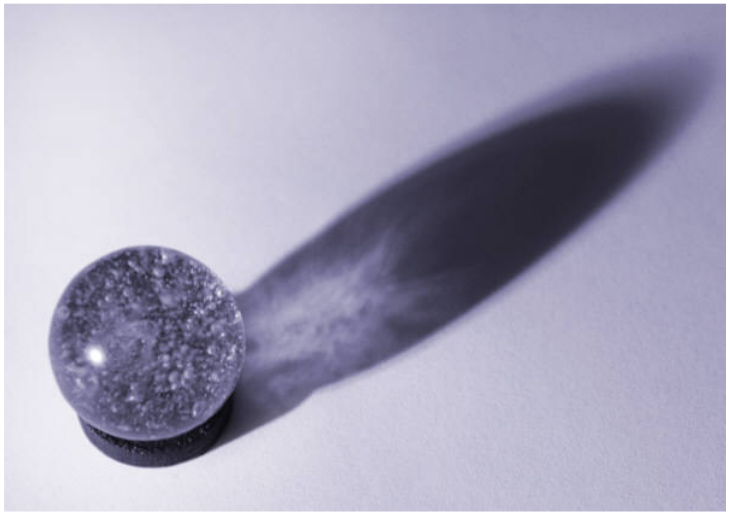
DRW Investment Research

Predicting Future Returns



By Daniel R Wessels

June 2011

1. The Institute of Behavioral Finance Investor Confidence Index survey

Since June 2007 the Institute of Behavioral Finance is conducting a monthly Investor Confidence Index (ICI) survey among South African professional (institutional) investors and financial planners. The survey gauges respondents' expectations of future market returns and volatilities. The survey is based on the methodology used by the Yale School of Management in which respondents are asked four questions, namely: the expected percentage change of the market over the next month, three months, six months and twelve months to derive at a one-year confidence index, how much respondents expect the market to recover the following day after a three percent drop the previous day (buy-on-dips confidence index), the possibility of a market crash in the near future (crash confidence index) and whether market valuation at the moment is undervalued, fair, or overvalued (valuation confidence index).[1]

2. Aim of the study

This study focuses on one aspect of the Investor Confidence Index survey, namely the respondents' prediction of future market returns and their abilities to call the general direction of market returns. It must be stated though that the intention of the ICI survey is not to test the respondents' ability or accuracy of predictions, but rather to gauge their sentiments about the outlook for future returns. Each month the respondents are asked to give their best view (expectation) of the market return over the next month, three months, six months and twelve months. For the purpose of this study only the respondents' 12-month predictions were considered.

While some respondents may perceive questions about expected market returns in the short term to be arbitrary or pure guesswork, it is most likely that many investors will invest according to their return expectations in the near term and not necessarily or exclusively with some long-term investment objectives in mind.[2] For example, it is most likely that asset allocation and investment timing decisions for especially actively-managed investment portfolios will be strongly influenced by return expectations in the near future (tactical asset allocation).[3]

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[1] For a complete description of the methodology and the results of the monthly ICI survey, please visit: http://www.ibfsa.co.za/ici/

[2] My practical investment experience in this regard indicates that while many investors (both professional and amateurs) claim to follow long-term investment strategies they do in fact quite the opposite!

[3] Numerous empirical research studies showed that tactical asset allocation strategies on average were not adding any real value over time. For example, see a research report recently published by Vanguard at:
http://us.vocuspr.com/newsroom/ViewAttachment.aspx?SiteName=vanguardnew&Entity=PRAsset&AttachmentType=F&EntityID=645160&AttachmentID=b5096462-5c7b-4f61-aa35-114db62a9bdb

The objective of this study is twofold: One, even professional investors and investment advisors are not very good in predicting future returns and, perhaps contrary to their own beliefs, are unlikely to make good calls on asset allocation and/or timing decisions. Secondly, that these groups constantly underestimate the occurrence of "outlier" market returns, both positive and negative outcomes. These "outlier returns" are the most important determinants of overall market return over time, that is to say whether investors will only partially or fully share in market returns. In fact, it is the difference between ordinary and great returns!

For this purpose I compared and evaluated the monthly 12-month return expectations of professional (institutional) investors and financial planners (investment advisors) since the IBF survey started in June 2007.[4] Thus, in total 48 months (June 2007 to May 2011) were considered. Next, I compared the 12-month return expectations of both groups with the actual market returns that transpired twelve months later (for example, comparing the June 2007 12-month prediction with the ALSI Total Return Index for the year ended at the beginning of June 2008, etcetera). In total, 36 data points were available (June 2008 to May 2011).

A word of caution: Not much data is available to make meaningful statistical inferences. The study, however, exhibits some interesting trends emerging from the monthly surveys. The passage of time will be the final adjudicator whether these trends are valid or not.

[4] The IBF kindly made their data available for this study.

3. Predicting 12-month returns

Chart 1 exhibits the expected 12-month market returns for financial planners and institutional investors from June 2007 to May 2011.

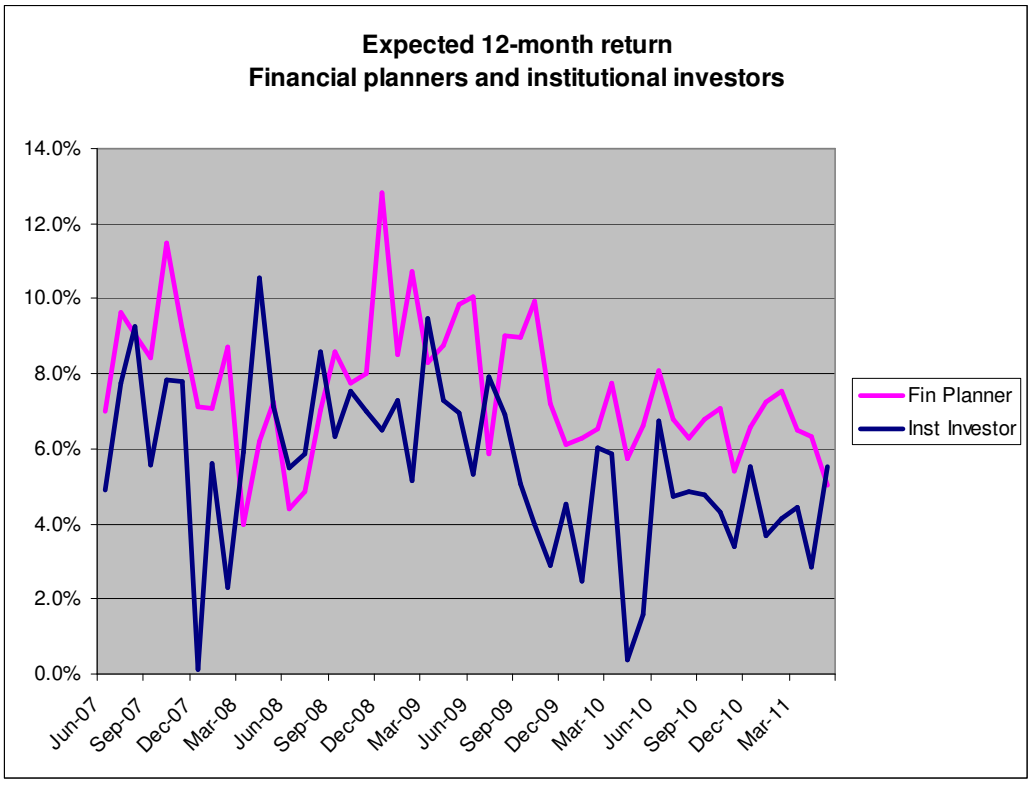


Chart 1: The 12-month return expectations of financial planners and institutional investors

- Financial planners as a group expressed a more optimistic view about future returns than institutional investors.

- None of the groups predicted substantial negative market returns over any 12-month period. Institutional investors predicted basically a zero 12-month return in December 2007 (which incidentally turned out to be a negative 27% return for the year ended November 2008) and again in April 2010 (which turned out a positive 15% return for the year ended March 2011).

- Surprisingly, however, the return expectations of the two groups were not very closely related or synchronised over the period. A correlation of only 0.27 was found in the 12-month return expectations between the two groups.

- The difference in the twelve-month return expectations between financial planners and institutional investors (Table 1).

Table 1: The difference in return expectations between financial planners and institutional investors

Bottom quartile difference	Less than 1.4 percentage points
Median difference	2.1 percentage points
Top quartile difference	More than 3.7 percentage points

- Consensus between the two groups was found in only a few instances relating to the expectations on future returns (Chart 2).

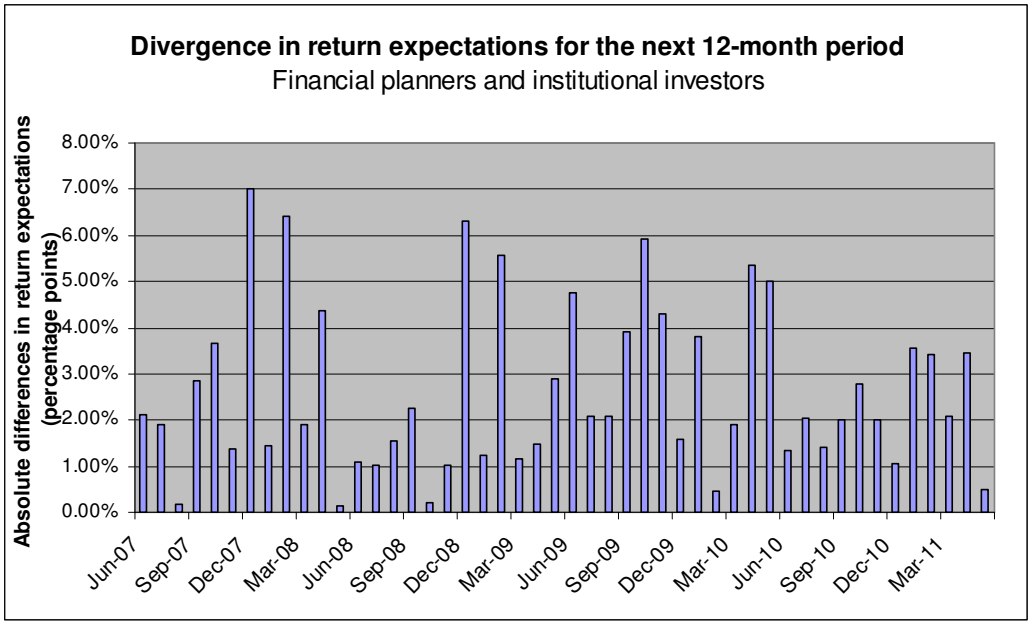


Chart 2: Absolute differences between financial planners and institutional investors' return expectations

4. The influence of perceived market valuations and historical market returns on return expectations

Expectations about future returns will be strongly influenced about perceptions whether the market is priced cheaply, fairly or expensively. For example, when the market is perceived to be priced fairly (neutral) and cheap, it is most likely that higher market returns will be expected by respondents relative to situations where markets are deemed to be expensive.

Chart 3 reflects the percentage of respondents perceiving the market to be priced cheaply or fairly. Leading up to the market crash of 2008/9 the majority of respondents did not think the market was expensive which, of course, with hindsight turned out to be quite expensive at the time. Shortly after the crash (market lows) basically all respondents (correctly) perceived the market to be cheap or fairly priced. With the ensuing strong market recovery from March 2009 onwards the relative optimism about market valuations was gradually replaced by cautiousness and the majority of respondents began to perceive the market as overpriced or at least fairly valued (Chart 4).

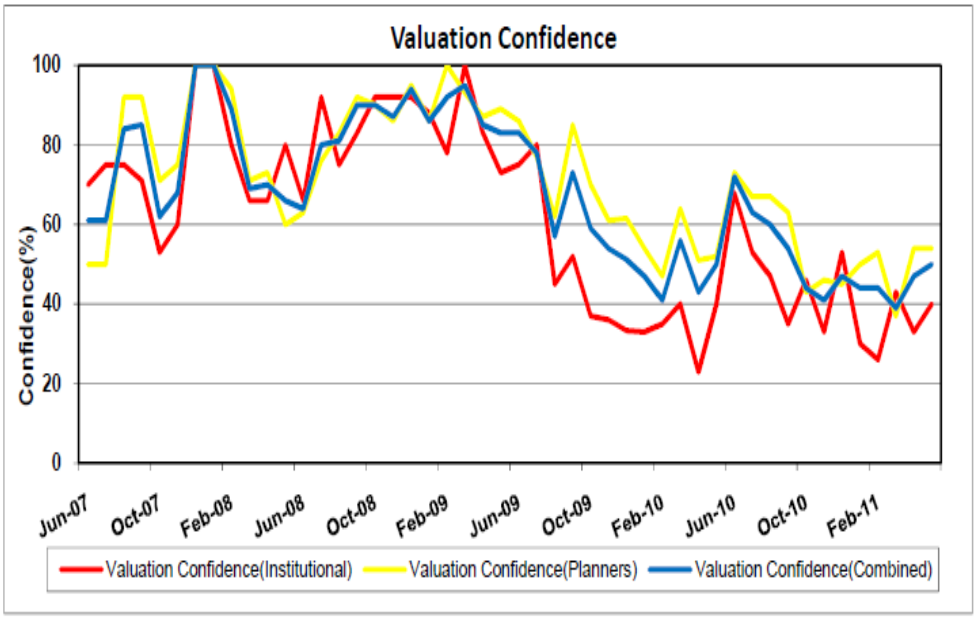


Chart 3: Valuation confidence (Source: ICI survey, May 2011)

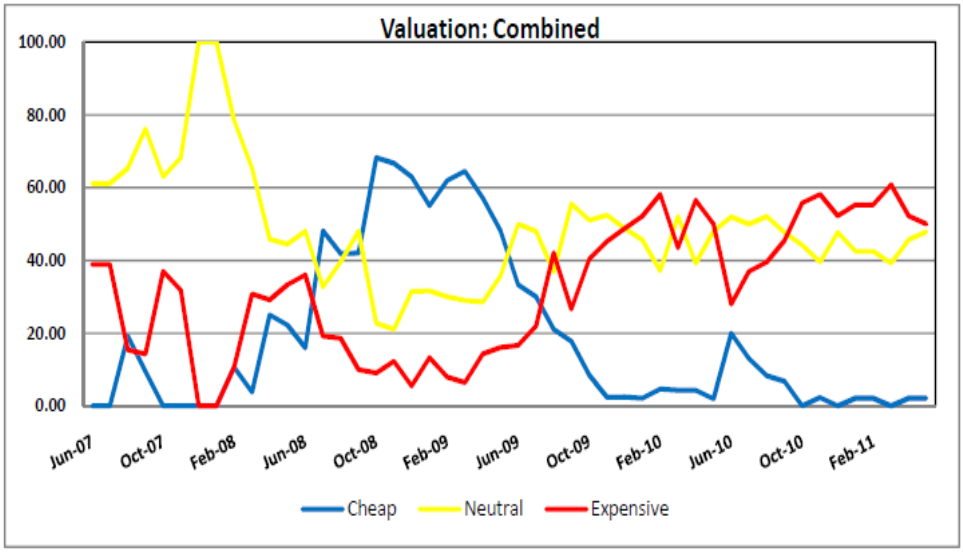


Chart 4: The percentage of respondents perceiving market valuation cheap, neutral or expensive (Source: ICI survey, May 2011)

- Perceptions about market valuations play a key role in market return expectations. If the market is perceived to be relatively cheap, return expectations will rise. Conversely, when the market is perceived to be expensive, return expectations are most likely to be subdued (Chart 5).

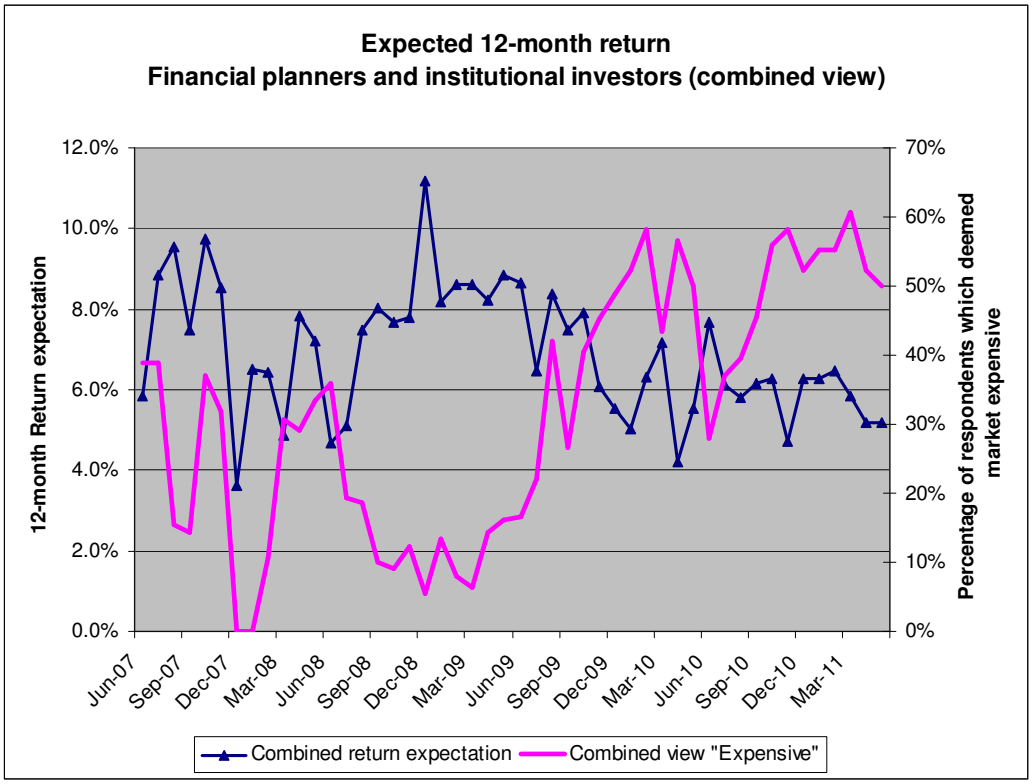


Chart 5: Rising and declining market return expectations

- Another important influence on market return expectations will be (directly or indirectly) the level of market returns experienced in previous periods. Table 2 shows the correlations of expected 12-month market returns with previous actual market returns experienced over periods of a month, three months, six months and twelve months respectively.

Table 2: Correlation of previous period market returns with the next 12-month return expectations

Group	Previous month return	Previous quarter return	Previous 6-month return	Previous 12-month return
Financial planners	-0.03	-0.19	-0.28	-0.35
Institutional investors	-0.22	-0.25	-0.39	-0.39

- Overall it seems that past market returns played some role in the return expectations of respondents for subsequent periods, especially previous twelve-month and six-month market returns. More specifically, a negative correlation was found, meaning that previous periods of high realised returns led to lower estimates of future returns. Furthermore, the return expectations of institutional investors generally seem to be more influenced by past returns than financial planners' expectations, hence the higher negative correlations found for this group.

5. Comparing return expectations with actual market returns

The expected 12-month returns of financial planners and institutional investors were compared with the actual or realised market returns twelve months later to gauge the relative accurateness of their predictions. As explained before, it is very likely that return expectations will play a pivotal role in asset allocation, and/or timing decisions.

- Table 3 exhibits the correlations found between actual market returns and the predictions made by financial planners and institutional investors over the same twelve-month periods. While some positive correlation was identified between financial planners' predictions and actual market returns, basically no correlation was found for institutional investors' predictions relative to the actual market returns.

Table 3: Correlation of 12-month return expectations with actual market returns

Financial planners	Institutional investors	Combined view
0.38	0.02	0.34

- Charts 6, 7 and 8 illustrate the 12-month return expectations of financial planners, institutional investors and the combined view versus the actual 12-month market returns. Clearly, vast differences were recorded between the actual market outcomes and predicted market returns. While the expected returns were relatively constant, actual 12-month returns varied significantly from month to month.

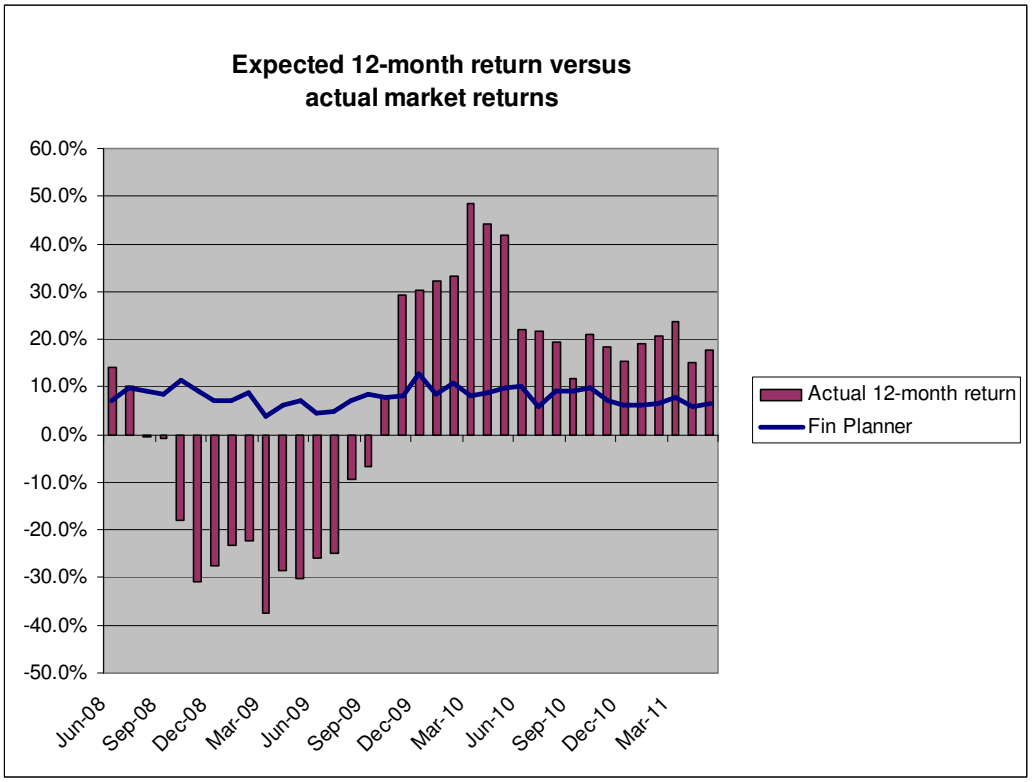


Chart 6: Financial planners' predictions and actual returns

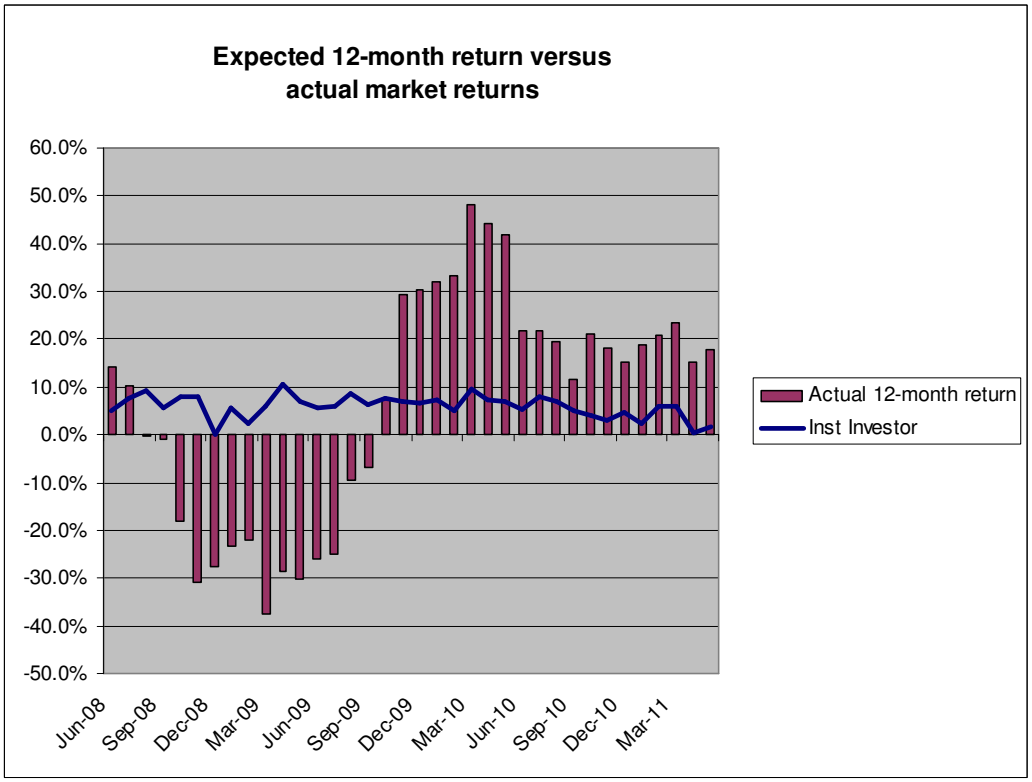


Chart 7: Institutional investors' expectations and actual returns

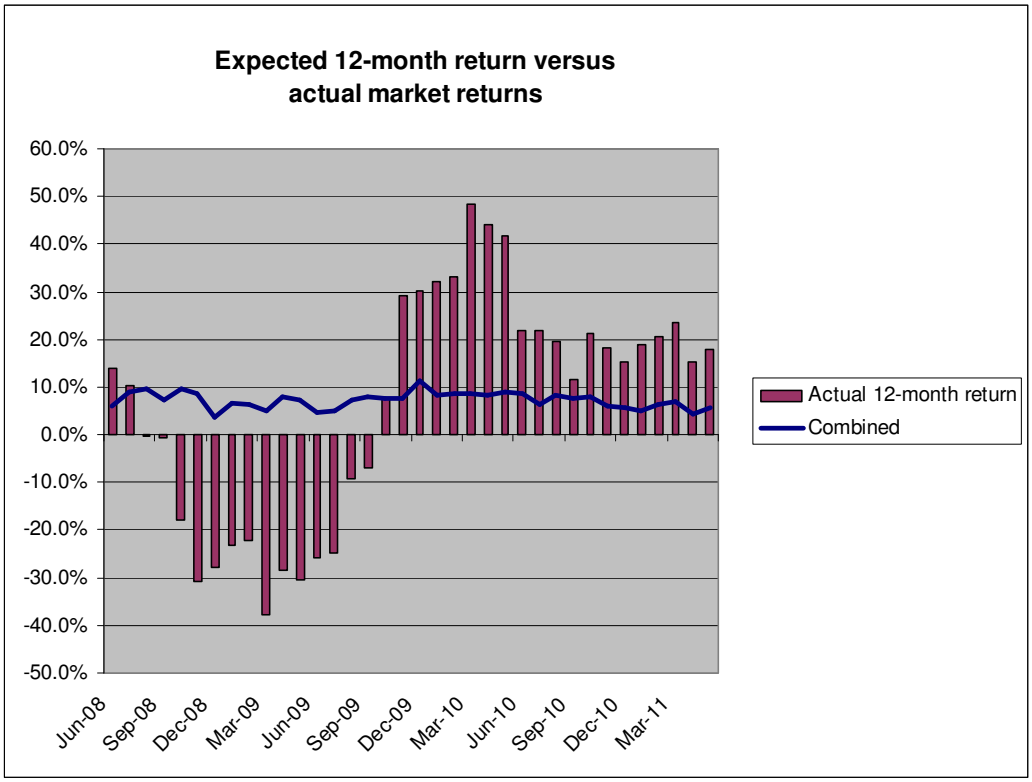


Chart 8: Combined expectations and actual market returns

- Charts 9 and 10 depict the prediction error (the percentage points of margin between expected returns and actual market returns). Both groups significantly overestimated the 12-month market returns that transpired towards the end of 2008 and for the greater part of 2009. Note that these return predictions were made before the market crashed in October 2008. Likewise, both groups underestimated the extent and rapidness of the market recovery that followed after the market lows were reached in February 2009.

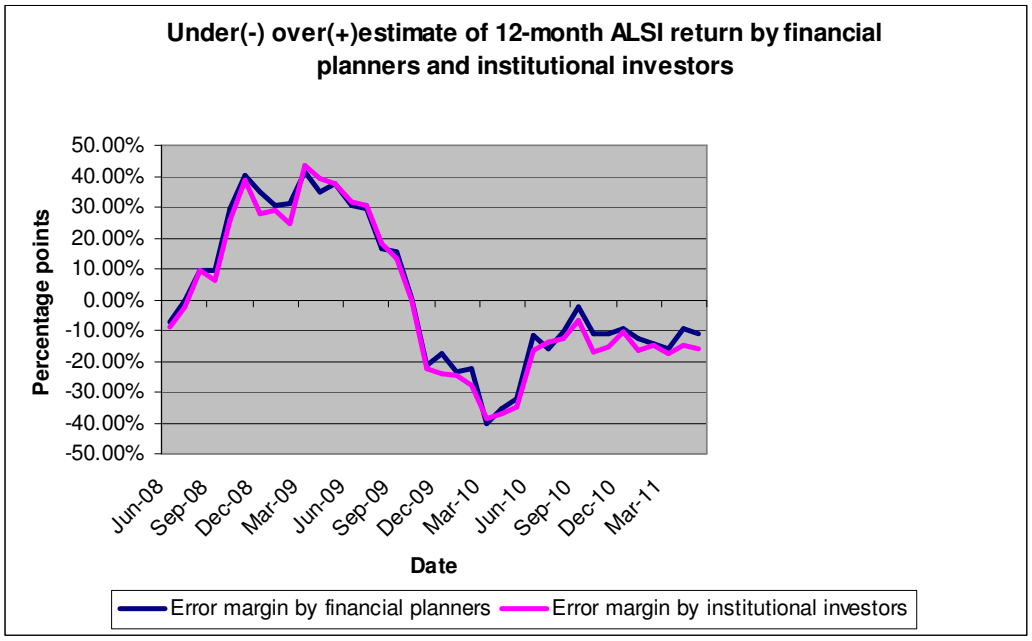


Chart 9: Prediction errors of financial planners and institutional investors

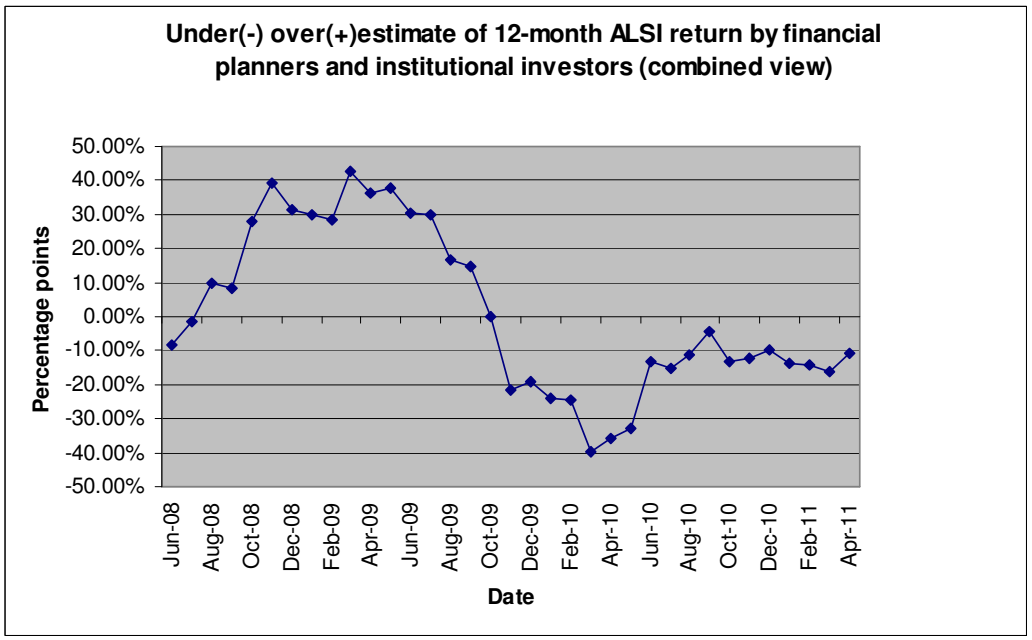


Chart 10: Prediction errors of the combined view

- Chart 11 illustrates the prediction error of both groups in terms of the percentage deviation from the actual ALSI index level. Note that when respondents are surveyed at the beginning of each month the actual market index level as at the end of the previous month is known. For example, if the market index (ALSI TRI) at the end of May closed at 3000 points, and the respondent in the beginning of June predicts that the market return over the next twelve months will be 10%, the respondent is implying that the market index will close at 3300 points at the end of May the following year.

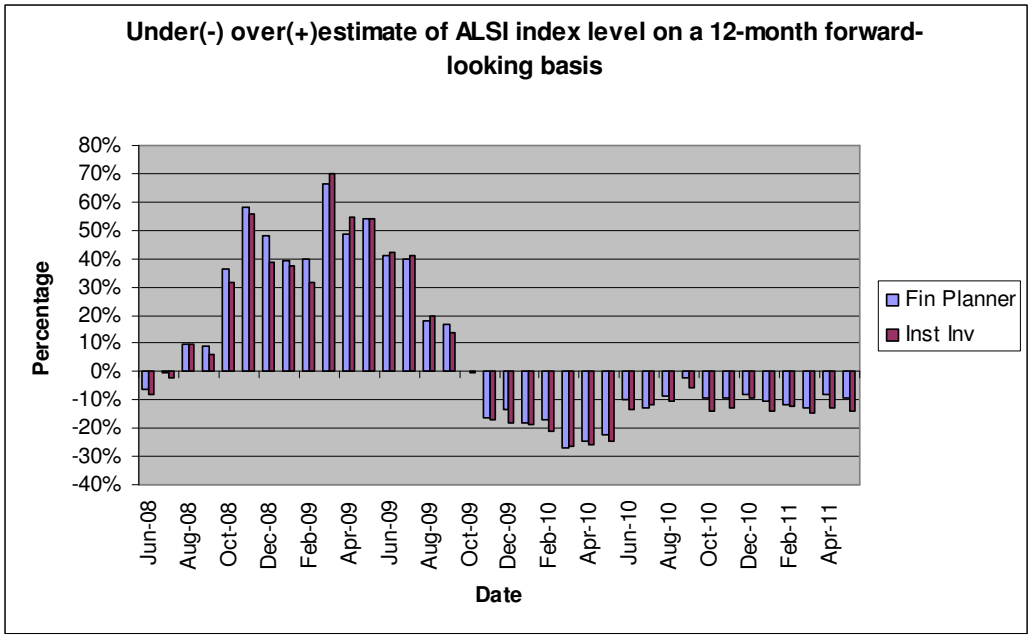


Chart 11: Prediction error by financial planners and institutional investors

- Financial planners as a group fared more often better than institutional investors in predicting future returns as shown by the smaller margin of prediction errors over time. Notwithstanding, it must be noted that the scale of prediction error is relatively large.[5]

[5] See the Appendix for regression statistics.

- Moreover, financial planners better predicted the general trend of future market returns. Chart 12 illustrates financial planners and institutional investors' three-month average predictions of future returns versus the three-month trend of actual market returns.

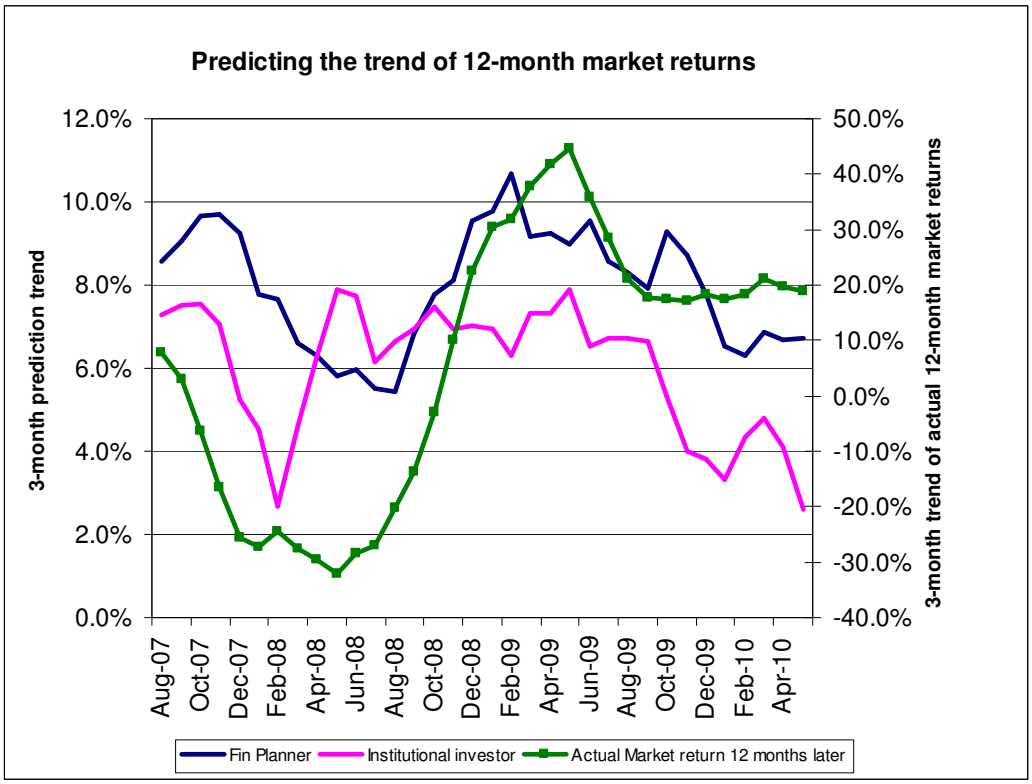


Chart12: Financial planners and institutional investors' abilities to predict market return trends

- *The above findings are "surprising" in as much that institutional investors have arguably an "information advantage" over financial planners with supposedly better resources and research capacities (intellectual capital) at their disposal, yet it did not enhance their abilities to better predict future returns. Some might argue that all that information availability made their efforts actually worse!*

6. Synopsis

Fred Schwed Jr wrote in his little masterpiece, *Where Are The Customers' Yachts?* (1940), about the tendency of market experts to make bold predictions about uncertain future events as follows:

"*It seems that the mind has a regrettable tendency to believe, as actually true, that which it only hopes to be true. The notion that the financial future is not predictable is just too unpleasant to be given any room at all in the Wall Streeter's consciousness. They continue to dream of conquests, coups, and power, for themselves or for the people they advise. Some Wall Street men manage to shed these dreams, given sufficient years, but the ultimate dream they almost never shed: that there is a secret, meaningful and predictable, in the rise and fall of enterprises – that a close study of this and that will prove something.*"

The central idea behind the study is not to show how wrong experts can be in predicting future returns or that one group is necessarily better forecasters than the other, but rather how extremely difficult it is to know beforehand how market returns will play out in the short run.

Investors will generally do better by having a definite investment policy that specifies a more or less fixed asset allocation strategy. It is unlikely that investors will create any value by actively switching between asset classes based on one's own or expert opinions about possible returns in the future.

Investors should remember that "losses" not only mean declining investment values, but also the opportunity cost of not investing in performing assets. Consider for example the following situation: Say one's investment strategy indicates a 50% equity exposure, but because of subdued equity return expectations in a forthcoming period equity holdings are then trimmed down to, say, a 25% allocation in an investment portfolio. When equities in that period perform much better than expected, say, double the expected return, then those investors lose out on significant wealth creating opportunities. Moreover, such "losses" will not be made up easily in subsequent years. Chances are that this is exactly what happened to many investors during the past number of years.

Finally, too often too much is made of potential market declines, as if it will continue indefinitely, while the other important side of the equation is ignored. Peter Lynch, one of the all-time great fund managers and investors correctly summed up the core message:

> *"Far more money has been lost by investors preparing for corrections, or trying to anticipate corrections, than has been lost in corrections themselves.*"

APPENDIX

Regression Analysis

Financial planners' predictions of 12-month returns and actual 12-month returns

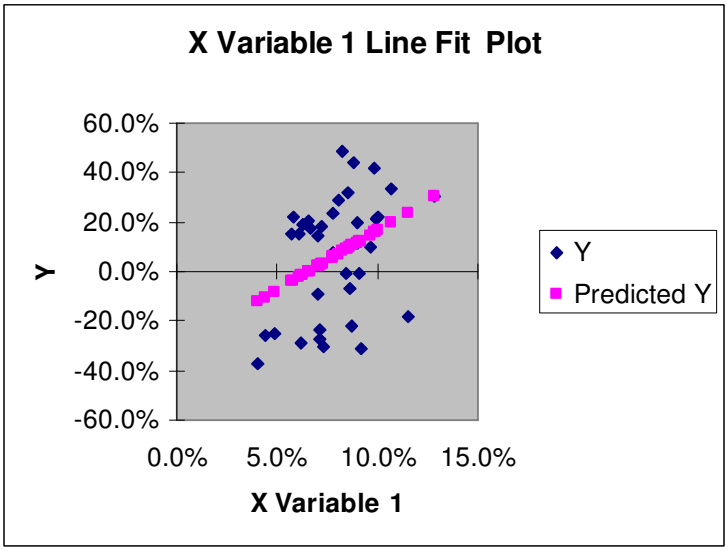
SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.38
R Square	0.15
Adjusted R Square	0.12
Standard Error	0.23
Observations	36

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.30	0.30	5.81	0.02
Residual	34	1.78	0.05		
Total	35	2.08			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-0.32	0.16	-1.95	0.06	-0.65	0.01
X Variable 1	4.83	2.00	2.41	0.02	0.76	8.90



Institutional investors' predictions of 12-month returns and actual 12-month returns

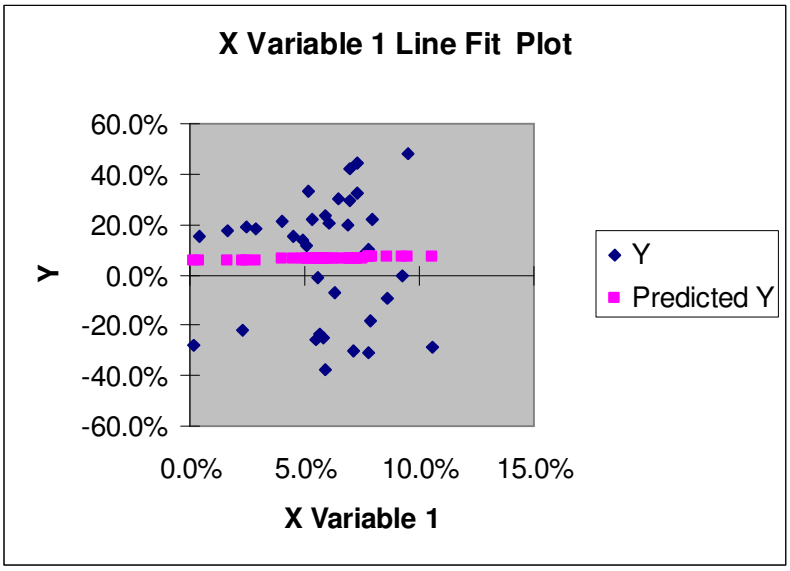
SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.02
R Square	0.00
Adjusted R Square	-0.03
Standard Error	0.25
Observations	36

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.00	0.00	0.01	0.91
Residual	34	2.08	0.06		
Total	35	2.08			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	0.05	0.11	0.48	0.63	-0.17	0.28
X Variable 1	0.19	1.73	0.11	0.91	-3.33	3.71



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