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1. Introduction

On 13 April 2006, the Chinese government announced the Qualified Domestic Institutional Investor (QDII) scheme, allowing Chinese institutions and residents to entrust Chinese commercial banks to invest in financial products overseas. However, at the time being, the scheme allowed individual investors to invest indirectly in overseas stock , through listed financial institutions in Hong Kong. All QDII funds launched to date are reporting losses, and the scheme appears to have lost its attraction for small investors .The sluggish overseas markets may also be a reason for Beijing shelving indefinitely the so-called "through train" program[1] that allows individual mainland Chinese residents to trade directly in Hong Kong stocks. Market investors became very excited. At the beginning, small investors were very interested in investing in the stock market in Hong Kong, and there was a significant increase in the Hang Seng index following the announcement. However, on 3 November 2007, Premier Wen Jiabao stated the need to carefully assess the possible adverse effects of the "through train" program on the stability of Hong Kong's financial system. Small investors then lost confidence in the program and sold their stock in the Hong Kong market, resulting in a significant decrease in the Hang Seng index.

The sub-prime mortgage crisis (2007-2010) was another issue that resulted in a loss of

[1] The "through train" program was different from the QDII scheme. The news of the program surfaced on 20 August 2007.

confidence among small investors in the stock market. Once the U.S. subprime crisis[2] occurred, investors began to lose confidence in the collateralized securities, and their attempts to leave the market caused the liquidity crisis. Although many central banks tried to inject large amounts of funds into the financial market, they were unable to stop the financial crisis. In September 2008, the financial market began to get out of control; many firms and companies such as investment banks (e.g., Lehman Brothers) and insurance companies (e.g., American International Group) went bankrupt or were taken over by the government. In Hong Kong, many small investors lost money through their investment in Lehman mini bonds[3]. They also lost confidence in the Hong Kong market and sold their stock.

Beginning in January 2006, stock prices of companies experienced a phenomenal increase, followed by an abrupt downturn beginning at the end of October 2007. The Hang Seng index rose by 111.7% between January 2006 and the end of October 2007. By October 2008, the Hang Seng index had lost more than one-third of its market value compared to its peak in October 2007. This type of research is becoming increasingly important. Now that the costs of entering the stock market have fallen, more and more small investors are investing in stock. It is natural to wonder how well they are handling this type of investment. The objective of this study was to research the factors, investing characteristics, and decision-making processes that affected small investors during the buoyant stock market[4] and the subsequent sharp correction period beginning at the end of October 2007. The remainder of this paper is organized

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[2] Details see Chen Jengfang, Huang Chunghuey, Wang Ming-Long, and Cheng Jia-Chi (2010)

[3] Lehman mini bond is a type of derivative, which is called credit default swap.

[4] The buoyant stock market was limited to the bull market between January 2006 and the end of October 2007 when the market reached its peak.

as follows: Section 2 reviews the theoretical background; Section 3 explains the methodology; Section 4 discusses data analysis and research findings; and Section 5 contains the conclusion and implication.

2. Theoretical background

Behavioural finance is a new approach to financial markets that has emerged, at least in part, in response to the difficulties faced by the traditional paradigm. It seeks to understand and predict systematic financial market implications of the psychological decision processes.

Did small investors change their investment behaviour during and immediately after the buoyant stock market of January 2006 to October 2007 in Hong Kong? If so, how did their investment behaviour change? This section will briefly examine the existing literature, in order to address this question.

A man could be judged irrational either because his preferences are contradictory or because his desires and aversions do not reflect his pleasures and pains. (Tversky, Kahneman, 1981) Prospect theory is a mathematically formulated alternative to the theory of expected utility maximization. Kahneman and Tversky[5] (1979) laid out the original version of prospect theory. Their paper presented a critique of expected utility theory as a descriptive model of decision-making under risk, and developed an alternative model, called prospect theory. Choices among risky prospects exhibit several pervasive effects that are inconsistent with the basic tenets of utility theory. In

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[5] Prospect theory was developed by Daniel Kahneman, professor at Princeton University's Department of Psychology, and Amo Tversky in 1979 as a psychologically realistic alternative to expected utility theory. In 2002 Daniel Kahneman shared the Nobel Prize in Economics but unfortunately Amos Tversky had died by that time and did not share in the fame.

particular, people give less credence to outcomes that are probable, versus outcomes that are certain.This tendency, called the certainty effect, contributes to risk aversion when making choices involving sure gains and to risk seeking when making choices involving sure losses.

We saw how prospect theory could explain why people make different choices in situations with identical financial wealth levels. This illustrates an important feature of prospect theory, namely that it can accommodate the effects of problem description, or framing. Framing refers to the way a problem is posed for the decision-maker. In many choice contexts the decision-maker has flexibility in how to think about the problem. One important feature of mental accounting is narrow framing, which is the tendency to treat individual gambles separately from other portions of wealth. In other words, when offered a gamble, people often evaluate it as if it is the only gamble they face in the world, rather than merging it with pre-existing bets to see if the new bet is a worthwhile addition. (Barberis, Thaler,2003, p.1071) People sometimes separate decisions that should, in principle, be combined. For example, many people have a household budget for food, and a household budget for entertaining. When eating at home (covered by the food budget), they will not eat lobster or shrimp because they are much more expensive than a simple fish casserole. But in a restaurant (covered by the entertaining budget), they will order lobster and shrimp, even though the cost is much higher than a more simple fish casserole. If they instead ate lobster and shrimp at home, and the simple fish casserole in a restaurant, they could save money. But because they think separately about restaurant meals and food at home, they choose to limit their food at home. (Ritter, 2003)

Cognitive dissonance is the mental conflict that people experience when they are presented with evidence that their beliefs or assumptions are wrong; as such, cognitive dissonance might be classified as a sort of pain of regret, or regret over mistaken beliefs. The theory of cognitive dissonance asserts that there is a tendency for people to take actions to reduce cognitive dissonance that would not normally be considered fully rational: the person may avoid the new information or develop contorted arguments to maintain their beliefs or assumptions. (Shiller, 2001) Cognitive resource constraints force the use of heuristics to make decisions, which Hirshleifer (2001) called heuristic simplification (for cognitive resource constraints, this means limited attention, processing power and memory.)

A source of bias arises indirectly from cognitive constraints. Natural selection probably did not design human minds solely to make good decisions. In the availability heuristic, items that are easier to recall are judged to be more common. This generally makes sense, since things that are more common are noticed or reported more often, making them easier to remember. Regular Web users can think of examples relating to the Internet revolution, which encouraged the market boom of the late 1990s. The representative heuristic (Tversky, Kahneman, 1974) involves assessing the probability of a state of the world, based on the degree to which the evidence is perceived as similar to or typical of that state. People's perceptions of how "representative" a piece of evidence is of a state may poorly match its conditional probability of the evidence. Companies with very low P/E's (Price-earnings ratio)are thought to be temporarily "undervalued", because investors become overly pessimistic after a series of bad earning reports or other bad news. Once future earnings turn out to be better than the unreasonably gloomy forecasts, the price adjusts. Similarly, the equity of companies with high P/E's is thought to be “overvalued,” before (predictably) falling in price. (De Bondt, Thaler, 1985) Overconfidence implies over-optimism about the individual’s ability to succeed in his endeavours. Economists have long asked whether investors who misperceive asset returns can survive in a competitive asset market such as a stock or a currency market. De Long, Shleifer, Summers,Waldmann (1991) concluded that there is, in fact, a presumption that overconfident investors—even grossly overconfident investors—will tend to control a higher proportion of the wealth invested in securities markets as time passes. Kyle, Wang (1997) showed that overconfidence may strictly dominate rationality, since an overconfident trader may not only generate higher expected profit and utility than his rational opponent, but will also generate more profit than he would have if he was a rational investor. Odean (1998) found that people are overconfident. His paper examined markets in which price-taking traders, a strategic-trading insider, and risk-averse market-makers are overconfident. Overconfidence increases expected trading volume, increases market depth, and decreases the expected utility of overconfident traders. Benos (1998) studied an extreme form of posterior overconfidence where some risk-neutral investors overestimated the precision of their private information. The participation of overconfident traders in the market led to higher transaction volumes and more volatility . Odean (1999) presented data on individual trading behaviour, which suggests that extremely high volumes may be driven, in part, by overconfidence on the part of investors. Overconfidence can explain high trading levels and the resulting poor performance of individual investors. (Barber, Odean, 2000)

In many situations, people make estimates by starting with an initial value that is adjusted to yield the final answer. The initial value, or starting point, may be suggested by the formulation of the problem, or it may be the result of a partial computation. In either case, adjustments are typically insufficient; i.e., different starting points yield different estimates, which are biased toward the initial values. We call this phenomenon anchoring. (Tversky, Kahneman, 1974) Anchoring refers to the decision-making process where quantitative assessments are required and where these assessments may be influenced by suggestions. People have in their minds some reference points (anchors), such as previous stock prices. When they receive new information they adjust these reference points insufficiently (under-reaction) to the newly acquired information. Anchoring describes how individuals tend to focus on recent behaviour and give less weight to longer time trends.

Herding is closely linked to impact expectations, fickle changes without new information, bubbles, fads, or frenzies. However, herding does require a coordination mechanism. This mechanism could be widespread rule to coordinate based on some signal (e.g. price movement), or be based on an individual’s direct ability to observe other decision-makers (observing investment trends). (Salmon, 2001)

3. Methodology

The theories and literature written on behavioural finance are relatively new. In this study, we have endeavoured to take an objective perspective on behavioural finance while describing and utilizing existing theories in explaining the change in the behaviour of small investors during and immediately after the buoyant stock market. We attempted to set the research questions based on prospect theory, anchoring, mental accounting, cognitive dissonance, overconfidence and herd behaviour, in order to achieve the research objective.

3.1 Research questions

We developed five questions and put the related hypotheses under each question to enable statistical testing.

1.	Is there a significant relationship between the small investors believed ability to predict the market and the opinion of whether the market was overvalued or not between January 2006 and the end of October 2007?
2.	Is there a significant relationship between small investors' reasons to make changes in their security holdings and the most important reasons for sharp correction in the market that started at the end of October 2007?
3.	Is there a significant relationship between the most important factors when small investors make changes in their security holdings during the buoyant stock market and the most important factor to the overvaluation of the market during the buoyant stock market?
4.	Is there a significant relationship between the small investors' opinion whether the market will recover if there was a similar economic downturn as immediately after the end of October 2007 and the small investors' opinion on the market value today?
5.	Is there a significant relationship between how small investors value the information in a situation when a decision has to be made given certain information and the small investors' believed probability that the Hang Seng Index will continue to rise three days of continuous increase?

We compared questions from different theories using the statistical method χ^2 (Chi square). We attempted to test various theories of the behaviour of small investors. The null hypothesis and the alternative hypothesis are as follows:

1.	The comparison between question 5 and 9
H_0:	There is no significant relationship between small investors who thought they could predict the market (overconfidence) and the opinion whether the market was overvalued or not during the buoyant stock market(cognitive dissonance). H_1: There is a significant relationship between small investors who thought they could predict the market (overconfidence) and the opinion whether the market was overvalued or not during the buoyant stock market(cognitive dissonance).
If the null hypothesis is rejected, it implies that the small investors are overconfident and they buy the stock during the buoyant stock market.	

2.	The comparison between question 7 and 11
H_0:	There is no significant relationship between small investors' reasons to make changes in their security holdings today (investment decision) and the most important reasons for the sharp correction in the market (herd behavior). H_1: There is a significant relationship between small investors' reasons to make changes in their security holdings today (investment decision) and the most important reasons for the sharp correction in the market (herd behavior).
If the null hypothesis is rejected, it implies that the small investors have herd behavior and they sell the stock for the sharp correction in the market.	
3.	The comparison between 8 and 10
H_0:	There is no significant relationship between the most important factors when small investors make changes in their security holdings during the buoyant stock market (mental accounting) and the most important factor to the overvaluation of the market during the buoyant stock market (cognitive dissonance). H_1: There is a significant relationship between the most important factors when small investors make changes in their security holdings during the buoyant stock market (mental accounting) and the most important factor to the overvaluation of the market during the buoyant stock market (cognitive dissonance).
If the null hypothesis is rejected, it implies that the small investors have mental accounting during buoyant stock market. The smaller investors think that the probabilities of recent price increase in connection with buoyant stock market are given too much weight. The small investors think naturally in terms of having a "safe" part of their portfolio that is protected from downside risk and a risky part that is designed for getting rich.	
4.	The comparison between 13 and 19
H_0:	There is no significant relationship between the small investors' opinion whether the market will recover (confidence and optimism) if there was a similar economic downturn as immediately after October 2007 and the small investors' opinion on the market value today (anchoring). H_1: There is a significant relationship between the small investors' opinion whether the market will recover (confidence and optimism) if there was a similar economic downturn as immediately after October 2007 and the small investors' opinion on the market value today (anchoring).
If the null hypothesis is rejected, it implies that the small investors have in their mind some reference points (anchors). A small investor who regards the market to be undervalued today may plausibly think that the market will recover in a few years to levels that prevailed during the buoyant stock market.	

5.	The comparison between 16 and 17
H_0:	There is no significant relationship between how small investors value the information in a situation when a decision has to be made given certain information (prospect theory) and the small investors' believed probability that the Hang Seng Index will continue to rise after three days of continuous increase (anchoring). There is a significant relationship between how small investors value information in a situation when a decision has to be made given certain information (prospect theory) and the small investors' believed probability that the Hang Seng Index will continue to rise after three days of continuous increase (anchoring).
If the null hypothesis is rejected, it implies that Daniel Kahneman and Amos Tversky's classic value function (prospect theory) is correct. The small investors will tend to hold on to losing positions in the hope that prices will eventually recover. Prospect theory also predicts that small investors will be risk averse in gains. This means that the small investors believe the Hang Seng Index will increase in value tomorrow; they will sell their stock (risk averse) in the buoyant stock market.	

3.2 Research design

3.2.1 Sampling method

In our study, secondary data were not available to facilitate our research. Our study data were collected primarily through a survey questionnaire directed (face-to-face) at small investors. Since the majority of Hong Kong's population is Cantonese-speaking, the original questionnaire was written in Chinese. Subsequent amendments[6] to the questionnaire were made following a pilot test on ten respondents. The questionnaire is in Appendix 1. The small investors to be interviewed were selected using

[6] Such as rewording of some questions to eliminate ambiguities, and adding or expanding the income classes so as to capture more information.

non-probability sampling[7] during October to November 2008. There were 1,199 selected respondents who were successfully interviewed.

3.3.2 Questionnaire design

The survey questionnaire was designed to elicit information about demographics and the situation and factors affecting financial decision-making. We took an existing questionnaire developed by Lund University[8] in Sweden and modified it for this study.

The first part of questionnaire focused on the situation and factors affecting financial decision-making. The second part collected respondents' personal information, including gender, age, employment status and personal average monthly income.

4. Data analysis and research findings

At the end of the survey period, a total of 1,199 questionnaires were returned. Since some respondents did not reply to all the questions in the questionnaire, we only used the number of replies (i.e., the questions that respondents did not answer were not counted) to calculate the total number of and the percentage of the total for the individual entries.

4.1 Preliminary survey results

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[7] See Cochran, Mosteller, and Tukey (1954).

[8] For details, refer Johnsson, Lindblom and Platan, (2002)

Table 1: Results of small investor's behaviour on stock market in Hong Kong

Items	No. of counts	% to Total
(A) Situation and factors affecting financial decision making		
2. Do you monitor your investments with a short-term investment horizon more often today compared with the period before the market decline at the end of October 2007. Choose one alternative:		
Yes	413	34.4
No	222	18.5
The same	448	37.4
Cannot say	116	9.7
3. Do you monitor your investments with a long-term investment horizon more often today compared with period before the market decline at the end of October 2007. Choose one alternative:		
Yes	383	31.9
No	152	12.7
The same	566	47.2
Cannot say	96	8.0
5. During the increases in equity prices from January 2006 up to the end of October 2007, did you at any point in time think that you could forecast the future market development?		
Yes	336	28.0
No	490	40.9
Cannot say	369	30.8
6. During the increases in equity prices from January 2006 up to the end of October 2007, how did you react to announcements and other information from companies? Choose one alternative:		
I made changes in my portfolio after the first news announcements	182	15.2
I made changes in my portfolio after a number of consequent news announcements that pointed into the same direction	465	38.8
I was not concerned about news announcements	393	32.2
I cannot say	158	13.2
7. When making investment decisions *today*, which of the following factors do you consider most important when making investments? Choose one alternative:		
Information from the company as a basis for a fundamental analysis.	303	25.3
Recommendations, advice and forecasts from professional investors.	221	18.4
The overall past performance of the market seen from a historical perspective.	301	25.1
Information from newspapers / TV.	113	9.4
Information from the Internet.	47	3.9
Discussion with personal friends.	85	7.1
Information from colleagues at work.	30	2.5
Own intuition of future performance.	99	8.3

Items		No. of counts	% to Total
8.	When you made investment decisions *during* the period from January 2006 to the end of October 2007, which of the following factors did you consider most important when making decision. Choose one alternative:		
	Information from the company as a basis for a fundamental analysis.	242	20.2
	Recommendations, advice and forecasts from professional investors.	265	22.1
	The overall past performance of the market seen from a historical perspective.	287	23.9
	Information from newspapers / TV.	125	10.4
	Information from the Internet.	58	4.8
	Discussion with personal friends.	89	7.4
	Information from colleagues at work.	38	3.2
	Own intuition of future performance.	95	7.9
9.	In your opinion, was the stock market overvalued at any point of time during the period from January 2006 to the end of October 2007?		
	Yes (to question10)	678	56.5
	No (jump to question11)	181	15.1
	Cannot say (jump to question11)	337	28.1
10.	If yes, what do you think was the most important contributing factor to the overvaluation of the market during the period from January 2006 to the end of October 2007? Choose one alternative:		
	The news stories in the media.	55	4.6
	The forecasts of analysts.	66	5.5
	Overconfidence among investors in the stock market.	168	14.0
	Earnings and profitability of the listed companies.	45	3.8
	Herd behavior, i.e. small investors following the majority.	343	28.6
11.	What do you think was the most important contributing factor to the *decline* in the market from the end of October 2007 up until today? Choose one alternative:		
	The news stories in the media.	120	10.0
	The forecasts of analysts.	95	7.9
	Loss of confidence among investors in the stock market.	391	32.6
	Earnings and profitability of the listed companies.	214	17.8
	Herd behavior, i.e. small investors following the majority.	294	24.5
13.	Using the scale provided (1 to 5) if there was a similar significant downturn in the market today as there was beginning at the end of October 2007, the market will surely be back up to its former levels in a couple of years or so? Strongly disagree ⟷ Strongly agree 1 2 3 4 5		

Items		No. of counts	% to Total
	1	103	8.6
	2	294	24.5
	3	462	38.5
	4	258	21.5
	5	82	6.8
14.	According to you, what is generally the reason for your less successful investments? Choose one alternative:		
	Incorrect recommendations or advice from broker /analyst/ banker etc.	151	12.6
	Incorrect recommendations or advice from other sources	161	13.4
	The market has, in general, performed poorly	460	38.4
	Own errors	404	33.7
	Others (please specify):___________________________	22	1.8
15.	You are faced with the following situation: A stock you bought one month ago for $50 is selling today at $40. One month from now the stock price will have either increased in price by $10 (i.e. price one month from now will be $50) or decreased in price by $10 (i.e. price one month from now will be $30). Both possibilities are equally likely; fifty-fifty chance. Choose one from the following:		
	Sell the stock now, thereby realizing a $10 loss.	372	31.0
	Hold the stock for one more month, given 50-50 odds between losing an additional $10 or breaking even.	824	68.7
16.	Assume the following situation: during the two recent years, the stock price of a certain company has risen with 70% and even the future for the stock looks bright. How do you value this information? Choose one alternative:		
	The stock is worth buying.	217	18.1
	The information is not sufficient enough for buying the stock.	800	66.7
	The stock is not worth buying.	181	15.1

Items		No. of counts	% to Total
(B) Demographic Characteristics			
21.	Gender:		
	Female	534	44.5
	Male	664	55.4
22.	Please choose your relevant age group:		
	under 25 years old	397	33.1
	26 – 35 years old	297	24.8
	36 – 50 years old	332	27.7
	51 – 65 years old	148	12.3
	over 65 years old	25	2.1
23.	Employment status:		
	Employee	778	64.9
	Self-employed	123	10.3
	Retired	80	6.7
	Others (please specify):_____________________	218	18.2

24.	Your average monthly income (including salaries, interest, rent and other earnings):		
	Below HK$5,000	265	22.1
	HK$5,000 -HK$9,999	226	18.8
	HK$10,000 - HK$14,999	268	22.4
	HK$15,000 - HK$19,999	193	16.1
	HK$20,000 - HK$24,999	117	9.8
	HK$25,000 - HK$29,999	46	3.8
	HK$30,000 - HK$49,999	52	4.3
	HK$50,000 or above	32	2.7

Table 1 shows that 44.5% of respondents were female and 55.4% were male. The majority of respondents were between the ages of 26 and 64 (64.8%), while 33.1% were below age 25 and 2.1% were over age 65. For the employment status aspect, 64.9% of respondents reported being employed, 10.3% were "self-employed", 6.7% were retired and 18.2% were classified as "Others" (e.g., housewives, students, etc.).

4.2 Data analysis

In this section, based on the information contained in Tables 1-4 and Figures 1-5, we attempt to examine the income distribution, the long-term and short-term investment horizon, the behavioural characteristics, and the prospect theory and heuristics of small investors in the Hong Kong stock market. The sharp correction in the stock market from the end of October 2007 may have caused the aversion of small investors to making long-term investments. A more comprehensive result could be achieved by asking whether small investors have changed their investment behaviour (and how they distributed their investments between short- and long-term) today compared with the period before the market decline at the end of October 2007.

4.2.1 Income distribution

Based on the information contained in Table 2, the respondents' mean individual income was $14,564.22[9], and the median individual income was $12,033.58[10].

Table 2**:** Respondents' average monthly income distribution

Class boundaries	Class mid-point	Frequency	Cumulative frequency	Class Total
$0 and under $5,000	2,500	265	265	$662,500
$5,000 and under $10,000	7,500	226	491	$1,695,000
$10,000 and under $15,000	12,500	268	759	$3,350,000
$15,000 and under $20,000	17,500	193	952	$3,377,500
$20,000 and under $25,000	22,500	117	1,069	$2,632,500
$25,000 and under $30,000	27,500	46	1,115	$1,265,000
$30,000 and under $50,000	40,000	52	1,167	$2,080,000
$50,000 and under $100,000	75,000	32	1,199	$2,400,000
Total		1,199		$17,462,500

4.2.2 Long-term and short-term investment horizon

The results from question 1a indicate that both female and male respondents had invested between 70% and 80% of their capital on long-term investments covering a period over five years (see Figure 1). The results from question 1 b indicate that both female and male respondents had invested between 30% and 40% of their capital on short-term investments of under a year (see Figure 2). These results indicate a preference for long-term investments, which may be a result, in part, of the buoyant stock market from January 2006 to the end of October 2007, which was characterized by the "through train" program, and speculative and short-term investments. The end

9 The mean is calculated by:

$17,462,500/1,199 = $14,564.22

10 The median is calculated by:

$$\$10{,}000+\{[(\frac{1{,}199+1}{2})-491]/268\}\text{x}\$5{,}000=\$12{,}033.58$$

of the “through train” program may have caused the current aversion towards these types of investments. Since the bankruptcy of Lehman Brothers, small investors have lost confidence in those types of collateralized securities and have tried to escape from the market. The result is that small investors may feel more comfortable investing in more safe and long-term investments.

Figure 1: Proportion of investments with long-term (>5 year.) investment horizon (%)

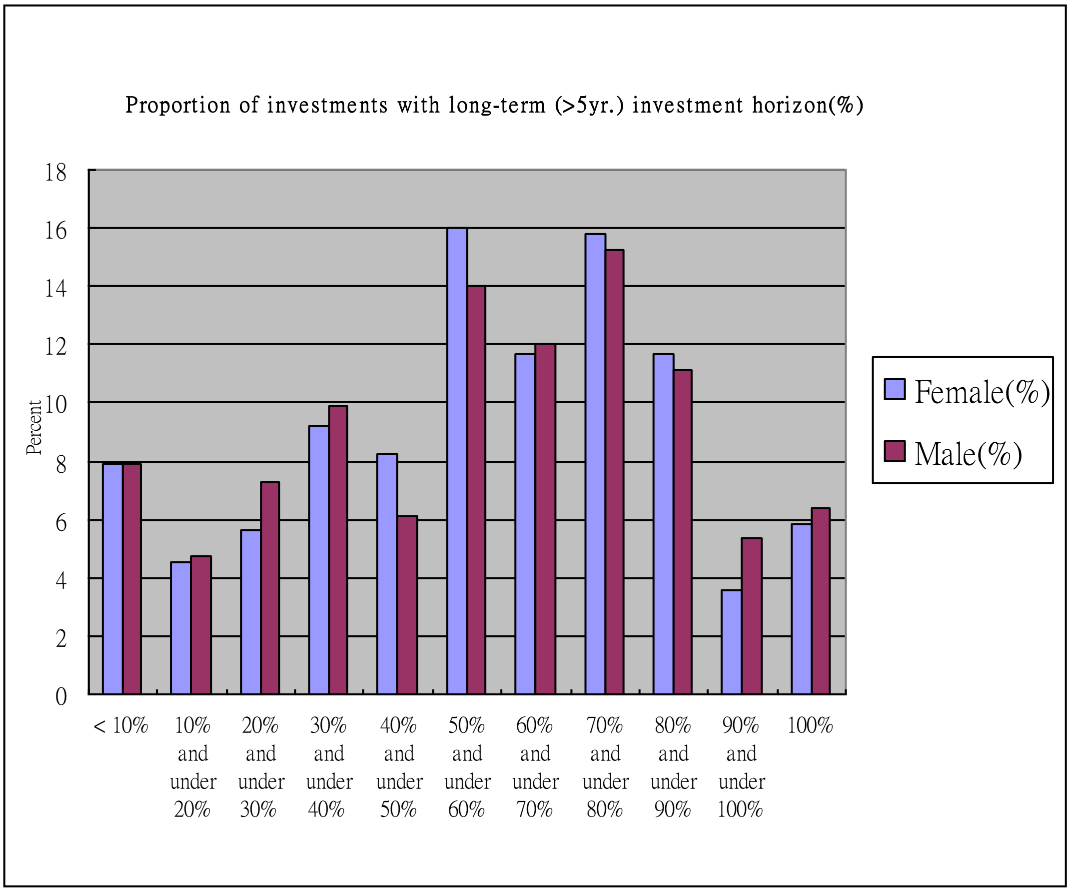
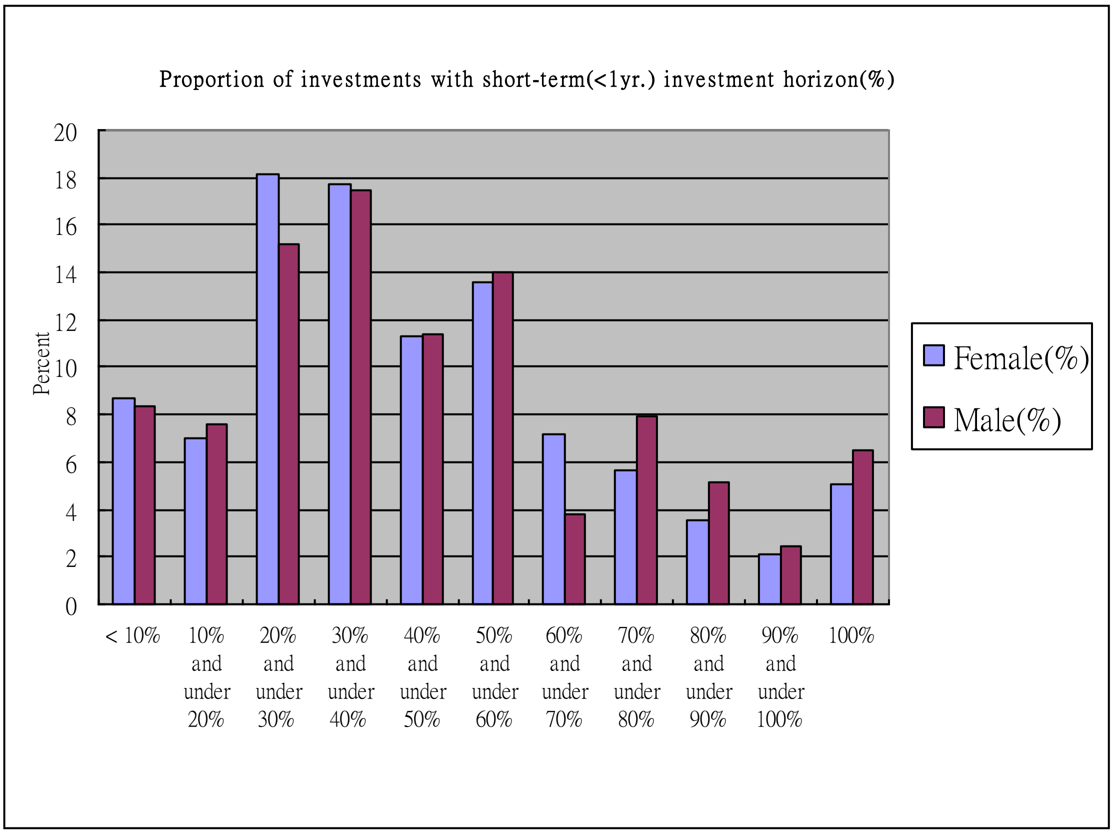


Figure 2: Proportion of investments with short-term (<1 year.) investment horizon (%)



4.2.3 Behavioral characteristics

Change In Monitoring of Investments

To determine whether small investors paid more attention to their investments after the market began to decline, respondents were asked two questions (questions 2 and 3) on whether they monitored both their short-term investments and long-term investments more often after the market decline.

Table 1 shows the frequency of respondents monitoring their short-term investments today compared with the period before the market decline at the end of October 2007 (question 2). A highest number of respondents (37.4%) have not changed their behaviour regarding the monitoring of their short-term investments. Similar results were found for monitoring of long-term investments (question 3), as 47.2% of respondents did not change their monitoring behaviour. Most of the respondents have not changed their monitoring behaviour because the market decline has made them more cautious.

Change in Investment Target Categories

To determine whether the small investors changed their investment objectives as a result of the market decline, respondents were asked to choose between two alternatives that best describe the investments they made in the two different time periods studied (questions 4 and 12): the period from January 2006 up to the market decline at the end of October 2007 and the period at the end of October 2007 up until today.

Table 3: Investment Target Category (revealed by question 4)

	Gender	**Female (%)**	**Male (%)**
Investment target category	Companies with uncertain but higher expected returns	13.21	16.39
	Companies with stable but lower expected returns	27.74	23.72
	Large size companies	30.75	30.21
	Small size companies	3.87	5.21
	IPO	20.47	17.46
	Derivatives	3.96	6.8
	Total	100	99.79

Table 3 shows the investment target categories chosen by respondents before the market decline. The results show that 30.75% of females and 30.21% of males invested mainly in large size companies. In addition, 27.74% of females and 23.72% of males invested mainly in companies with stable but lower expected returns.

Table 4 Investment Target Category (revealed by question 12)

	Gender	Female (%)	Male (%)
Investment target category	Companies with uncertain but higher expected returns	7.53	11.49
	Companies with stable but lower expected returns	34.71	32.57
	Large size companies	36.78	34.25
	Small size companies	3.2	4.72
	IPO	13.26	11.11
	Derivatives	4.52	5.86
	Total	100	100

Table 4 shows the investment target categories chosen by respondents after the market decline. The results showed that large size companies and companies with stable but lower expected returns were still the favourite investment categories after the decline: 36.78% of females and 34.25% of males invested in large size companies and 34.71% of females and 32.57% of males invested in companies with stable but lower expected returns. In fact, the proportion of those investing in these two target categories increased by a wide margin: investment in companies with stable but lower expected returns increased from 27.74% to 34.71% for females and 23.72% to 32.57% for males, and investment in large size companies increased from 30.75% to 36.78% for females and 30.21% to 34.25% for males. Investment in companies with uncertain but higher expected returns and investment in IPO(Initial Public Offering) decreased after the decline: investment in the former dropped from 13.21% to 7.53% for females and 16.39% to 11.49% for males, while investment in the latter dropped from 20.47% to 13.26% for females and 17.46% to 11.11% for males.

The domination of the investment target categories “companies with stable but lower expected returns” and “large size companies” both before and after the market decline shows that investment target categories with smaller risk fit human nature; in other words, people will always try to minimize and diversify their risks by investing in both safe and risky investments. However, after the market decline, small investors were discouraged from making high-risk investments. They became more sensitive to loss; therefore, they invested more in “safe” investments and less in “risky” investments.

We reviewed the results by gender, to determine whether any investment characteristics are gender-based. We found out that although both females and males were mostly unwilling to make high-risk investment decisions (shown in the high proportion of respondents who invested in less risky investment target categories), males were more willing to take some risk, shown in the larger proportion of males who reported investing in “companies with uncertain but higher expected returns”. Before the market decline, 16.39% of males invested in this category, compared to 13.21% of females. Even after the market decline, males were still more likely to invest in the higher risk categories: 11.49% of males and 7.53% of females invested in the companies with uncertain but higher expected returns. Therefore, we may conclude that when deciding on the type of investment, females are generally more prudent while males are more adventurous.

Change in Factors Important for Investments

Which factors do investors consider to be the most important when making their investment decisions? Respondents were asked to rate the importance of factors influencing investment decisions (questions 7 and 8 in Table 1). We can see that the overall past performance of the market was the most important factor affecting investment decisions between January 2006 and October 2007, with 23.9% of respondents choosing this factor. Advice from professionals was the next important factor chosen by 22.1% of respondents, followed by receiving information from the company, at 20.2%.

The most important factor affecting current investment decisions is receiving information from the company (25.3% of respondents), closely followed by the overall past performance of the market (25.1% of respondents). The results show that since the decline of the market, small investors pay more attention to these types of factors in order to help them analyze which stock is worth buying, as these factors focus on clear facts and fundamental valuations. The importance of receiving advice from professionals has decreased since the market decline, possibly due to a loss of confidence in these professionals. Overall, it appears that small investors now prefer to make investment decisions on their own.

Possible Reasons for the Overvaluation and Decline of the Market

According to the survey results from question 9 in Table 1, 56.5% of respondents considered the market to be overvalued between January 2006 and the end of October 2007, while 15.1% did not consider the market to be overvalued, and 28.1% of respondents could not decide. Even though small investors were confronted with evidence suggesting that the consecutive price increases in the market did not have any fundamental basis, and thus the market was overvalued, they may have avoided this new information or developed contorted arguments to maintain their own beliefs.

What factors contributed to the overvaluation of the market during the period from January 2006 to the end of October 2007? According to the survey results from question 10 in Table 1, the most important factor reported by respondents was herd behaviour (28.6%), followed by overconfidence among investors in the market (14%). With regard to the factors contributing to the decline in the market starting at the end of October 2007 (question 11 in Table 1), 32.6% of respondents indicated that loss of confidence was the most important factor, followed by herd behaviour (24.5%).

What are the possible reasons given by small investors to explain their less successful investments? Results from question 14 in Table 1 show that 38.4% of respondents considered the poor performance of the market to be the most important factor leading to their less successful investments, followed by their own errors (33.7%). The failure of investments brings with it feeling of regret, and it is possible that small investors may have attempted to avoid this feeling by blaming their poor investment performance on an external cause (poor performance of the market), rather than an internal one (their own errors).

4.2.4 Prospect Theory

Susceptibility to Loss Aversion When Faced with Losses

Would small investors prefer to gamble and possibly accumulate further losses when faced with a price decline of their stock, instead of closing their position with a minor loss? Question 15 in Table 1 was used to explore this question. Results show that a majority of respondents would choose to hold onto the stock for one more month, in the hope that it would break even (68.7% of respondents). In contrast, only 31.0% of respondents would sell the stock now thereby realizing a $10 loss. This result is reasonable, as if there is a chance to break even or possibly gain capital, most people would take that chance. In particular, people give less credence to outcomes that are probable, versus outcomes that are certain. This tendency, called the certainty effect, contributes to risk aversion when making choices involving sure gains and to risk seeking when making choices involving sure losses.

4.2.5 Heuristics

Investors' Ability to Forecast the Development of the Market

During the increases in equity price from January 2006 up to the end of October 2007, did small investors at any point in time think that they could forecast future market development? The purpose of this question was to establish if there was a degree of overconfidence among small investors between January 2006 and the end of October 2007. The results (shown in question 5 in Table 1) show that 40.9% of respondents did not think they could forecast future market development, compared to 28.0% of respondents who believed they could. Thus, there was a small group of respondents who were as confident in their own forecasting skills as the professionals.

Investing in a Winner Stock

Assume that in the last two years, the stock price of a certain company rose 70%, and the future for the stock looks good. How do small investors value this information? Question 16 was used to determine whether small investors would make investment decisions based only on observed similarities to familiar patterns. The results, in Table 1, show that a majority of respondents felt there was not sufficient information to make a decision to purchase the stock (67.7%), while 18.1% of respondents thought the stock was worth buying. Only 15.1% of respondents thought the stock was not worth buying. It is possible that the prudence shown by the respondents in this question may be a result of their loss of confidence in the market.

Probability for Continued Changes in Value

How do small investors perceive the probability of repeated events and how do they react to a similar occurrence taking place in the market? Questions 17 and 18 refer to the anchoring of decisions to previous events when faced with uncertainty, and describe a situation where the index of a stock market has decreased or increased for three days in a row. Figures 3 and 4 show that approximately 35% of respondents thought there was a 50–60% probability that the market would increase if the Hang Seng Index increased for three consecutive days; on the other hand, approximately 40% of respondents thought there was a 50–60% probability that the market would decrease if the Hang Seng Index decreased for three consecutive days.

Figure 3: If Hang Seng Index has increased consecutively during the past three days, what is probability that it will increase in value during tomorrow as well

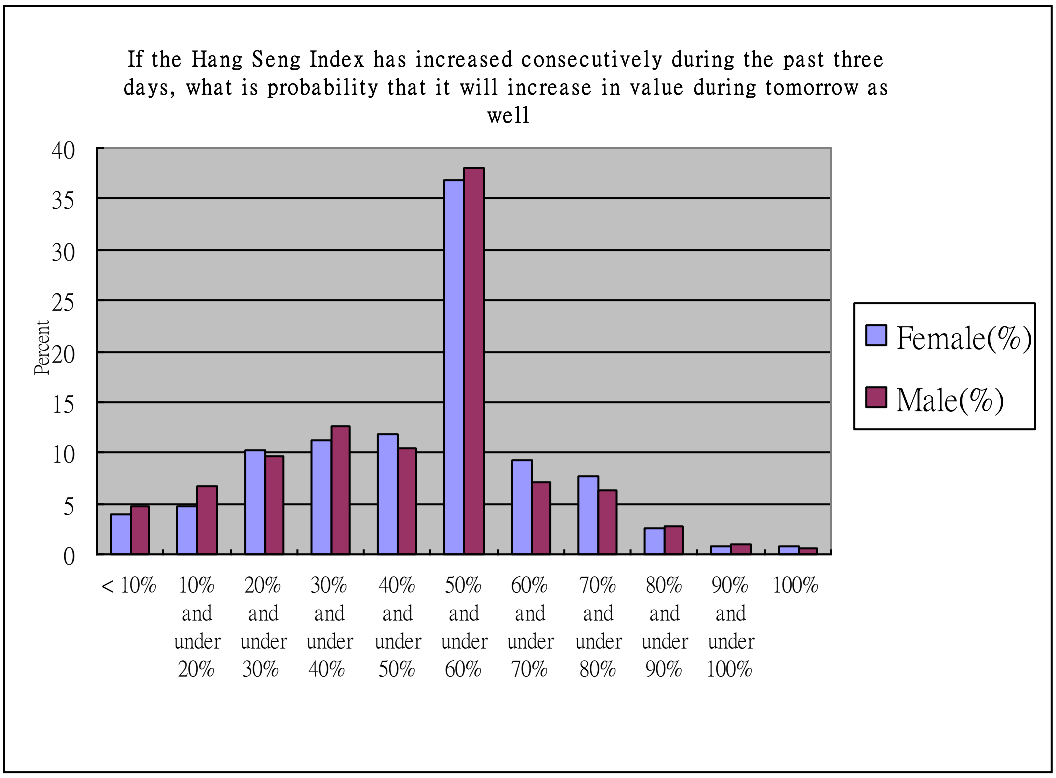
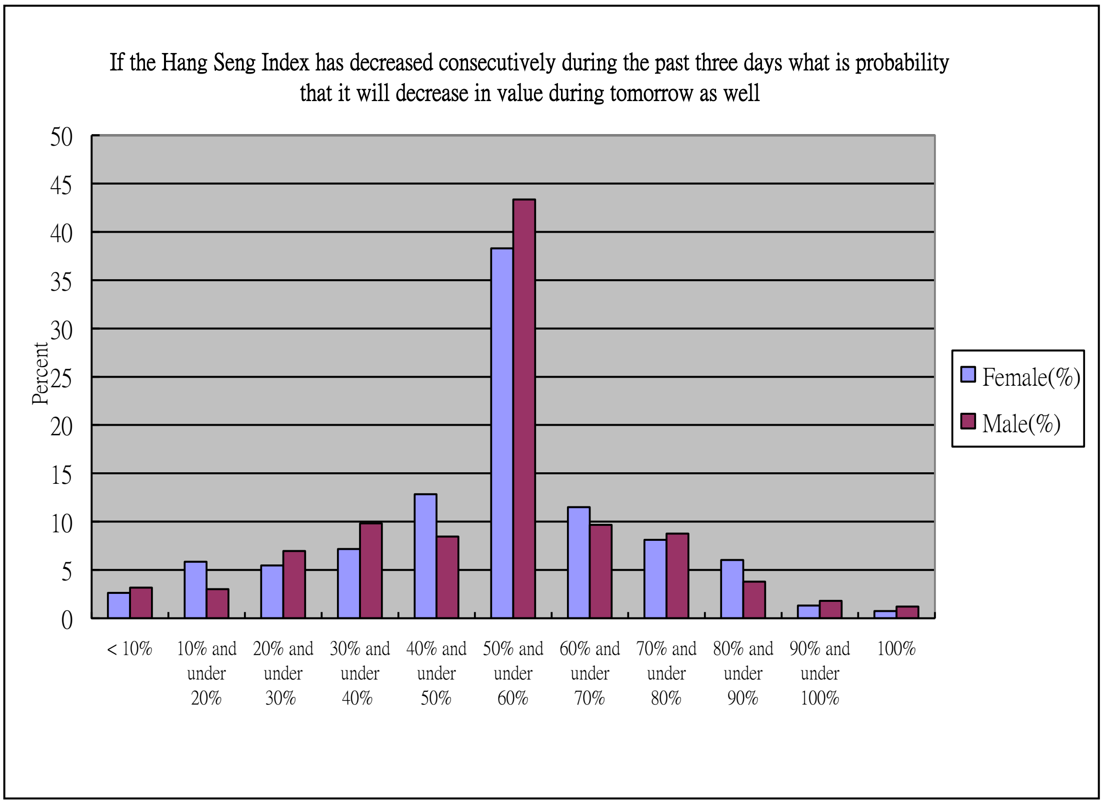


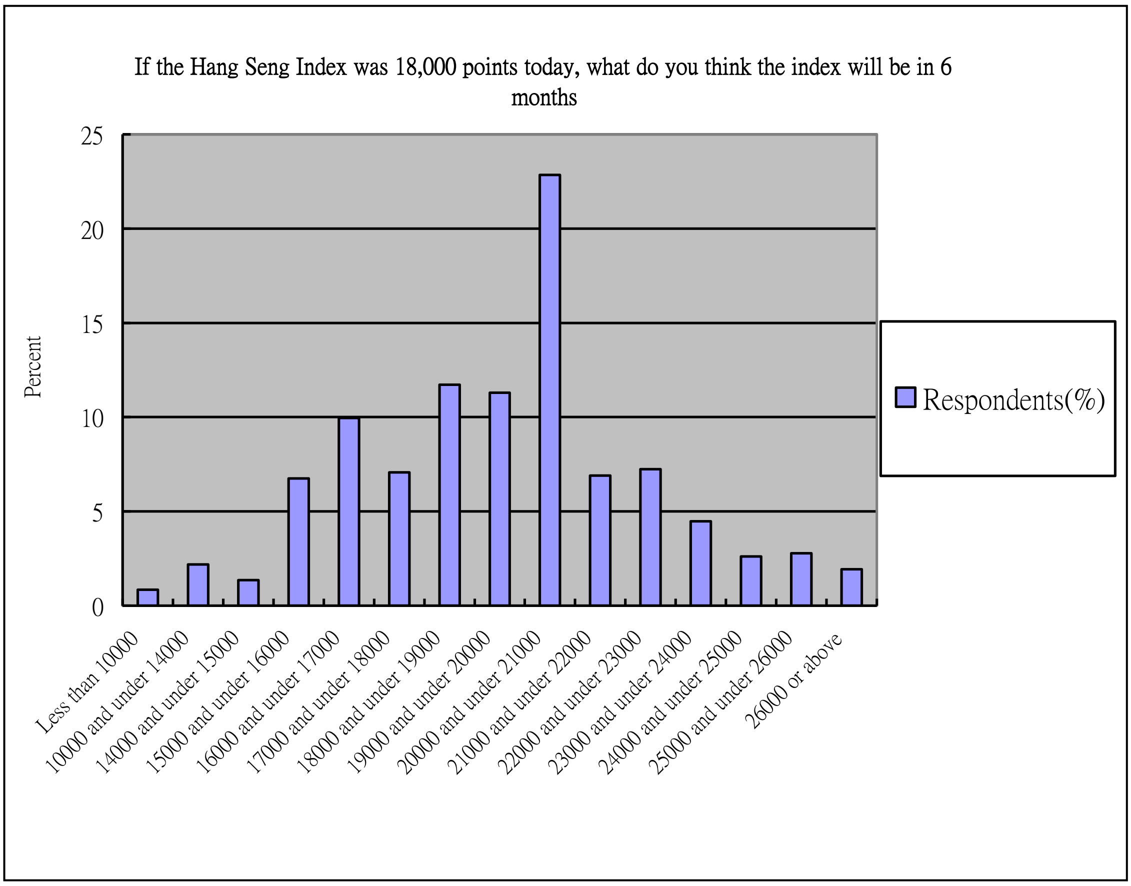
Figure 4: If the Hang Seng Index has decreased consecutively during the past three days, what is probability that it will decrease in value during tomorrow as well



Forecast of the Hang Seng Index

If the Hang Seng Index was at 18,000 points today, what do small investors think the index will be at in 6 months? The answer to this question (question 20) looks at the level of confidence small investors have in the stock market. The results, seen in Figure 5, show that the respondents are prudent: most respondents forecast that the market level would not be that high—between 20,000 and under 21,000 points. This means that they believe the market will not recover so quickly, even though the forecast is that the Hang Seng Index will recover within 6 months to the level before the market decline.

Figure 5: If the Hang Seng Index was 18,000 today, what do you think the index will be in 6 months



4.3 Empirical results

Table 5: Statistical Comparisons

The comparison	Cramer's V Value	Approx. Sig.
Question 5 and 9	0.139	0.000
Question 7 and 11	0.099	0.030
Question 8 and 10	0.088	0.828
Question 13 and 19	0.102	0.000
Question 16 and 17	0.214	0.000

The empirical results of each of our comparisons are reported in Table 5. The first comparison was between questions 5 and 9, which analyzed the relationship between overconfidence and cognitive dissonance. Is there a significant relationship between the belief of smaller investors' in their ability to predict the market, and their opinion of whether the market was overvalued between January 2006 and the end of October 2007? The Cramer's V value is 0.139 and significant level is 0.000. The null hypothesis is rejected, indicating that there is a significant relationship between the small investors' believed ability to predict the market and their opinion of whether the market was overvalued at any point between January 2006 and the end of October 2007.

The second comparison was between questions 7 and 11. It is a more wide-ranging query concerning the composition and characteristics of investments and is based on a theory of herd behaviour as a cause of both overvaluation and the decline of the market. Is there a significant relationship between the reasons given by small investors for making changes to their security holdings and the most important reasons for the sharp correction in the market that started at the end of October 2007? The Cramer's V value is 0.099 and significant level is 0.030. The null hypothesis is rejected, indicating that there is a connection between the reasons given by small investors for changing their current security holdings and the reasons they felt were important to the decline of the market starting at the end of October 2007. If a small investor believes that the forecasts by analysts were important to the downturn, that investor would plausibly focus on analysts' forecasts today in order to be well-informed about important news stories that may affect his security holdings. Our findings established a significant relationship between these two questions.

The next comparison was between questions 8 and 10. Question 8 refers to the most important factors small investors gave for making changes to their security holdings during the buoyant stock market. There is a relationship to mental accounting theory behind the question. The comparison between questions 8 and 10 was an exploration of mental accounting and cognitive dissonance. Small investors tend to focus on recent behaviour and give less weight to longer time trends . The probabilities of recent price increases in connection with a buoyant stock market may be given too much weight, which can reinforce herd behaviour. The comparison between questions 8 and 10 strives to discover if there is a significant relationship between the most important sources of information for making changes to small investors' security holdings between January 2006 and the end of October 2007. The Cramer's V value is 0.088 and the significant level is 0.828. The null hypothesis cannot be rejected, indicating that there is no statistically significant relationship. We thought that there might have been a link between the sources of information people actually used and the sources they believed were the most important in the buoyant stock market. The Internet was widely available and popular and there were a number of Internet brokers and numerous websites giving financial information on companies. In addition, newspapers gave "hot stock tips" on a daily basis. As a result, we expected that some of this widely available information would have affected people and their perceived reasons for the buoyant stock market. To our surprise there was no such relationship. The comparison between questions 13 and 19 was used to determine if there was a relationship between confidence and optimism on one hand and anchoring on the other. Is there a possible relationship between the opinions of small investors on whether the market would recover in the event of a similar economic downturn after the end of October 2007, and their opinions on the market value today? The Cramer's V value is 0.102 and significant level is 0.000. The null hypothesis is rejected, indicating that there is a statistically significant relationship. A small investor who regards the market to be undervalued today may plausibly think the market will recover in a few years to levels that prevailed during the buoyant stock market. This is the reason why we think the market will return to its historical average over time, and the questionnaire results seem to back up our hypothesis.

The comparison between questions 16 and 17 is an investigation of Kahneman and Tversky's classic value function (prospect theory), compared to anchoring. It examines the relationship between how much small investors value the information they have in a situation when a decision has to be made and their belief that the Hang Seng index will continue to rise after three days of continuous increases. The Cramer's V value is 0.214 and the significant level is 0.000. The null hypothesis is rejected, indicating that there is a statistically significant relationship. It implies that Daniel Kahneman and Amos Tversky's classic value function (prospect theory) is correct. No matter how many days the stock market has increased in value, the probability that it will go up or down the next day is 50-50. As can be seen in Figure 3, about 35% of respondents believe the probability is between 50–60% that the stock market will continue to go up if it has gone up three consecutive days. Patterns are thought to exit even in data that are random and continuous price increases are categorized as improbable. This is consistent with the overconfidence hypothesis. Conservation can also help to explain why small investors give too much weight to the prior probabilities of events in a given situation, as they are reluctant to change their opinions.

5. Conclusion and Implication

The objective of this paper was to research the factors and decision-making processes that affect the investment behaviour of small investors. There was a change in the behaviour of small investors' during and immediately after the buoyant stock market of January 2006 to October 2007 in Hong Kong. During the buoyant market, small investors were overconfident and bought stock. The small investors also exhibited herd behaviour, and, once the sharp correction to the market began after October 2007, they sold the stock. The small investors had in mind some reference points (anchors), such as the stock purchase price. If a stock appreciates (e.g., during the buoyant stock market) and the small investor continues to use purchase price as a reference point, the stock price will be in a more concave, risk-averse part of the investor's value function. The stock's expected return may continue to justify its risk, but if the small investor lowers her expectation somewhat for the stock's return, she will likely sell the stock. On the other hand, if the stock declines (e.g., immediately after the buoyant stock market), its price is the convex, risk-seeking part of the value function. Here the small investor will continue to hold the stock even if its expected return falls lower than the level that would have been necessary to justify its original purchase.

Specifically, the objective of this paper was to study the reasons that lay behind the enormous rise in the value of the stock market in Hong Kong between January 2006 and October 2007. The survey results showed that a majority of small investors have an investment horizon of more than five years. Furthermore, the unpleasant experience of the market decline after October 2007 has made small investors more cautious and careful now than they were during the buoyant stock market.

When we examined the reasons that contributed to the buoyant stock market, the results were more scattered. The overall past performance of the market was the most important factor affecting investment decisions for small investors during the period of January 2006 to October 2007 (23.9% of respondents chose this factor). In contrast, the most important factor affecting current investment decisions was receiving information from the company (25.3% of respondents). With regard to the factor that contributed most to overvaluation of the market, 28.6% of respondents chose herd behaviour. Finally, 32.6% of respondents indicated that loss of confidence was the most important factor that contributed to the market decline after October 2007.

Prospect theory and heuristics may help to further explain the other psychological factors affecting the investment decision-making process and how these processes can lead to a buoyant stock market. Prospect theory asserts that people are risk seekers for losses and risk averse only for levels of wealth above a certain reference point. This was true among the small investors in Hong Kong. Heuristics—a process by which people find out things for themselves, usually by trial and error—may help to explain why the market sometimes acts in a less-than-rational manner. In our study, the heuristic-related factor of overconfidence in the market was the second most important contributing factor to the overvaluation of the market between January 2006 and the end of October 2007 (14% of respondents chose this factor). During the buoyant stock market, overconfidence appears to have been strong among small investors. This suggests that small investors' decision-making was influenced by a strong belief in their own skills, which can lead to an underestimation of the likelihood of bad outcomes during a buoyant stock market.

Several findings came out of the empirical results of our study. First, there is a significant relationship between the number of small investors who thought they could predict the market during the buoyant stock market period and whether the market was overvalued during that period. This result implies that small investors were overconfident and bought the stock during the buoyant stock market.

Second, there is a significant relationship between the reasons given by small investors for changing their current security holdings and the reasons given for the sharp correction in the market. This result implies that herd behaviour occurred among the small investors, and they sold their stock during the sharp correction period.

Third, there is no significant relationship between the factors small investors felt were important in making changes to their security holdings during the buoyant stock market and the most important factor in the overvaluation of the market during that same time period. This result implies that small investors had no mental accounting during the buoyant stock market. They thought in terms of having a “safe” part of their portfolio that was protected from downside risk and a “risk” part of their portfolio that was designed for increasing wealth. This result was surprising.

Fourth, there is a significant relationship between the opinions of small investors on whether the market would recover in the event of an economic downturn similar to the one that occurred after October 2007, and the opinions of smaller investors on the market value today. This result implies that small investors have reference points (anchors). A small investor who believes the market is undervalued today may plausibly think that the market will recover in a few years to levels that prevailed during the buoyant stock market.

Finally, this study showed that there is a significant relationship between how small investors value information in a situation when they have to make a decision and their belief in the probability that the Hang Seng index would continue to rise after three days of continuous increase. This result implies that Daniel Kahneman and Amos Tversky's classic value function (prospect theory) is correct. Small investors will tend to hold on to a position of loss in the hope that prices will eventually recover. Prospect theory also predicts that small investors will be risk averse to gains, which means that small investors believe the Hang Seng index will continue to increase in value, and as a result, they will sell their stock (risk averse) in a buoyant stock market.

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Appendix 1

No:____

A survey on the change of small investors' behaviour on stock market in Hong Kong

Target Population:	Hong Kong small investors on stock market (Nonprobability sampling)
The Purpose:	To collect the information and opinion of Hong Kong small investor who invest in stocks. Deeply investigate of Hong Kong small investors' financial decision making. More specifically, we are researching how the speculative market during January 2006 and at the end of October 2007 has affected investment behaviour. With the speculative market we mean the significant increase in equity prices from January 2006 up to the end of October 2007. We are also researching how market participants have changed their market behaviour after the sharp correction in the market during the period from the end of October 2007 up until today.
Duration of the Survey:	October – November 2008

(A) Situation and factors affecting financial decision making

1. How your investments are distributed between short-term and long-term investment horizons:
   a. Proportion of investments with long-term (>5yr.) investment horizon______%
   b. Proportion of investments with short-term(<1yr.) investment horizon______%

2. Do you monitor your investments with a short-term investment horizon more often today compared with the period before the market decline at the end of October 2007. Choose one alternative:
   - ☐ Yes
   - ☐ No
   - ☐ The same
   - ☐ Cannot say

3. Do you monitor your investments with a long-term investment horizon more often today compared with period before the market decline at the end of October 2007. Choose one alternative:
   - ☐ Yes
   - ☐ No
   - ☐ The same
   - ☐ Cannot say

4. Choose the two alternatives that best describe your investment strategies during the period from January 2006 up to the market decline at the end of October 2007.
   - ☐ I invested mostly in companies with uncertain, but higher expected returns
   - ☐ I invested mostly in companies with stable, but lower expected returns
   - ☐ I invested mostly in large size companies
   - ☐ I invested mostly in small size companies
   - ☐ I invested mostly in IPO (Initial Public Offering)
   - ☐ I invested mostly in derivatives

5. During the increases in equity prices from January 2006 up to the end of October 2007, did you at any point in time think that you could forecast the future market development?
    - ☐ Yes
    - ☐ No
    - ☐ Cannot say

6. During the increases in equity prices from January 2006 up to the end of October 2007, how did you react to announcements and other information from companies? Choose one alternative:
    - ☐ I made changes in my portfolio after the first news announcements
    - ☐ I made changes in my portfolio after a number of consequent news announcements that pointed into the same direction
    - ☐ I was not concerned about news announcements
    - ☐ I cannot say

7. When making investment decisions *today*, which of the following factors do you consider most important when making investments? Choose one alternative:
    - ☐ Information from the company as a basis for a fundamental analysis.
    - ☐ Recommendations, advice and forecasts from professional investors.
    - ☐ The overall past performance of the market seen from a historical perspective.
    - ☐ Information from newspapers / TV.
    - ☐ Information from the Internet.
    - ☐ Discussion with personal friends.
    - ☐ Information from colleagues at work.
    - ☐ Own intuition of future performance.

8. When you made investment decisions *during* the period from January 2006 to the end of October 2007, which of the following factors did you consider most important when making decision. Choose one alternative:
    - ☐ Information from the company as a basis for a fundamental analysis.
    - ☐ Recommendations, advice and forecasts from professional investors.
    - ☐ The overall past performance of the market seen from a historical perspective.
    - ☐ Information from newspapers / TV.
    - ☐ Information from the Internet.
    - ☐ Discussion with personal friends.
    - ☐ Information from colleagues at work.
    - ☐ Own intuition of future performance.

9. In your opinion, was the stock market overvalued at any point of time during the period from January 2006 to the end of October 2007?
    - ☐ Yes (to question10)
    - ☐ No (jump to question11)
    - ☐ Cannot say (jump to question11)

10. If yes, what do you think was the most important contributing factor to the overvaluation of the market during the period from January 2006 to the end of October 2007? Choose one alternative:
    - ☐ The news stories in the media.
    - ☐ The forecasts of analysts.
    - ☐ Over-confidence among investors in the stock market.
    - ☐ Earnings and profitability of the listed companies.
    - ☐ Herd behaviour, i.e. small investors following the majority.

11. What do you think was the most important contributing factor to the *decline* in the market from the end of October 2007 up until today? Choose one alternative:
- ☐ The news stories in the media.
- ☐ The forecasts of analysts.
- ☐ Loss of confidence among investors in the stock market.
- ☐ Earnings and profitability of the listed companies.
- ☐ Herd behaviour, i.e. small investors following the majority.

12. Choose two alternatives that best describe the investments you have been making since the market decline at the end of October 2007 up until today.
- ☐ I invested mostly in companies with uncertain, but higher expected returns
- ☐ I invested mostly in companies with stable, but lower expected return
- ☐ I invested mostly in large size companies
- ☐ I invested mostly in small size companies
- ☐ I invested mostly in IPO (Initial Public Offering)
- ☐ I invested mostly in derivatives

13. Using the scale provided (1 to 5) if there was a similar significant downturn in the market today as there was beginning at the end of October 2007, the market will surely be back up to its former levels in a couple of years or so?

Strongly disagree ◄——————————► Strongly agree

1	2	3	4	5
☐	☐	☐	☐	☐

14. According to you, what is generally the reason for your less successful investments? Choose one alternative:
- ☐ Incorrect recommendations or advice from broker/analyst/banker etc.
- ☐ Incorrect recommendations or advice from other sources
- ☐ The market has, in general, performed poorly
- ☐ Own errors
- ☐ Others (please specify):___________________________________

15. You are faced with the following situation: A stock you bought one month ago for $50 is selling today at $40. One month from now the stock price will have either increased in price by $10 (i.e. price one month from now will be $50) or decreased in price by $10 (i.e. price one month from now will be $30). Both possibilities are equally likely; fifty-fifty chance. Choose one from the following:
- ☐ Sell the stock now, thereby realizing a $10 loss.
- ☐ Hold the stock for one more month, given 50-50 odds between losing an additional $10 or breaking even.

16. Assume the following situation: during the two recent years, the stock price of a certain company has risen with 70% and even the future for the stock looks bright. How do you value this information? Choose one alternative:
- ☐ The stock is worth buying.
- ☐ The information is not sufficient enough for buying the stock.
- ☐ The stock is not worth buying.

17. If the Hang Seng Index has *increased* consecutively during the past three days what is probability that it will *increase* in value during tomorrow as well? (From 0-100%)
______%

18. If the Hang Seng Index has *decreased* consecutively during the past three days what is probability that it will decrease in value during tomorrow as well? (From 0-100%)
______%

19. If you look at the stock market today, in your opinion, it is (choose one alternative):
- ☐ Overvalued by _______%
- ☐ Undervalued by ________%
- ☐ Value at a fundamentally correct level.
- ☐ Cannot say.

20. If the Hang Seng Index was 18,000 points today, what do you think the index will be in 6 months?
I think the Hang Seng Index will be ___________points in 6 months.

(B) Demographic Characteristics

21. Gender:
- ☐ Female
- ☐ Male

22. Please choose your relevant age group:
- ☐ under 25 years old
- ☐ 26 – 35 years old
- ☐ 36 – 50 years old
- ☐ 51 – 65 years old
- ☐ over 65 years old

23. Employment status:
- ☐ Employee
- ☐ Self-employed
- ☐ Retired
- ☐ Others (please specify)_______________

24. Your average monthly income (including salaries, interest, rent and other earnings):
- ☐ Below HK$5,000
- ☐ HK$5,000 -HK$9,999
- ☐ HK$10,000 - HK$14,999
- ☐ HK$15,000 - HK$19,999
- ☐ HK$20,000 - HK$24,999
- ☐ HK$25,000 - HK$29,999
- ☐ HK$30,000 - HK$49,999
- ☐ HK$50,000 or above

Thank you very much for taking your valuable time to complete this questionnaire!

編號:________

香港小投資者在股票市場上行爲及決策研究問卷調查

調查對象：	香港股票市場的小投資者(非隨機性選取樣本)
調查日期：	二零零八年十月至＋一月
調查目的：	此問卷目的爲收集本港小投資者在股票市場投資方面的資料及意見。從而深入地探討本港小投資者對理財方面的決策。我們針對 2006 年 1 月至 2007 年 10 月底，期間的股票價格有顯著的上升，研究投資行爲如何受該時期所影響。再者，投資者在「顯着調整」期(即 2007 年 10 月底直至今天)，他們投資行爲有何改變，亦是我們研究目標。

小投資者理財情況及影響因素

1. 如何把你的資金分佈在短線及長線投資之間:
   a. 長線投資(五年以上)的資金投資百分比爲________________%。
   b. 短線投資(少於一年)的資金投資百分比爲________________%。

2. 與 2007 年 10 月底的股市下跌之前的時段相比，現在你是否花更多的時間留意自己的短線投資走勢? (衹可選一個答案)
   - ☐ 更多
   - ☐ 更少
   - ☐ 一樣
   - ☐ 不清楚

3. 與 2007 年 10 月底的股市下跌之前的時段相比，現在你是否花更多的時間留意自己的長線投資走勢? (衹可選一個答案)
   - ☐ 更多
   - ☐ 更少
   - ☐ 一樣
   - ☐ 不清楚

4. 於 2006 年 1 月直至 2007 年 10 月底期間,請選出**兩項**最適合形容你的投資策略的選擇。(請選兩個答案)
   - ☐ 我多數投資於風險較大的公司上，但預期回報較高
   - ☐ 我多數投資於較穩定的公司上，但預期回報較低
   - ☐ 我多數投資於規模大的公司上
   - ☐ 我多數投資於規模小的公司上
   - ☐ 我多數投資於新股上
   - ☐ 我多數投資於衍生工具上

5. 由 2006 年 1 月至 2007 年 10 月底，股票價格普遍上升， 在當時您認爲自己是否能夠預測將來市場發展？
   - ☐ 是
   - ☐ 否
   - ☐ 不清楚

6. 由 2006 年 1 月至 2007 年 10 月底，股票價格普遍上升 ， 於這個時期內您對於公司的各項公佈和各類資訊的反應是: (祇可選一個答案)
   - ☐ 在公司首次消息發放後，我便對自己的投資組合作出改變
   - ☐ 市場出現數段相互吻合的消息公佈後，我對於自己的投資組合作出適當修改
   - ☐ 我沒有關心消息的發放
   - ☐ 不清楚

7. 今天你作投資決定的時候，下列哪一項是你最重要的參考資料? (祇可選一答案)
   - ☐ 該公司資訊以作爲基本分析
   - ☐ 專業投資者的推薦、忠告和預測
   - ☐ 市場整體的過去表現
   - ☐ 報紙或電視上的資訊
   - ☐ 網上的資訊
   - ☐ 與朋友之間的討論
   - ☐ 從同事之間得到的資料
   - ☐ 個人對未來表現的直覺

8. 當你在 2006 年 1 月至 2007 年 10 月底作投資決定時，下列哪一項是你最重要的參考資料?(祇可選一答案)
   - ☐ 該公司資訊以作爲基本分析
   - ☐ 專業投資者的推薦、忠告和預測
   - ☐ 市場整體的過去表現
   - ☐ 報紙或電視上的資訊
   - ☐ 網上的資訊
   - ☐ 與朋友之間的討論
   - ☐ 從同事之間得到的資料
   - ☐ 個人對未來表現的直覺

9. 根據你的意見，你認爲 2006 年 1 月至 2007 年 10 月底股票市場上升階段, 股票價格是否過高?
   - ☐ 是 (往第 10 題)
   - ☐ 否 (跳往第 11 題)
   - ☐ 不清楚 (跳往第 11 題)

10. 如果是，2006 年 1 月到 2007 年 10 月底您認爲下列那一個最重要因素導致股票價格過高? (祇可選一答案)
   - ☐ 媒體的報導
   - ☐ 分析員的預測
   - ☐ 看見其他投資者對投資股票的過度自信
   - ☐ 上市公司的收入及利益
   - ☐ 羊群心理，即跟隨大多數人投資

11. 您認爲那一個是股票市場從 2007 年 10 月底開始價格下跌至今天最重要的因素?(衹可選一答案)
- ☐ 媒體的報導
- ☐ 分析員的預測
- ☐ 看見其他投資者對投資股票失去信心
- ☐ 上市公司的收入及利益
- ☐ 羊群心理，即跟隨大多數人投資

12. 選擇**<u>兩個</u>**您認爲最佳描述自己在 2007 年 10 月底股票市場價格下跌至今天的投資決定。(請選兩個答案)
- ☐ 我多數投資於風險較大的公司上，但預期回報較高
- ☐ 我多數投資於較穩定的公司上，但預期回報較低
- ☐ 我多數投資於規模大的公司上
- ☐ 我多數投資於規模小的公司上
- ☐ 我多數投資於新股上
- ☐ 我多數投資於衍生工具上

13. 今天股市出現如 2007 年 10 月底開始的顯着調整，你認爲市場將於兩年左右必定會回復致顯着調整前的水平嗎?(請選出一個數字。)

絕對不同意 ←				→ 絕對同意
1	2	3	4	5
☐	☐	☐	☐	☐

14. 你認爲自己最不成功的投資是基於以下哪個原因? (衹可選一答案)
- ☐ 經紀/分析員/銀行業者提供的不正確建議
- ☐ 其他途徑 / 來源所得的不正確建議
- ☐ 市場整體表現差
- ☐ 個人失誤
- ☐ 其他(請註明): ________________

15. 現在， 您面對以下的情況: 一個月前您買入價格爲 $50 的股票， 現賣出價格爲 $40。一個月後， 該股票的價格會上升 $10 (即爲 $50)， 或下降$10（即爲 $30）。兩者發生的機會率各半。從以下選出一項:
- ☐ 現在以虧損$10 的情況下賣出股票。
- ☐ 繼續持有該股票至下個月，一個月後再損失$10 或打和, 機會各半。

16. 假設情況如下: 在近兩年中，某公司的股票價格上升了 70%，並似乎仍有上升的空間。你如何評價此資料? (衹可選一答案)
- ☐ 此股票值得買
- ☐ 以上資料未足夠用以判斷此股票是否值得去買
- ☐ 此股票不值得買

17. 假設恒生指數在過去的三天裏連續上升，那麼它在明天將繼續上升的可能性有多大呢? (最大可能性爲 100%，最小可能性爲 0%)
______%

18. 假設恒生指數在過去的三天裏連續下跌，那麼它在明天將繼續下跌的可能性有多大呢? (最大可能性爲 100%，最小可能性爲 0%)
________%

19. 假如你關注今天的股票市場，在你看來，你認爲它 (選擇一個答案)
- ☐ 被高估了__________%
- ☐ 被低估了__________%
- ☐ 基本上爲合理價値
- ☐ 不清楚

20. 如果今天的恒生指數是 18,000 點，你認爲恒生指數在 6 個月後會怎麽樣？
我認爲恒生指數在 6 個月後會達到__________________點。

個人背景資料

21. 性別:
- ☐ 女
- ☐ 男

22. 在以下的年齡組別選一項:
- ☐ 25 歲以下
- ☐ 26-35 歲
- ☐ 36-50 歲
- ☐ 51-65 歲
- ☐ 65 歲以上

23. 就業狀況
- ☐ 受僱人士
- ☐ 自僱人士
- ☐ 退休人士
- ☐ 其他(請註明:________________)

24. 你的平均月薪爲 (包括薪金，利息，租金及其他收入):
- ☐ HK$5,000 以下
- ☐ HK$5,000-HK$9,999
- ☐ HK$10,000-HK$14,999
- ☐ HK$15,000-HK$19,999
- ☐ HK$20,000-HK$24,999
- ☐ HK$25,000-HK$29,999
- ☐ HK$30,000-HK$49,999
- ☐ HK$50,000 或以上

多謝你抽出寶貴時間完成這份問卷!

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Department of Economics and Finance

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