speculative bubble falls into the certain circumstances. It forces a convergence of views that under normal economic conditions would be impossible even to imagine. It makes contrarian views extremely costly to maintain during the speculative bubble in emotional, reputational and financial terms (see Galbraith, 1994; Kindleberger, 2000; Nyberg, 2011). To make the situation even worst, the problem is transformed with the passage of time. Greed moves stealthily into the game
causing reputational concerns to fade. The primary issue with as the speculative bubble is progressing is to outperform competitors. Having exceptionally high returns is no longer enough. You have to be the best. A rational target under the circumstances is to have the highest returns in the market. Second to none, no matter of the risks accepted.

“Additionally, we had collaborations between institutional investors. The institutional investors started collaborating, creating camps. The next stage was when the market needed a push, because at the initial stages the market needed no boost. Whatever you bought was running. The returns were overflowing. Then when the market needed a boost, the rumours started. Mr X was appearing, who was well off and high in the hierarchy of one of the institutional investors or broker houses, leaking ‘information’ in strict confidence to somebody who was unable of keeping secrets. “You know, we will do this with this firm, or we will use that firm as a vehicle ...” (Michalis interview)

Very interestingly, the institutional investors played the game along the lines with retail investors, irrespectively of the fact that are considered to be the gatekeepers of market’s efficiency. They supposed to sell the overpriced and buy the underpriced assets, when such discrepancies appear in the market. However, according to the informants, they behave in the same way as the retail investors. They may have liquidated part of their positions but they were still heavily invested. As supported by Christos K,

“The institutional investors, I think, followed with the retail investors. This is observable in the performance of the majority of the institutional investors. Ok, some institutional investors appear in the record to have sold £20-30 million but they might keep £100. Subsequently, I have not seen any institutional investor [to fully close their positions]; the most palpable example is the insurance funds. Which fund sold from the insurance funds? It also prevailed the sense that ‘If we, institutional investors, sell’, this might be used as an alibi by some that they do not want to sell, you know, ‘if I sell, as institutional investor, we will be accused that we sell (pushing the market lower), subsequently we do not sell.’ I think that they used this excuse because they did not want to sell, not because it was the real reason. Subsequently,
look at the insurances and the investment companies, some they might sell more than others, but they did not sell.” [the majority of their position]. (Christos K interview)

It seems that during the speculative bubble the objectives of institutional investors deviate from the risk adjusted return achieved through diversification. The findings are in direct oppositions to the well accepted claims of modern finance theory. Although the work of Markowitz (1952, 1959) on diversification, of Sharpe (1964), Lintner (1965), and Mossin (1966) and Treynor (1999) on Capital Asset Pricing Model (CAPM) and of Fama (1970) on market’s ability to immediately price assets correctly, have utterly prevailed academic teaching and regulators’ philosophy over the last 40 years, they fail to account for the recurrent phenomenon of speculative bubbles. The institutional investors during the speculative bubble under consideration were almost exclusively interested in playing the game and outperforming competitors rather than diversifying their investments in order to achieve a better ratio between risk and returns. Additionally, the diversification does not seem to work during speculative manias. The correlation between the stock during the speculative mania and after the burst of the bubble is close to 1. During the financial euphoria all the stocks move up and after the bubble bursts all the stocks move down. It seems that diversification is a strategy that is working only during normal economic conditions. During the speculative mania what matters is only the bull market, and after the burst of the bubble only the cash can protect investors (see Lefèvre, 2005: chapter IV). Actually, diversification is a seat belt that is never working during accidents; when it is most needed.

Marios, with particular emphasis on the insurance sector describes how the speculative mania impacted on institutional investors’ objectives. He supports that their main objective was to participate in the game, totally ignoring the risks of such enterprise.
“Cyprialife life was part of Laiki group. It marketed some plans with the capital guaranteed. However, instead of investing the money collected conservatively since they were guaranteed by Laiki Bank, they invested it in the stock market because it was chasing the unusually high returns for investors. Additionally, the fact that the professionals were channelling pension funds, which missed the bigger part of the bull market, in the stock market shows that they felt that they could not be left out of this game. The pressure was tremendous. It was also additional pressure by the newspapers, the television; the fact that it was this general euphoria and the stock market was discussed everywhere.” (Marios interview)

However, what started as a reputational concern, during the fever of the bubble, coupled with greed, transformed into a competitive impulse without boundaries that destroyed its believers. The numbers made no sense any more to the institutional investors. Whatever was the return of the previous period, they demanded a much higher one for the following periods. In Marios words,

“I think that it is even difficult to describe what was going on. It moved beyond any boundaries. This attitude moved to the absolute extremes. At a stage, you did not even bother with the competitors. You were thinking only your own return, with any means. It was not even a healthy competition. It was no logic behind it.” (Marios interview)

It seems that during the highs of the speculative mania the investment world takes an extreme version of what was described by Minsky (1996: 1) as a ‘money manager capitalism’, where “The total return on the portfolio is the only criteria used for judging the performance of the managers of these funds” totally ignoring the concept of risk. Speculative bubbles are frenzy periods, emotionally laden, where greed gradually totally overshadow the capacity to reason. It is a phase, the final stage of the bubble, where institutional investors entirely ignore what is going on. They are entirely consumed by the game, which promise unthinkable richness and glory.
4.5.2. Strange friendships

The last theme I present and discuss, entitled ‘strange friendships’, deals with the attempts of institutional investors during the speculative bubble to support investments that were either already included in their portfolios or they were associated with them. According to the informants, these ‘strange friendships’ were unofficial coalitions between institutional investors formed when the institutional investors realised that by manipulating the demand and supply will further increase their returns. Once again, the model of Abolafia and Kilduff (1988) explains the formation of these unofficial coalitions. Without the context of the speculative mania, these coalitions would have never been formed. In simple words, these unofficial coalitions were the result of the identification by institutional investors of new profit opportunities that were provided by the speculative mania. They simply adapted to the new demands, ignoring their long term interest, as well, as the interest of the investment community and the stock market. This section starts with the analysis of extracts providing a description and then a definition of the ‘strange friendships’, as seen through the eyes of the informants. Afterwards, I discuss the origin and objectives of the ‘strange friendships’ and the degree to which the institutional investors were involved. Afterwards, I provide examples followed by explanations of the reasons behind the formation of ‘strange friendships’.

Loizos introduces the concept of ‘strange friendships’ that were initially observed during the IPO’s frenzy. The institutional investors in order to be able to take full advantage of their size and financial muscles during the speculative mania started building on their existing socioeconomic relations. They started working on unofficial coalitions, which gave them the financial strength needed in order to support the prices of titles that interested them. Actually, the ‘strange friendships’ were agreements between ‘gentlemen’ that not only they
will not sell the ‘friendly titles’, but they will start buying these ‘friendly titles’, as well.

According to Loizos,

“The logic of these strange friendships was that ‘you buy my own titles, and I will buy yours.’ Each broker, each underwriter had investment companies under his management. They used them in order to support ‘friendly’ titles. ‘You buy my own titles, and I will buy yours.’ It was a very strange, unethical situation, which should be blamed to the fund managers and to some parachutists that appeared as market makers, because market making did not exist as a formal practice.” (Loizos interview)

It seems that these strange friendships were unofficial strategic coalitions, which targeted at manipulating the demand and supply on stocks that the participants were interested in. Loizos supports that the actors exercising this malpractice belonged to the local community. This is because only locals have the socioeconomic networks in order to orchestrate such coalitions, which are solely based on the trust between the participants, which are safeguarded only by their common interest on the stock(s) under consideration. Michalis provides a remarkably convincing explanation of how the key players, mainly institutional investors, capitalised on existing socioeconomic networks in order to establish what is known in the finance literature as ‘pools’ or ‘syndicates’ with the sole objective of manipulating specific stocks (see Guenther, 1911). According to Michalis,

“In the past, both the stockbrokers and fund managers were allowed to be in the trading floor. Afterwards, only the brokers were allowed, who were mouthpieces of fund managers, making no big difference. However, starting from friendly relationships, in a number of times they evolved into coalitions, targeting at ‘since the two of us can do this and that, and since we share a portion of knowledge of this part of the market, let’s do this and the others will follow.’ As a result, a lot of coalitions were built on this premise. Everything to me is about negotiations and interpersonal relationships. If Kostas or John from my company has good relations with Adonis or Phillips from the other company, it can be the start of a possible collaboration. Or if we ever become partners in company X, with 2 or 3% each, it means that
we afraid each other, because if I, at any time, try to push the share price higher, you may unload your shares. However, if we come into an agreement with the opposite camp, it means that we own 5% of the company, and all the others are of smaller size.” (Michalis interview)

Michalis suggests that interpersonal relations and common financial interests are determining the formation and participation in ‘strange friendships’. As in the case of rumours, secrecy and coordination are pivotal to the success of the scheme. Subsequently, existing socioeconomic relations and common financial interest create the impression of trust among participants. That is why all those participating in the ‘strange friendships’ were locals with access to the major shareholders, who their participation was deemed pivotal to the success of the scheme. In particular, Loizos suggests that those involved in the ‘strange friendships’

“... were local market practitioners. They promoted themselves as gurus of the stock markets. This is an indisputable testimony. They were collecting money from the major shareholders in order to support their titles, and then they found some fund managers, as well, in order to move large packages. Their main objective was to manipulate the indicators of the technical analysis in order to attract other market participants. If a selling target is violated, and then the share price reverses its direction and move some points higher, a buy signal will be given. Especially, if the move is accompanied by increased trading volume. In this case, the trading volumes were bogus because of the packages. Increased trading volumes plus the buy signal provided by the technical analysis; not just a buy signal but a strong buy signal attracted the retail investors. However, from the middle of 1999 this ‘practice’ was no more viable. Especially during 2000, where the prices start retreating, they kept trying using this kind of practices in order to support the share prices of specific stocks. Then you could see somebody buying 10 shares at the closing in order to close the share at a higher price. A number of institutional investors remained loaded with securities with no liquidity. Strange titles belonging to the same group of companies with the institutional investor that held them. Subsequently, all these titles experienced a collapse in their share price.” (Loizos interview)

Initially, the focus of these operators was on providing support to the titles under the scheme by manipulating the demand through the exchange of packages. A method known as ‘wash sales’, according to which parties transact in concert or collusion, without having any real
change in the beneficial interest. A practice called by Guenther (1911: 179) as ‘artificial speculation’, where its main objective was to create an illusion of trading activity on a particular stock. One of the reasons behind the ‘strange friendships’ was to support titles which were already included in the portfolios of the institutional investors. A material retreat in the share prices of the title included in institutional portfolios, during the bear market following the speculative bubble, would damage their returns and subsequently their position in the competition game, negatively affecting their reputation, as well. As a result, institutional investors deemed necessary to support the share prices of their holdings by keep buying them, even at elevated prices. However, as described by the informants although this ‘practice’ was successful during the speculative mania, when the bubble burst turned against those involved in the ‘friendships’. It seems that the market participants, no matter of their financial status in the market and the practices they employ, during a speculative bubble and its subsequent burst, can only profit when their practices are consistent with the trend of the market (see sections 4.3.3 and 4.3.4). For example, these ‘strange friendships’ were making money as long as the market was moving up. When the bubble burst they kept losing money. It was impossible to set a floor on stock prices retreat. On this point, Charis explains that

“... some fund managers were trying with their investments to support shares in which they had big investments, in order to show higher profits in their portfolios’ values. Of course, when the market started retreating it was observed that the institutional investors kept investing in titles whose valuations were not justified but were already invested, in order to decelerate the decline of share prices.” As a result, they were consistently losing money (Charis interview).

Although the objective of the ‘strange friendships’ was to make money by supporting titles of their interest, they did not stop when the market turned negative at the end of 1999. They kept committing money to loss-making investments. Actually, the coalitions were dissolved
only when the escalating losses forced the participants, one by one, to break the ‘deal’ by either stop supporting the title or even, when this was permitted by the tittles’ trading liquidity, to sell their holdings. This observation offers valuable insights in terms of both the methodological and conceptual understanding of the ‘strange friendships’ formed during speculative bubbles.

Although Abolafia and Kilduff’s (1988) framework of coalitions that successfully determine the investment environment in which they operate proportionally to their regulatory and financial status provides a sufficient explanation of the behaviour of the ‘strange friendships’ during speculative bubbles, there are some inconsistencies that need to be clarified. Firstly, it seems that the members of the ‘strange friendships’ are not the first to withdraw. Rather can be said that are the last who question the dominant definition of the bubble who suggests indefinite uptrend. The abandonment of the scheme is rather the result of their financial disaster rather than their rational evaluation of the situation, which calls for new strategic actions. In this regard, the strength of the bubble’s deflation is well beyond the strategic capabilities of the actors involved. It gradually imposes a new definition of reality to the members of the ‘strange friendships’, who exhausted by the financial and emotional strain leave the scheme in order to survive rather than to make money. The defections are part of the phase of panic rather than the phase of distress, as suggested by Abolafia and Kilduff (1988).

Regarding the objectives of the ‘strange friendships’, Giannis argues that for the sake of profit and without any critical mood at all, the institutional investors tried to corner stocks in which they were already invested in order to keep their prices inflated, avoid showing any
investment losses from a possible retreat in their share prices. That is a practice known in the jargon of finance as ‘throwing good money after bad’.

“Their objective was effectively; all investors objective is to make money. All institutional investors’ target was to make money. They, however, forgot one thing. That if you are making money and is paper money and you are excessively exposed, you are not making money. It is fictitious. Thus, they were trying to cover bad decisions with whatever exposure, by buying more. Effectively they were trying to corner stocks, to keep them inflated, so they don’t show the loss in the P & L and balance sheet. (Giannis interview)

Giannis supports that the institutional investors avoid showing losses at the end of the reporting periods at any cost. A kind of ‘window dressing’ by keeping their holdings inflated through unofficial strategic coalitions with other influential players, such as major shareholders. The presence of major shareholders in the schemes allow institutional investors to adopt a comparatively less irrational definition of the situation, which was from every prospective problematic. They assumed that the major shareholders would allow the ‘strange friendships’ to trade on inside information, giving the coalition an informational advantage over the other players. A definition which was perfectly working as long as the speculative mania was going on. According to Giannis,

“The return was the reason. All the others were excuses. The friendships with major shareholders; why do I have to invest in the firm of Mr X? ‘I invest because, under the friendship relationships, I will have insiders’ information. Because I already feel or think that I know, mainly because I have been convinced by the major shareholder that we will do this and that, we will acquire that company, and we will start new operations’. Consequently, what we call friendships; we have to know that nobody puts his money in support of somebody in the name of friendship. He put his money because he believes that because of the friendship he knows a lot of things about operations, creating the illusion, especially after had been convinced by the major shareholder, that this and that will happen indeed. Consequently ‘we will make money.’” (Giannis interview)
That is a supplementary explanation regarding the participation of institutional investors in the ‘strange friendships’. It suggests that the presence of major shareholders in these schemes provided institutional investors the perception of security. The rationale from the part of institutional investors was that the ‘major shareholders know what they do. We are trading on inside information.’

The discussion now turns to the universality of the malpractice of ‘strange friendships’. The informants suggest that it was widespread among institutional investors and major shareholders. That means that the malpractice overwhelmingly influenced the development of the bubble. Although these ‘strange friendships’ were brought into existence because of the bubble, once they prevailed among key players, they further fuelled the bubble, making its containment impossible and the environment for all the other player not participating in the ‘strange friendships’ even more hostile. Louis suggests that

“It was a common practice. For example, the Cytrustees Investment to support the shares of the Bank of Cyprus or the Apollo Investment to support the shares of the Popular Bank of Cyprus. Or the Athena Cyprus Investments to support the shares of Hellenic Bank. The funds originated from bigger corporations had to play these roles. As a result, they suffered substantial losses. They did not have a balanced portfolio. They have invested neither in a broad range of securities, nor in foreign markets.” (Louis interview)

The examples provided by Louis include the three local banking institutions, which operated the biggest stockbroking houses in island. Not only they supported speculators with an ample supply of credit but they engaged in manipulative practices in order to support titles in which they had a material interest, as well. Of course, the result was substantial losses for the participants, once the bubble burst.
For example, the only documented case of a ‘strange friendship’, with vivid details, regards the rights issue of the Bank of Cyprus in 2000 for the parallel listing of its shares in the Athens Stock Exchange. Its details are known because it has been the subject of a Securities and Exchange Commission investigation. The following extract comes from the findings of the Cyprus Securities and Exchange Commission regarding the circumstances under which the exercise of 39 million rights issued by the Bank of Cyprus took place. The extract is a conversation between a strange friendship’s prominent members regarding the support of the Bank of Cyprus share price to a specified level. The objective of the ‘strange friendship’ was to ensure that the share price of the Bank of Cyprus would not retreat, endangering the exercise of its rights. The findings of the report prove the existence, objectives and the way these ‘strange friendships’ were operating. I reproduce in whole one of their conversation of 12th October 2000 at 09.34 hours, because it is representative of how these ‘strange friendships’ work. The conference meeting starts with Stavros Agrotis, Head of Brokerage, CISCO.

Stavros Agrotis [Head of Brokerage, CISCO]: Hello!

Stelios Christodoulou [Managing Director, CISCO]: Stavros, I am speaking with Mary, I am in conference.

Stavros Agrotis: Yes.

47 Cyprus Securities and Exchange Commission (2005) Investigation into the circumstances under which the exercise of the rights issued by the Bank of Cyprus in 2000 took place
48 Recorded conversation between Stavros Agrotis, Mary Demetriou and Stelios Christodoulou on 12th October 2000 at 09.34 hours. The conversation is taken from CISCO records. CISCO is the investment banking arm of Bank of Cyprus. The collection of the data was conducted with the consent of Bank of Cyprus.
49 The document of the report is in English. The somehow peculiar language it is probably attributed to the nature of the conversation, which calls for the discussion to be conducted in code.
Stelios Christodoulou: Well, with regard to our conversation of this morning, Mary says CLR [investment bank], Demetra [one of the bigger investment fund in Cyprus], and Hellenic [the 3rd largest bank of Cyprus].

Mary Demetriou [Head of Portfolio Management, CISCO]: Stavro let me tell you. I’ll gladly handle CLR myself.

Stavros Agrotis: No, let me tell you. Already, already. Christos called me this morning.

Mary Demetriou: Hadjimitsis? [Higher ranking official, Bank of Cyprus]

Stavros Agrotis: Yes, yes. They have spoken with CLR, they have spoken with Sharelink [investment bank], they have spoken with the Hellenic and he also told me ...

Mary Demetriou: When we say have spoken, what did they promise?

Stavros Agrotis: They came and told them “look, it is important for us that our price be at those levels and please do not sell’. They did not tell them to buy. Yes but ... Wait. I spoke last night with Kostas Toumbouris [Director and Major shareholder of CLR] and we arranged to speak today. I have spoken with the Hellenic, what remains now is Lefkoniko [Brokerage house affiliated with Demetra, which is one of the bigger investment funds in Cyprus].

Mary Demetriou: Yes, but look, Stavro dear. All these ‘vague’ we are talking about, and I am speaking from experience, do not count for much. There must be numbers. To CLR we’ll
give them in their capacity as a Group, we’ll buy 3.5 million shares. I do not think that there is anybody else who is willing to invest at this time 3.5 million shares in their company. Therefore, I have not given them the money yet.

Stavros Agrotis: OK.

Mary Demetriou: And ... sorry, scratch my back to scratch yours. Otherwise I am going to change the sums.

Stavros Agrotis: You call CLR and tell them, commit them to buy.

Mary Demetriou: No, I want to quote sums to them. Now, as regards the Hellenic, you know approximately how much money the Bank of Cyprus has put into the Hellenic, they should act, not simply not sell, they should buy, let’s say, one million shares.

Stavros Agrotis: They did that yesterday too.

Mary Demetriou: Demetra, I do not trust Hadjixenofontos [executive director of Lefconico].

Stavros Agrotis: No, I do. I’ll call him.

Mary Demetriou: All right, it will be a good thing if you succeed.

Stelios Christodoulou: As I said this morning, the danger is that if we go all out today, everybody will be traced tomorrow. I prefer to close today at £6.20 and pounce tomorrow.
Mary Demetriou: No. It is better that it does not slide very low, we must also leave some scope for tomorrow.

Stavros Agrotis: All right. You speak with CLR, I'll speak with the Hellenic and with Lefkoniko. Are you going to pull some strings? (It is obvious that he is referring to portfolios managed or controlled by CISCO) [comments of the SEC officer].

Mary Demetriou: I'll look at all the margins available to me and, yes, I will do.

Stavros Agrotis: OK.

Mary Demetriou: CLR, with whom did Hadjimitsis spoke?

Stavros Agrotis: He spoke with Ntinos [one of CLR managers] .... Who was at the bank to speak with them but Costas is more suitable and more reliable.

Mary Demetriou: All right.

Stavros Agrotis: Lambros [executive director of CLR] is not, Costas is.

Mary Demetriou: Yes. I am in possession thereof. It is up to me not to give them the money.

Stavros Agrotis: OK!
It is worth mentioning that, in the conversation, the entire spectrum of the local investment community is mentioned. The participants of the teleconference support that the biggest institutional investors in Cyprus will provide support to the share price of the Bank of Cyprus in the Greek stockmarket. It seems that this is the strongest ‘strange friendship’ of the period. The ‘friendship’ was formed in order to manipulate the share price of the biggest bank in Cyprus. For the history, I would like to mention that they succeeded. The share price collapsed only after the rights were exercised.

Giannis provides further examples regarding the universality of the practice. Additionally, he suggests that the ‘strange friendships’ fall broadly under two categories. The first explanation regards a rational approach from the participants, who found comfort when investing in titles belonging to their group. For example, in the above quotation provided by Louis, the investment companies belonging to the banks heavily invested in the shares of the parent bank not in order to support it, but because they felt more comfortable with the valuation of the shares of the parent bank. As insiders had better information regarding the financial affairs of the parent bank rather than those of competitive banks. For example, Giannis explains:

“[A] particular company invested more than it should have, based on the index, in the owner bank because the people there felt more comfortable even if they knew it was overpriced to buy some of their bank than from the other bank, because you know ‘I don’t know the other guy. I don’t know those guys as much’. It is related to information and the level of knowledge and comfort of the investments. I do not believe that investments; they were made on a relative basis. And if you look at it on a relative basis, a lot of these people bought some of their own stocks, because they felt more comfortable, most of them. ‘Because I know the risk there. I do not know the risk on the other one.’ So they bought more than the weighting allowed. That is a fact and it is human. That is the level of comfort you have.” (Giannis interview)
This is the rational side of the ‘strange friendships’, which supports that investing in titles belonging to your group gives you an information advantage, making you feeling more comfortable, especially in periods of overpriced assets. However, it seems more appropriate for rational investors to stay away from overpriced assets. This is something that as highlighted by Giannis it is human and it is happening. However, this explanation, as recognised by the informants cannot provide a complete answer to the phenomenon of ‘strange friendships’. It seems that it is a rationalisation of commitments to past investment rather than a rational behaviour during a speculative bubble. An early reference to the phenomenon belongs to Staw (1976: 29) who supported that people instead of changing their behaviour when it results to ‘negative consequences’ they “cognitively distort the negative consequences to more positively valenced outcomes.” According to Staw (ibid),

“The phenomenon underlying this biasing of behavioral outcomes is often said to be a self-justification process in which individuals seek to rationalize their previous behavior or psychologically defend themselves against adverse consequences.”

The findings of Staw seem to provide an adequate explanation of the reasons some fund managers overinvested in the titles of the parent companies. Giannis, as he goes on with his views on the subject, identifies that the ‘strange friendships’ mainly invested in the titles of the parent company in order provide support to the share price. More specifically,

“Some bought ridiculously priced assets, just to support stocks. That is different. That is dangerous but it could happen. It has happened and the reason that has happened, I believe, it has to do with material motives. For example, if you have a portfolio with stock A in the assets; if you have holding companies you can create a Net Asset Value of that holding company which is very high and unjustified but it will appear in your books. And that happened in a number of groups, not just one; in a lot of groups. So it has happened for various reasons, including supporting stocks ... The level of this varied among the different groups. But it did happen.” (Giannis interview)
Marios argues that the support provided to friendly titles happened because of the conflict of interest. Actually, the banks forced the funds under their influence in order to support their titles. One of the reasons was that the banks funded the speculators with credit, accepting their own shares as collateral. A declining market, especially the banking shares, would have damaged their books. Subsequently, they thought that forcing the funds under their influence to support the banking shares was the solution. The following extract from Marios interview is revealing.

“Additionally, it was no control regarding the conflict of interest. A lot of funds, which were related to the banks, were pressed by the banks in order to keep buying their shares in order to push them higher. I keep referring to the banks because they were the main players not only regarding the institutional investors, but with regard to the stock market per se. I would not say friendly relations. I would rather say it was a matter of interest. I think that it was an important factor explaining the increased investment of the funds [in the parent bank]. A declining market was not in the best interest of anybody. For example, if the banks decided to sell, they had to sell their own shares if you think about it, or the shares of their corporate clients. On the top of that, the bank, at a stage, loaned big amounts to individual investors in order to invest in the stock market. So, if you think about it, by selling they would have created a vicious circle. For example, if an insurance fund related to a bank had sold the shares of the banks, the share prices of the banking sector would have retreated, making it difficult for the banks to collect more money by issuing new equity or making it difficult to proceed with any acquisitions. Additionally, the banks would have lost money because their customers borrowed money investing at very high prices [in banking shares]. Subsequently, it was no control at all, regarding the conflict of interest. At a point, it was not paid any attention to the relation of risk and return, especially at the peak of the market. Nobody was thinking about the risk.” (Marios interview)

The results are consistent with the observations of Abolafia and Kilduff (1988), Galbraith (1992, 1994) and Kindleberger and Aliber (2005) that the fuels for the bubble are provided “by the bankers who compete to extend credit to speculators” (Abolafia and Kilduff, 1988: 182). As a result, the banks found themselves in a situation where the burst of the bubble
would have dramatic consequences on their profitability and balance sheet, as well. Their
decisions to support the bubble with whatever means can be explained by the framework
provided by Straw (1976). They tried to rationalise their involvement with the bubble
creation by sustaining it. However, the respondents are convinced that there is certainly no
way to prevent the bubble from bursting. The question is not if it is going to happen. It is only
a matter of when is going to happen and what is going to be the final cost. Marios, when I
asked if the ‘strange friendships’ can successfully provide support to share prices after the
bubble burst was dogmatic.

“No. It is crystal clear. There is no possibility. Because, some of those included in the team
supporting the titles, at a stage will stop buying and some they will be turned into sellers.
There is no such a possibility. It has never been a bubble that has not been burst.” (Marios
interview)

On the same subject, Michalis highlights the risk of committing funds to share prices support.
Such schemes are destined to fail. One of the greatest risks faced by those participating to the
‘strange friendships’ is that once they start it is almost impossible to stop. Firstly, during a
bull market such schemes are extremely profitable since the financial strength of the
participants coupled with the rising prices offer abundant profit opportunities. Why someone
to withdraw from a ‘sure thing’? Then, after the bubble burst, the participants cannot accept
the new definition offered by the unfolding events, mainly with regard to the collapsing
prices. They are emotionally trapped and desperate in order to repeat the returns achieved
during the speculative mania. Subsequently, they keep committing money, hoping that thinks
will get better.

“Of course, this is a wrong tactic, which once you start it is difficult to stop, because you have
already devoted capital for this purpose that is already trapped. As a result of this practice if
the particular asset declines in value, your losses are leveraged. According to my view, the majority of institutions engaged in this practice.” (Michalis interview)

Christos K provides further explanations regarding the risks and consequences of the ‘strange friendships’ when the bubble burst, which utterly change the rules of the game. Christos’ explanation provides further insights regarding the difference between supporting a title during a bull market and a bear market. The ‘strange friendships’ were successful during the speculative bubble, purely because they followed the trend. Their orchestrated actions simply provided additional fuel to the bull market. They simply rode the wave. Nevertheless, the bear market following the burst of the bubble revealed the weaknesses of the ‘strange friendships’, demonstrating the short lived prospects of such schemes. As said by Christos,

“Basically, regarding what we said about investing in their own group [of companies], things got worse when the decline started. Because during the decline were trying to support those papers. Of course, we say that during the bull market they entered into those investments in order to push them higher, but during the bull market shares prices could climb on their own. That is because everybody wanted to buy, and the institutional investors were buying, as well. During the bear market, when some were selling, it was too obvious that some institutional investors were trying to support their own papers. Subsequently, some institutional investors, especially beyond the banking system, ended up holding only their own papers. They bought them back and they stayed with them.” registering unbearable losses. (Christos K interview)

The participants of the ‘strange friendships’ initially refuse to accept the new reality of collapsing prices. This is mainly because, as discussed above, they have to accept that they are wrong and the extraordinary returns provided by the bull market are no longer possible. Consequently, they keep supporting their initial decision although they gradually prove lethal. The findings are aligned with the explanation provided by Straw. According to his theory, the commitment to loss-making investments creates a ‘negative cyclical process’ that multiply the losses. In Straw’s words (1976: 29) “It follows, however, that ... a decision
maker may increase his commitment in the face of negative consequences, and this higher level of commitment may, in turn, lead to further negative consequences.” Staw (1976) highlighted the importance of psychological factors in ‘escalating commitments’ to investment mistakes. It suggested that decision makers escalate the commitment of resources to loss making investments for ‘self-justification’ reasons. Individuals want to show to themselves and others that their investments, no matter if they are loss making, are both rational and correct.

To conclude with, during the speculative bubble the institutional investors and major shareholders took advantage of the circumstances in order to manipulate the shares that interested them, at the expense of all the other market participants. They formed ‘strange friendships’ (Loizos interview) in order to manipulate titles that they either belong to their group of companies or they were already included in their portfolios. Although these ‘strange friendships’ were successful during the speculative mania, all of them failed during the subsequent burst of the bubble. Informants suggest that it is impossible for such schemes to survive in bear markets that follow speculative bubbles (Charis, Christos K and Marios interviews). Although I have no intention of dealing with the ethics of the speculative bubble, I have to agree with Loizos that the situation was clearly unethical. It seems that this is a strong attribute of the speculative bubbles, which has gone unnoticed by the academic community (see Galbraith, 1992, 1994; Kindleberger, 2000). Why during speculative bubbles the investment community loses its ethical standards, especially, regarding the ‘strange friendships’, which seem to be an integral part of every speculative episode (Galbraith, 1994; Kindleberger, 2000)? These are questions that naturally have no easy answers. However, the academic community should start working on them more intensively.
Chapter 5: The Anatomy of a Speculative Bubble

5.1. Introduction

This section aims at presenting a reflective account of my main findings, demonstrating the degree to which I have answered my research questions and met my research objectives (Saunders et al, 2007: 529). The structure of this chapter is similar to the one followed in the chapter of ‘Data analysis and discussion’, which answers the research questions of my thesis. My work brings together the works of leading contributors towards a theory of financial bubbles. Kindleberger, Galbraith, Minsky and Abolafia and Kilduff all saw the bubbles from their own perspectives. Each work includes parts of the financial bubbles’ puzzle, which I have attempted to fill in with important pieces, such as the ‘accelerator event’, ‘strange friendships’, ‘collective trauma’ and ‘risk detestation’. Firstly, I present the conclusions of the ‘Seeds of speculation’, which examines how the scene for the speculative mania was set. Then, I reflect on ‘How is the risk attitude of institutional investors transformed during the speculative bubble?’ exposing the phenomenon of ‘Risk paradox’, which is an integral part of the speculative bubble under consideration. Afterwards, I go on with the ‘Speculative illusions affecting institutional investors during the speculative bubble’. Finally, I present the conclusions related to the ‘Institutional investors’ objectives during the speculative bubble’.

5.2. The seeds of speculation

The research question asked in this section is ‘How the speculative bubble was formed?’ The purpose is to reveal the factors that fostered the speculative bubble. Actually, I aim at understanding and explaining how the scene of the speculative mania was set. It seems that the speculative bubble was set in motion by a combination of interconnected events with powerful implications on the investment environment and the encouragement of large scale
speculation. The first event that set the speculative mania in motion was what has been coined by Kindleberger and Minsky as ‘displacement’.

5.2.1. Displacement event
It seems that the speculative bubble is a positive feedback loop set in motion by the prices’ appreciation initially caused by the ‘displacement’. In the case of the CSE the ‘displacement’ was the political decision to cancel the installation of the S-300 missiles on the Island. This decision removed the polemic threat by Turkey. The second event that acted as the catalyst for the speculative market that followed was the acquisition of the Siakolas insurances group by the second largest bank of the island. These events materially improved investors’ expectations and sentiment, which eventually provided the economic substance on which the speculative bubble under consideration was built.

After the initial price appreciation that was fully justified by the improved macroeconomic and corporate prospects, the climbing prices attracted new players into the market, having a decisive effect on the organisation and structure of the stock market. The powerful market players, which consisted of institutional investors, major shareholders and insiders, formed ‘strange friendships’ (Loizos interview) in order to influence and explore the new environment strategically (see Abolafia and Kilduff, 1988).

The importance of ‘displacement events’ lies at the early warning they provide to market participants regarding the formation of a speculation bubble. They provide the economic ground on which investors’ excessive expectations and sentiments will be planted. The understanding of the formation of bubbles, which have been extremely damaging to all market participants, requires a comprehensive examination of ‘displacement events’.
5.2.2. Accelerator event

The second theme supporting the answer I provide to this research question is what I coin as ‘accelerator event’. It is based on informants’ observations that speculative mania grew out of proportions after the IPO of Louis Cruise Lines. The implication of Louis Cruise Lines’ IPO was that because of its size and publicity gave access to socioeconomic groups, such as ‘grandmothers, housewives and farmers’ (Giannis interview) who traditionally have no links to the stock market. These groups have neither the experience nor the basic knowledge in order to survive a highly risky period such as the speculative bubble. Groups that according to Christodoulos constituted the ‘alevin’ which the sharks, consisted of institutional investors and major shareholders, were fed with (Loizos interview).

The elevated prices caused by the forceful effects of the accelerator event provided the basis for a widespread ‘hysteria’ among the general public, creating an illusionary world of easy and riskless returns of permanent status. After the IPO of Louis Cruise Lines the holding of shares and playing the game was imperative among the investment public. The uncritical buying pushed prices even higher exercising enormous pressure even on the most prudent institutional investors, because the benchmarks they followed skyrocketed (Charis; Gianni's interview). The new inexperienced ‘alevin’ (Christodoulos interview) changed entirely the market dynamics. It created ample space for the powerful players in order to promote their interest in strategic coalitions, namely, ‘strange friendships’, at the expense of the investing public, creating an even more complex and unfamiliar environment, further frustrating regulatory efforts to deal with the situation.

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The ‘accelerator event’ is a vital missing piece from the framework provided by Kindleberger and Minsky regarding speculative bubbles. It also significantly affects the ability of regulators to protect the investing public and restrain the unbridled speculation. It is their last chance to act promptly. It seems that after the ‘accelerator event’, because of the mass involvement of the general public the dynamics of the market become forceful and unstable, turning the factor of time against regulators. This can have dramatic consequences on the exaggeration of the speculative bubble and its associate costs.

Actually, the ‘accelerator event’ makes the employment of both models, Kindleberger (2000) and Minsky (1982; 2008) and Abolafia and Kilduff (1988), necessary in order to be able to understand the formation of the speculative bubble. The bubble up to the point of the ‘accelerator event’ can be understood using the model of Abolafia and Kilduff (1988). The speculative mania can be seen as the consequence of the purposive actions of the powerful players in order to exploit the new profit opportunities presented by the ‘displacement event’. After the accelerator event, with the massive entrance of the investing public who is unable to be strategically organised, behaving as a disorganised crowd, the model of Minsky and Kindleberger appears to be a more appropriate framework. Because none of the two models in isolation can fully explain the speculative bubble, both of the models should be employed. What I suggest, at least up to the phase of ‘overtrading’, is to use Minsky and Kindleberger’s model in order to understand the crowd and apply the Abolafia and Kilduff’s model in order to understand the investors, such as the major shareholders and the institutional investors that are strategically organised during the speculative bubble.
5.2.3. Regulatory failure

The efforts of powerful players to exploit the situation found an unexpected ally; the inability of the regulators, mainly of the CSE Council to correctly read and cope with the new regulatory demands set by the speculative environment. This brings us to the third premise which the speculative bubble was built on, namely, the ‘regulatory failure’. My understanding from the accounts provided by the fund managers, regarding the role of regulators, is that the regulatory challenges during speculative bubbles are a real Lernaean Hydra. This is because the dynamics of the speculative bubble are highly unstable, mainly because of the continuous rise of the stock prices, which invites more inexperienced investors in the game (Smith, 1998) allowing for more profitable opportunities for strategic coalitions formed by powerful market players. Although regulatory reactions during a speculative bubble, as it was the case of the CSE, may be based on the best of intentions, normally set in motion new strategic coalitions from powerful market players in order to take advantage of the new situation created. On the top of that, the introduction of a new regulation during a speculative bubble is normally poorly studied, planned and implemented. It seems to be guided by the pressure felt by regulators, which is coming from every direction, to respond to the new challenges rather than by the real needs of the market participants.

Firstly, the regulators contrary to the firm opposition by the stockbrokers (Christodoulos; Louis interview) introduced a partial electronic trading system. They automated only the execution of trades without leaving the settlement of the transactions manual. Effectively, this means that the execution of trades was unlimited while the settlement was limited by the manual capacity of the brokers, which was still based on the demands of the ‘outcry’ system
(ibid). As a result, thousands of transactions remained unsettled during the speculative bubble allowing the major shareholders to exploit the investing public\textsuperscript{51}.

The new environment created by the regulators misunderstanding of the new ‘reality’ mobilised the major shareholders and the insiders, who strategically explored the circumstances with the help of the companies’ registrars. They knew that thousands of shareholders could not sell their holdings because they had no certificates. The unintended consequences of the new regulation include the manipulation of prices through the restriction of sales. Retail investors could not sell. Additionally, it gave the opportunity to the major shareholders and the insiders, who had immediate access to their companies’ registrars to unload millions of shares.

It seems that the ‘regulatory failure’ can be better understood using the enactment process of Abolafia and Kilduff (1988). It is a highly political process where competing groups try to impose their own explanation of the situation in order to affect new regulation, which in turn, will affect trading procedures. However, I would not say that the regulatory phase is the last stage of the enactment as presented by Abolafia and Kilduff (1988). It is rather a process spread throughout the bubble. Actually, it enters the scene after the ‘displacement event’. Once the key players identify the new profit opportunities presented by the improve expectations and sentiment, they start working on affecting or exploiting the regulation. That is a process that seems to intensify after the ‘accelerator event’, which invites the inexperienced ‘alevin’, which in turns increase trading liquidity and push the prices even higher. In short, it represents a vast pool of inexperienced demand for stocks. Can the regulatory failure, in part, be seen as a result of ‘strange friendships’, which were facilitated

by the ‘accelerator event’? It seems that the answer is yes. Of course, the attempt to affect regulation by organised groups is present after the bubble burst, as well, in order to protect themselves from the losses associated with the speculative excesses.

I would say that regulators have a pivotal role in fostering the speculative bubbles (Angelides 2011; Levin and Coburn, 2011; Nyberg, 2011). However, it seems that the discussion, at least regarding speculative bubbles, should shift from the impact of regulation to the role of regulators. The main cause of damage during speculative bubbles seems to be the inability of regulators to understand the needs of the markets created by the speculative dynamics. The market becomes substantially vulnerable during speculative bubbles, and the regulatory demands cannot be understood by studying periods of normal conditions. Evidently, regulators do not understand the regulatory requirements of a speculative bubble.

Although none of the informants hints to intentional misacting from the part of the regulators, they all highlight the negative impact their decisions had in forming and enforcing the bubble. The question of whether speculation can be totally erased by regulatory action is of a different nature and it is not included in the research questions of this thesis. Additionally, such endeavour should include an extended discussion whether such an outcome is desirable. However, it seems that to a large degree the severe socioeconomic adverse effects of excessive speculation (Keynes, 1974) can be prevented. As put by Loizos, having the regulators read the speculative market correctly “I am sure that we would have avoided much of the pain that followed 1999’s bull market.” (Loizos interview).
5.3. Risk paradox

The theme of ‘risk paradox’ reflects the tendency of institutional investors to gradually overlook the risk aspects of their investments as long as the market is rising and totally avoid risk when prices have collapsed after the bubble bursting. As long as the market is moving higher, the institutional investors are focused almost exclusively on the short term returns and they largely ignore the risks associated with speculative activities. Although during the euphoric period they are ‘reckless risk takers’, during the subsequent bear market they are transformed into ‘risk detesters’, precipitating in both phases the existing trend. That is what I call ‘risk paradox’. Actually, the concept of ‘risk paradox’ is a vicious circle set in motion by the ‘uncritical optimism’ and completed by the theme of ‘risk detestation’, which is caused by the ‘collective trauma’. More specifically, the ‘risk paradox’ consists of six successive transformational phases. It starts with the ‘uncritical optimism’, which brings the ‘myopic focus on returns’ that is gradually transformed into ‘reckless risk taking and suppression of contrary voices’. The last phase of the speculative mania consists of ‘overtrading’, during which institutional investors utterly depart from the exercise of common sense regarding their investment behaviour, sending a strong message to the astute student of the markets that prices will collapse sooner than later. After the bursting of the bubble, the collapsed prices cause unbearable losses to investors, which in turn, impose a ‘collective trauma’ on investors. The ‘collective trauma’ causes investors’ appetite for risk to take a U turn, leading to what I coined as ‘risk detestation’. Investors avoid risks completely, ignoring the prospective returns, which at the bottom of the bear market are exceptionally attractive.

5.3.1. Uncritical optimism

It should be stressed that the uncritical optimism is a vital part of CSE speculative bubble. By definition, speculation, as discussed in the chapter of literature review, is purely the purchase of financial instruments with the expectation of profit.
of stocks on the expectations that in a short period of time the speculator will be able to sell the stocks on unusually high profit (Keynes, 1974; Chancellor, 2000; Kindleberger, 2000). Thus, the speculator, on the absent of the expectation to sell profitably, will not trade at all (see Keynes, 1974). However, as Schumpeter (1939) articulated, the optimism alone cannot cause a systemically important speculative bubble. For, the foundation of sustained optimism, which will incubate a lasting speculative bubble with systemic importance, as suggested by the informants, is the underline economic reality that will initially spark optimism. That is what is known in the literature as ‘displacement’ (Kindleberger, 2000 and Minsky, 2008).

However, the uncritical optimism, described by Schumpeter (1939: 145) as subsequent waves of strengthened optimism, which “feed upon itself, became a leveraging mechanism to the speculative bubble. The findings on the positive feedback loop between rising prices and optimism are in line with Kindleberger and Aliber (2005: 10) who observed, “The increase in the rate of economic growth induces investors and lenders to become more optimistic about the future and asset prices increase more rapidly - at least for a while.” In the same vein, Selden (1912: 93) provided a detailed description of the mechanics the speculative bubble uses in order to reproduce itself, which is aligned with the informants’ views.

“... confidence and enthusiasm keep reproducing each other on a wider and wider scale until the result is a sort of hilarity on the part of thousands of men, many of them comparatively young and inexperienced, who have “made big money” during the long advance in prices.”

According to the informants, in the case of the CSE, the institutional investors became uncritically optimistic about the stock market returns, as shown by tables 7 (p: 217) and 9 (p: 241). As a result, they gradually started becoming more risk tolerant.
5.3.2. Myopic focus on returns

The phase of ‘uncritical optimism’, during which the speculative bubble starts becoming visible, is succeeded by the ‘myopic focus on returns’. Marios suggests that during the stage of ‘myopic focus on returns’ the climate became “clearly speculative”, signalling a significant shift in the risk attitude of institutional investors. They were interested only on the returns of their investments, ignoring the factor of risk. For example, according to Christos K, the customers of fund managers wanted desperately to buy shares; any shares that traded below 1 pound. The bubble caused institutional investors to be less careful and less worried about the risks that lied ahead. The mass entrance of the investing public into the game, caused by the rising prices and the ‘accelerator event’52, pushed the indexes followed by institutional investors substantially higher, increasing the anxiety among institutional investors (Smith, 1998; Giannis interview). According to Giannis, even those institutional investors that wanted to sell were afraid to do so, because nobody knew where the speculative mania would stop. Instead they gradually moved to shares with poorer fundamentals on the promise of higher returns, because they were more volatile (Marios interview). As Emilios suggests,

“I believe that, at this point, the institutional investors were drifted by the climate. Because, you can surely say that a retail investor can be drifted, or misread the facts or the information or misunderstand them when investing, resulting in losses. However, the institutional investors were drifted, as well. Although the institutional investors have the quality of foreseeing the markets, they were drifted because ‘everything is moving up and we participate in wild prices, until to see where will go.’” This is what prevailed. (Emilios interview)

The institutional investors instead of acting as arbitrageurs, as suggested by modern finance theory (Fama, 1970) they played the game more intensively (Keynes, 1974; Smith, 1998)

causing prices to rise even further. This created a vicious circle that kept inflating the share prices. The speculative bubble rewarded irresponsible speculators with excessive returns (Selden, 1912), associating them with success and intelligence, as well (Galbraith, 1994). On the other hand the speculative bubble was punishing with poor returns the prudent investors that incorporated in their decisions risk considerations (Michalis interview).

5.3.3. Reckless risk taking and suppression of contrary voices

I call the next stage of the speculative bubble as ‘reckless risk taking and suppression of contrary voices’. With the continuous rise of the share prices the appetite for risk grows out of proportions (Marios interview), with a double effect on institutional investors’ investment behaviour. Firstly, the risks associated with the speculative bubble are entirely ignored and, secondly, contrary voices are suppressed.

This period is characterised by the syndrome of “this time is different” (Reinhart and Rogoff, 2009) which is used by institutional investors in order to rationalise their participation to the speculative bubble. A widespread belief among institutional investors that the existing valuation and risk management methods were obsolete. The importance of the “this time is different” syndrome lies in its ability to distract investors’ attention from the risks associated with the speculative mania. The investors do not have to worry since “this time is different”. The inflated valuations are justified by the new stories about exotic growth (Christos K). Additionally, the persistence of the rising prices suppresses contrary voices imposing a convergence of views (Galbraith, 1994; Nyberg, 2011). Contrarian voices during the speculative bubble are punished by the market with poor returns (Selden, 1912; Michalis interview) endangering their positions, jobs and reputation (Nyberg 2011). At the end, the
emotional strain forces even contrarian investors to play the game. The process is perfectly described by Michalis.

“Howver, at a point, when his theory, which goes “because the market will stop; because the market will retreat” is refuted day by day, irrespectively of the fact that at the end of the day six months later he will be right, the stamina of every fund manager is exhausted and put the money in the market even if his decision is much more risky compare to 2 years ago.” (Michalis interview)

5.3.4. Overtrading
The theme of ‘overtrading’ marks a remarkable shift in the size of the positions, the leverage and the investment horizon of professional investors. They focus on short term trading, again drifted by the market sentiment, which to a large degree is the outcome of their own actions. The stage of ‘overtrading’ marks the zenith of the speculative mania. It is the last opportunity of regulators and investors to prepare for the subsequent collapse, which will come sooner than later (Keynes, 1974). During this stage institutional investors behaved

“... like someone who is drunk. A drunken guy can do things that would have never done in a normal state. In such periods, regardless of the fact that they are institutional investors, generally speaking, with only a few exceptions, they accept risks that under normal circumstances they would have never accepted.” (Charis interview)

The increased liquidity and volatility of the market during ‘overtrading’ which is the result of institutional investors’ speculative activities (see Keynes, 1974) allows institutional investors to trade at much shorter horizons with much bigger positions. Their actions have dramatic effects on the market, which as a result of the speculative frenzy are now unstable and
vulnerable to investors’ psychological swings (ibid). Nevertheless, for the short term, it provides a conducive environment for the speculators to thrive (Selden, 1912).

It seems that during the phase of ‘overtrading’ even the key market players, who appeared to be strategically organised in order to promote their interests, start to lose their ability to influence the situation. They are now victims of the speculative mania they sponsored with their ‘strange friendships’, the exploitation of the ‘regulatory failure’, which all led to ‘reckless risk taking and suppression of contrary voices’ and finally to ‘overtrading’. It seems that at the end of the speculative bubble the purposive action advocated by Abolafia and Kilduff loses its influence over the disorganised crowd behaviour. Institutional investors now can only be understood by employing Kindleberger and Minsky’s framework of disorganised crowd. The extent of the bubble has negative effects on their ability to organise and act purposively. I would say that they are consumed by the bubble they help to create.

I would say that the speculative mania facilitates the influential players to organise strategically in order to promote their interest up to a point. Actually, it seems to be an optimal point in time during the speculative mania, which seems to be during the phase of ‘myopic orientation of returns’. Is this because during the ‘reckless risk taking and suppression of contrary voices’, which follows the ‘myopic orientation on returns’ the investing public is heavily involved, having on the aggregate significant implications on the transformation of the speculative bubble? Of course a lot of work is still needed on this area. How do the two groups interact? How are their powers transformed during the speculative bubble? Why at the end of the speculative bubble, during ‘overtrading’, even the key players lose their influence to strategically organise? Why they fall victims of the same trapped as the
disorganised crowd? All these questions are significant pieces that have to be put on the mosaic of speculative bubbles.

5.3.5. Collective trauma

The ‘collective trauma’ is the psychological mark left on investors because of a persistent market trend, which culminates with a price shock that pushes prices to previously unthinkable levels. After the shock, investors inherit impulsive memories associated with the financial and emotional strains caused by the shock (Galbraith, 1994; MacKenzie and Millo 2003). As a result, investors heavily overweight the possibilities of such events. Actually, a negative collective trauma is reinforced by a bear market linked to a burst of a speculative bubble, which ends with a panic. At the end of the panic, investors believe that the prices will not recover again, at least to the levels seen before the crisis. For example, in the case of Cyprus Stock Exchange

“After 1999-2001 and until 2005-2006 nobody wanted to listen about investments. It was a period that the investors wanted in order to recover from the shock of the huge losses incurred during 1999 period.” (Charis interview)

On the other hand, a positive collective trauma is the result of a speculative bubble, which makes investors believe that share prices have reached a permanent high plateau of valuations (Fisher, 1929). Nevertheless, the ‘collective trauma’ has therapeutic effects, as well. For instance, a negative collective trauma removes the excesses and misconceptions caused the speculative bubble. Investors become, at least, more prudent (Selden, 1912; Galbraith, 1994). The ‘collective trauma’ causes the ‘risk detestation’, which is the last phase of the crisis’ framework I propose.
It seems that during the phase of the ‘collective trauma’ the influence of investors on the market significantly weakens, at least, for as long as the ‘collective trauma’ lasts. The emotionally and financially damaged investors do not have the financial and emotional strengths to fight any more; at least until the next speculative episode.

5.3.6. Risk detestation

The concept of ‘risk detestation’ lies on the far end of the risk attitude spectrum, opposite to the ‘overtrading’. After the collapse of prices and the ‘collective trauma’ the investors aggressively avoid risky investments at any costs. They are totally consumed by risk considerations, completely ignoring the variable of return. The institutional investors need a period in order to recover from the ‘collective trauma’. During this period they simply want to stay away from risk. In short, “The institutional investors on average during the speculative period because of the price movement upwards they were extremely risk takers. And the return to risk profile was against them. Afterwards, they took the exact opposite view.” (Giannis interview). It seems that because of the ‘collective trauma’ the investors adopt a hostile approach to risk. They avoid association with stock market investments, because it reminds them the massive losses registered after the bubble collapsed. The ‘risk detestation’ completes the concept of ‘risk paradox’ that is based on the pro-cyclical nature of institutional investors’ risk attitude, which cannot be explained by modern finance theory. Although it is observed in every speculative bubble and its subsequent burst it has been an under-researched area, which calls for academic attention. It is pivotal to the development of speculative bubbles and its understanding will add an important piece to the puzzle of speculative bubbles.
5.4. Fallacies affecting institutional investors during the speculative bubble

5.4.1. Unrealistic assumptions: when reasoning becomes a bubble

The speculative bubble limits the ability of investors to see things as they truly are (MacKay, 1841; Galbraith, 1992, 1994; Kindleberger, 2000). The institutional investors in order to justify their participation in the speculative bubble adopt unrealistic assumptions, which rationalise their speculative investments. The unrealistic assumptions provide comfort to the believers since they justify the ‘uncritical expectations’ shared by institutional investors. The first assumption was “that the uptrend will continue” (Charis interview), subsequently, ‘the share prices cannot collapse’. The fact that in the absence of new information investors assume that the current state of affairs will continue (Keynes, 1974) in speculative bubbles becomes reinforcing. They assume that the uptrend will continue not because they do not have new information suggesting differently, but because they do not want the uptrend to stop. If the uptrend stops, the institutional investors will not be rewarded with the speculative returns any more, which of course they attribute to their superior skills (Galbraith, 1994; Michalis interview). The assumptions become embedded in the way institutional investors deal with the speculative bubble, as long as it last, by the fact that is shared by lenders, as well, who support the bubble with ample liquidity and positive statements about future growth (Christodoulos interview; Minsky, 1977, 1992).

After the bubble reached stratospheric levels and the first assumption was not appealing so strongly, the institutional investors employed a second assumption: even if the market collapses, we will get out first’ (Giannis interview). The objective of this assumption was to increase the psychological comfort zone of institutional investors indefinitely. Since the institutional investors believed that they could ‘get out first’ if the bubble burst, they did not
have to worry either about the speculative bubble *per se*, or with when it will burst. The second assumption is much more dangerous than the first one because it relaxes institutional investors’ vigilance when it is most needed. Surprisingly, although the unrealistic assumptions of economists are considered natural and part of every normative model studying investments, the assumptions of investors have no place in the models of economists yet. However, it seems that we have to study them carefully, because they are part of the self-reinforcing process that forms and shapes the speculative bubbles.

### 5.4.2. Rumours: reason has no place in the realm of bubbles

Contrary to the Efficient Market Hypothesis (Fama, 1970; 1970; 1998; Jensen, 1978), which claims that investors are rational and share prices reflect only the relevant information, the informants suggest that the ‘rumours’ is a common practice found during speculative bubbles. It seems that rumours play a crucial role in speculative markets, since they always appear aligned with the trend, giving investors the necessary justifications they need for their continuing (mis)interpretation of the situation. They are employed by influential players in order to manipulate demand and supply. Rumours can be grounded to real facts, which of course are exaggerated and distorted in order to impose a particular view on market participants (Giannis interview), which during speculative bubbles are susceptible to manipulation (Galbraith, 1994; Chancellor, 1999; Kindleberger, 2000). However, they can be totally imaginary stories, as well. In both cases, the purpose is to manipulate market perception and action on asset prices (Brace, 1913; Lefèvre, 2005).

Since ‘rumours’ and ‘strange friendships’ are both part of Abolafia and Kilduff’s (1988) purposive action of powerful players their links should be scrutinised. Are rumours fabricated and disseminated by the same ‘strange friendships’ examined in section 4.5.2 as suggested by
Michalis? Or can they be traced in different ‘coalitions’? If they are used by the ‘strange friendships’ then they give them unlimited power over market during speculative bubbles, when markets are really prone to manipulation.

5.5. Institutional investors’ objectives during the speculative bubble

This research question aims at revealing the institutional investors’ objectives during speculative bubbles. Contrary to the modern finance theory, the informants suggest that the institutional investors move to objectives that are completely unfamiliar to the concepts of investors’ rationality. The institutional investors during the speculative bubble initially concentrated in following the trend, in order to be on the same side with the vast majority of institutional investors (Giannis interview) playing the game with the comfort of ‘conventional wisdom’ (Keynes, 1974). Additionally, the local institutional investors strategically organised strategic coalitions (see Abolafia and Kilduff, 1988), coined as ‘strange friendships’ (Loizos interview) based on their existing socioeconomic relations (Michalis interview). The objective of the ‘strange friendships’ is to manipulate particular stocks that interest their members, ignoring any ethical or legal boundaries. Gradually, the institutional investors became fully obsessive with the extraordinary returns achieved during the speculative mania. A sense of superior ability (Selden, 1912; Galbraith, 1994) and a kind narcissism seem to paralyse completely their ability to exercise common sense.

5.5.1. Outperforming competitors and playing the game of speculation

The informants suggest that the main objective of the institutional investors during the speculative bubble was to outperform competitors and play the game of speculation. The
findings oppose modern finance’s established view that the main objective of institutional investors is to achieve a risk weighed return reflecting shareholders’ risk profile (see Markowitz, 1952, 1959; Treynor, 1999; Sharpe, 1964; Lintner 1965; Mossin 1966; Fama, 1970). At the initial stages of the bubble, the institutional investors were rather guided by reputational concerns (see Scharfstein and Stein, 1990). One of the mechanics developed by speculative bubbles is the enforcement of convergence of views among participants, by marginalising and punishing those daring to express contrarian views (Nyberg, 2011) and rewarding the reckless risk takers (Selden 1912; Galbraith, 1994; MacKay, 1995). As argued by Keynes (1974) in the investment world the convention brings comfort. Subsequently, especially during speculative bubbles, which are closely associated with a strong feeling of success and richness (Selden, 1912; Marios interview) institutional investors go with the trend rather than evaluate the situation based on the available information (Scharfstein and Stein, 1990).

The analysis and understanding of speculative bubbles it is not an easy task. Beyond the complexities governing all the social phenomena resulting from the interactions between the actors involved, the speculative bubble is a very dynamic phenomenon in constant flux, governed by self-reinforcing processes and feedback loops. In this context, the initial comfort felt by institutional investors when they play the game along the other market participants, it is gradually transformed with the maturation of the bubble into a highly competitive impulse. As highlighted by the informants, during the highs of the speculative fever the main objective of the institutional investors was to outperform their competitors, ignoring the risks of the bubble. Charis suggests that while the bubble was approaching its end, the institutional investors ignored entirely their competitors and the risks that lied ahead, targeting only to higher returns. That means that the speculative bubble bears the closer resemblance possible
to the money manager capitalism presented by Minsky (1992). The institutional investors are judged only on the basis of the returns, which as I have discussed in section 4.3.3 entirely prevail all other factors, such as risk, during the speculative mania. In short, the institutional investors in the speculative bubble are in an on-going transformation that moves them far away from their expected role of prudent investors (see Keynes, 1974). At the end of the speculative mania, the speculative circumstances are so strong that the effects of the strategic organising of the institutional investors are completely damaged. Subsequently, they are entirely at the mercy of the speculative mania, which unilaterally affects even the most powerful players. The institutional investors from active participants of the speculative bubble gradually became passive followers of the mania. This part of the behaviour of institutional investors can be explained better, by the framework of Kindleberger (2000) and Minsky (1977) of disorganised actions rather than the model of Abolafia and Kilduff (1988) of strategic coalitions, which seems to explain sufficiently institutional investors’ behaviour for the first phases of the speculative bubble.

5.5.2. Strange friendships

From the outset of the speculative bubble, the institutional investors took advantage of their financial muscles in order to explore strategically the newly transformed investment environment. The disorganised entrance mainly of retail investors, following the ‘displacement event’ and culminating with the ‘accelerator event’, created a favourable investment environment for the institutional investors in order to set in motion strategic coalitions, coined as ‘strange friendships’ (Loizos interview). Local institutional investors exploited their existing relations with other significant players, including brokers and major shareholders (Loizos interview; Michalis interview). The ‘strange friendships’ combined the financial strength of their ‘members’ in order to manipulate shares in which they had
significant positions. The ‘strange friendships’ can be explained using the Abolafia and Kilduff (1988) framework of strategic coalitions between powerful players. Their purposive actions were the result of the new profit opportunities provided by the bull market. However, they, in turn, shaped the investment environment in a way that, at least, for the short term, was more favourable for the ‘strange friendships’. Nevertheless, according to the informants, over longer horizons their actions worked against them, since the speculative bubble created an unsustainable price level that was destined to fail (Galbraith, 1992, 1994; Kindleberger, 2000). Even the most reputable of the institutional investors engaged in ‘strange friendships’ in order to manipulate shares of their interest\(^\text{53}\). The objective of manipulating particular stocks that the members of the ‘strange friendship’ had significant interest overshadowed prudent investment approaches expected by institutional investors.

Interestingly the issue of ‘strange friendships’ is unexplored. Although it seems to be part of every speculative episode (MacKay, 1841; Guenther, 1911) it has not been given any attention. However, it presents a challenge not only to academics, but to regulators, as well. The existence of such ‘strange friendships’ seems to be a by-product of the speculative mania. Nevertheless, a number of its aspects should be illuminated. Is the phenomenon present in emerging markets only, as in the case of Cyprus or can be found in developed markets as well? What are the real motives behind such ‘friendships’; power over particular stocks or money as it seems to be the case in Cyprus? And of course from regulators’ point of view, how can the investors be protected from such schemes?

\(^{53}\) See the conversation between the high ranking officials in various financial organisations I reproduce in page 266 from the ‘Cyprus Securities and Exchange Commission (2005) Investigation into the circumstances under which the exercise of the rights issued by the Bank of Cyprus in 2000 took place’
5.6. A final note on methodological implications

It seems that the methodological debates in the field of finance are still far from being resolved. However, I would agree with Keynes (1974), Galbraith (1994), Kindleberger (2000) and Minsky (1992) that the system is inherently unstable because of the human nature. Even Alan Greenspan (2007), the former Chairman of the United States Federal Reserve System, repeatedly claimed that speculation is, and will remain a recurring phenomenon because of the human nature. Although financial economists and sociologists should direct more intellectual and financial resources in understanding the causes of this tremendously costly phenomenon, ironically, a decisive answer regarding the human nature would probably be given by biologists. Is the propensity to speculate defined by a gene? I am sure that the answer will come sooner than later because of the huge progress on the fields dealing with human DNA. In the meantime, it seems more appropriate for us, financial economist, to follow the suggestion of Galbraith, who spent most of his academic life studying and writing about the phenomenon of speculation. As he suggested, “Recurrent speculative insanity and the associated financial deprivation and larger devastation are, I am persuaded, inherent in the system. Perhaps it is better that this be recognised and accepted.” (Galbraith, 1994: viii). That is a recommendation aligned with the position of Minsky (1992) who supported that the system is inherently unstable, because of the propensity of the financial agents to speculate in favourable economic times. That is a recommendation stemming from the observable phenomena rather than from an uncritical attachment to normative methodologies of hard sciences. Such themes, as ‘accelerator events’ and ‘strange friendships’ can only be realistically explored through a qualitative approach and thus finance will continue to fail to understand itself while it fixates on mathematical models (see Lawson, 2009).
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Χρηματιστηριακή (1999) 'Interview of Kikis Lazarides', October

Χρηματιστηριακή (2000) 'Interview of Kikis Lazarides', 21 March

Appendices

Appendix 1: Interview guide

<table>
<thead>
<tr>
<th>Interview Guide</th>
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<tbody>
<tr>
<td>1. Could you please explain the investment climate from the end of 1998 to the</td>
</tr>
<tr>
<td>beginning of 2000? If possible, I would like to focus on institutional investors.</td>
</tr>
<tr>
<td>2. You mentioned that the particular period was speculative. Could you please</td>
</tr>
<tr>
<td>expand more on this issue? Why do you think this particular period can be</td>
</tr>
<tr>
<td>described as speculative?</td>
</tr>
<tr>
<td>3. Were the institutional investors prepared for the speculative period?</td>
</tr>
<tr>
<td>4. How the institutional investors were affected by the speculative mania?</td>
</tr>
<tr>
<td>5. What were the most important factors that influenced institutional investors’</td>
</tr>
<tr>
<td>investments decisions during the speculative period?</td>
</tr>
<tr>
<td>6. What were the main investment objectives of the institutional investors</td>
</tr>
<tr>
<td>during the period under consideration?</td>
</tr>
<tr>
<td>7. Would you like to add something more? Is there any notable incident from the</td>
</tr>
<tr>
<td>speculative period regarding the topics we covered that is worth mentioning?</td>
</tr>
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</table>
Appendix 2: Number of daily transactions during 1998 and 1999

<table>
<thead>
<tr>
<th>Month</th>
<th>Trading Days</th>
<th>Transactions</th>
<th>Change %</th>
<th>Daily Transactions</th>
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<tbody>
<tr>
<td>January</td>
<td>20</td>
<td>19</td>
<td>3,415</td>
<td>13,338</td>
</tr>
<tr>
<td>February</td>
<td>20</td>
<td>19</td>
<td>4,913</td>
<td>16,729</td>
</tr>
<tr>
<td>March</td>
<td>20</td>
<td>22</td>
<td>10,016</td>
<td>14,550</td>
</tr>
<tr>
<td>April</td>
<td>19</td>
<td>19</td>
<td>8,641</td>
<td>10,779</td>
</tr>
<tr>
<td>May</td>
<td>20</td>
<td>20</td>
<td>6,832</td>
<td>27,960</td>
</tr>
<tr>
<td>June</td>
<td>21</td>
<td>22</td>
<td>4,480</td>
<td>43,704</td>
</tr>
<tr>
<td>July</td>
<td>23</td>
<td>19</td>
<td>4,170</td>
<td>60,171</td>
</tr>
<tr>
<td>August</td>
<td>21</td>
<td>17</td>
<td>5,009</td>
<td>71,912</td>
</tr>
<tr>
<td>September</td>
<td>22</td>
<td>3</td>
<td>5,120</td>
<td>14,656</td>
</tr>
<tr>
<td>October</td>
<td>20</td>
<td>18</td>
<td>5,251</td>
<td>50,102</td>
</tr>
<tr>
<td>November</td>
<td>21</td>
<td>22</td>
<td>8,856</td>
<td>125,368</td>
</tr>
<tr>
<td>December</td>
<td>21</td>
<td>18</td>
<td>7,038</td>
<td>73,076</td>
</tr>
<tr>
<td>Total</td>
<td>248</td>
<td>218</td>
<td>73,741</td>
<td>522,345</td>
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</tbody>
</table>

Total change: 608%