

**Volume 19, Number 2**

**ISSN 1948-3147**

**Allied Academies  
International Conference**

**Las Vegas, NV  
October 15-17, 2014**

**Academy of Accounting  
and Financial Studies**

**PROCEEDINGS**

**Copyright 2014 by Jordan Whitney Enterprises, Inc, Weaverville, NC, USA**

All authors execute a publication permission agreement taking sole responsibility for the information in the manuscript. Jordan Whitney Enterprises, Inc is not responsible for the content of any individual manuscripts. Any omissions or errors are the sole responsibility of the individual authors.

The Academy of Accounting and Financial Studies Proceedings is owned and published by Jordan Whitney Enterprises, Inc, PO Box 1032, Weaverville, NC 28787. Those interested in the *Proceedings*, or communicating with the *Proceedings*, should contact the Executive Director of the Allied Academies at [info@alliedacademies.org](mailto:info@alliedacademies.org).

Copyright 2014 by Jordan Whitney Enterprises, Inc, Weaverville, NC

# **Table of Contents**

# **FASB AND IASB CONVERGENCE: ASYMPTOTIC RELATIONSHIP OR TRANSMOGRIFICATION?**

**Diane Satin, California State University  
Thomas Huffman, California State University**

## **ABSTRACT**

*Much work has been done and many papers and articles written about the possibility of U.S. GAAP converging with the international financial reporting standards (IFRS) or at least of the U.S. firms adopting IFRS as an alternate reporting format for listed firms. This paper reexamines the discussion in light of the recent issue of ASC 606 (revenue recognition) and revisits several reasons that neither convergence nor adoption may be achieved. These reasons include the belief that U.S. GAAP is the gold standard for reporting, that too many groups and people are involved in the rule-making process, that there are too many choices for a resolution to the convergence issue, and that the innate belief that principles based and rules based statements are irreconcilable. The conclusion of this paper is that pure convergence will never be achieved, and that IFRS and GAAP will tend to grow closer as time passes, but asymptotically.*

# VALIDITY OF ALTMAN'S Z-SCORE MODEL FOR PREDICTING BANKRUPTCY IN RECENT YEARS

Anwar Y. Salimi, California State Polytechnic University

## ABSTRACT

*Over the years, many models have been suggested and tested for predicting bankruptcy. These include ratio analysis models such as Beaver (1966, 2005), discriminant analysis models such as Altman (1968, 2006), regression models such as Ohlson (1980) and others. The Altman model (1968, 2006) is one of the most influential models in the area of bankruptcy prediction. However, the Altman model is not successful in predicting bankruptcy all of the time. The Z-Score predictive model, introduced by Altman in 1968, is a widely used and cited model for predicting bankruptcy, and uses a combination of several financial ratios to calculate the "Z-score", which value indicates the likelihood of future bankruptcy of the company under examination. Altman estimated the model using multiple discriminant analysis to derive a linear equation that discriminates between bankrupt and non-bankrupt companies. Multiple empirical studies have been done by Altman and others to evaluate the model. In this study, the Z-Score model will be evaluated using financial data from public companies that started reorganization proceedings under Chapter 11 of the bankruptcy code from 2000 to 2005.*

*The purpose of this study is to test the accuracy of Edward Altman's Z-Score model in a more recent time period from 2000 to 2005 including more recent years than in which it was developed and previously tested.*

*The question is whether the Z-score model is as accurate indicator for bankruptcy in a more recent period as it was in the 1960's and with a sample of companies from different industries. There have been several critiques of Altman's Z-score model. Grice (2001) addressed and questioned the generalizability of the model to industries and period outside of those in the original sample. When a model is applied to periods other than those used to develop and test the model; researchers assume the model is stable across economic conditions that change over time, such as inflation, interest rates, and credit availability.*

*The study took a large sample of companies that had declared bankruptcy during the period from 2000 to 2005. This sample of companies included companies from many different industries. Further the time period of the study was more recent from 2000 to 2005. The results from the study indicate that the Altman model predicted bankruptcy in a significant majority of the companies that subsequently declared bankruptcy. Thus it is still a viable predictor of bankruptcy.*

# **THE PAYOFF OF PAYING IT FORWARD**

**Martha Lair Sale, Texas A&M University**

**R. Samuel Sale, University of Texas**

## **ABSTRACT**

*Unlike previous studies that examined companies based on their inclusion in indices or funds that featured companies judged to be socially responsible, this study attempts to determine if there is a measurable intrinsic financial value associated with public recognition of being a socially active company. It adopts an internal financial perspective examining several financial ratios of individual publically-traded companies that have been recipients of the Secretary of State's Award for Corporate Excellence (ACE). Comparisons between the company results and the company's industry median on four common financial ratios show no significant difference.*

# **THE IMPACT OF DISCLOSING MANAGEMENT'S PAST FORECAST ACCURACY ON NONPROFESSIONAL INVESTORS' HEURISTIC DECISION-MAKING**

**Kelly F. Gamble, Valdosta State University  
Christopher D. Allport, University of Alabama**

## **ABSTRACT**

*With the dramatic increase in the availability of personal investment websites and the increasing number of individuals choosing to manage their own investment portfolios (Looney et al. 2006), understanding the needs for, and uses of, publicly-available information by nonprofessional investors when making their investment decisions have become more important (Barron et al. 2004). The nonprofessional investor is challenged by the need to predict future earnings, stock returns, and risk (Moser 1989). In addition, behavioral research in finance and accounting indicates that, because of the inherent uncertainties in the decision-making process, investors often rely on heuristics (rules-of-thumb) when making investment decisions (DeBondt 1998).*

*Heuristics are decision rules which develop over time and are stored in memory (Chen et al. 1999). Their use is triggered by the receipt of heuristic cues which are information items related to the decision at hand. Heuristic cues used in investment decisions may include company name recognition (Teoh and Wong 1993), CEO reputation (Cianci and Kaplan 2010), and past stock prices (DeBondt 1998). While heuristic cues such as these can be helpful when making investment decisions, they can also lead to poor choices because they often don't have a direct relationship to the firm's earning potential or investment worthiness (DeBondt 1998).*

*The use of heuristics results in investors developing intuitions about their investment decisions (DeBondt 1998). This first impression (or initial preference), once formed, functions as a decision default (Chaiken et al 1989). The decision to stay with, or switch away from, the initial preference depends upon the strength of "constraint information" which is information that either contradicts the initial preference or supports an alternate decision (Simmons and Nelson 2006). Accordingly, as investors obtain additional information about the firms they are considering for investment, their initial preferences may be strengthened or weakened. Unfortunately, some types of constraint information related to investment decisions can be difficult for nonprofessional investors to use because the information may be difficult to interpret and/or access. An example of this type of information is management's earnings forecast.*

*A well-established literature stream has shown that management's earnings forecasts provide decision-useful information to investors (Waymire 1984; Pownall and Waymire 1989). From the individual investor's perspective, management forecasts provide forward-looking information that can be useful when predicting future cash flows. However, the interpretation of earnings forecasts can be difficult because its value is dependent, at least in part, upon the perceived reliability of the forecast. For instance, a reputation for highly accurate forecasting based on past disclosures increases the perceived reliability of subsequent management forecasts (Benjamin and Strawser 1974, Williams 1996). While knowing how accurate*

*management has been in the past is helpful, this information is often difficult to acquire because it is not currently a required disclosure. Thus, managements' earnings forecasts potentially represent an important source of constraint information, but the appropriate use of this information may be dependent upon the knowledge and/or experience of the investor.*

*The present study is an initial exploration into nonprofessional investors' use of managements' earnings forecasts. Specifically, we consider the impact of specifically stating managements' past forecast accuracy after investors have already established an initial investment preference. The experiment included 102 business students with limited investment experience assuming the role of nonprofessional investors. Each was presented with case materials describing two fictitious firms being considered for investment. Using heuristic cues such as CEO reputation, stock price trends, and brand name, the case materials presented one firm as the "intuitive" choice. After considering the heuristic cues, each participant indicated which of the two companies they initially felt was better. They also gave an assessment of their confidence in this initial preference. Participants were then given information on the accuracy of managements' past earnings forecasts. They were told that the management teams of both firms had either been very accurate or very inaccurate in making their forecasts in previous years. This manipulation resulted in two treatment groups: high accuracy and low accuracy. All participants then received current earnings forecasts for both firms. The forecasts presented to both groups indicated that the "non-intuitive" choice expected better performance. Participants were again asked which was the better company and indicated their confidence level. In addition, each provided a choice for the best investment.*

*Our results show that participants initially used the heuristic cues in ways consistent with prior research. Specifically, the firm with the trendy name, more accomplished CEO and higher historical stock prices was rated as the better company across both treatment groups. When considering the use of managements' earnings forecasts, we find a difference based on past forecast accuracy. For those in the high accuracy group, the forecasts appeared to moderate the participants' initial investment preferences and led them toward the non-intuitive option. In contrast, members of the low accuracy group continued to consider the intuitive option to be the better company, though the preference did weaken. Additional analysis shows that the low accuracy group also lost a significant amount of confidence in its preference. Overall, our findings suggest that managements' past forecast accuracy can play a role in how nonprofessional investors use earnings forecasts. However, the effect is not as straight-forward as was expected. The initial preferences were moderated by highly accurate forecasts, but less accurate forecasts had unexpected effects on strength of preference and confidence.*

*Our study contributes to the literature on investor behavior and financial disclosure in several ways. First, while many previous studies have focused on professional investors (e.g., analysts), we focus on the growing number of nonprofessional investors. This population of investors is worthy of study because the growth of online investing "increases the likelihood that the information they process will eventually be aggregated in share prices" (Barron et al. 2004, pg. 22). We also find support for earlier results by providing evidence that nonprofessional investors will rely on heuristics and heuristic cues in predictable ways when making investment decisions. Next, our study shows that management's past forecast accuracy can influence nonprofessional investors' interpretation and use of earnings forecasts. This finding highlights the importance of past forecast accuracy information being made readily available to these investors. Finally, our participants' unexpected reliance upon less accurate forecast information certainly calls for further investigation.*



## REFERENCES

- Barron, O. E., Byard, D., and Enis, C. R. (2004). Leveling the information playing field. *Review of Accounting & Finance*, 3(4), 21-46.
- Benjamin, J. J., and Strawser, R.H. (1974). The publication of forecasts: An experiment. *Abacus*, 10(2), 138-146.
- Chaiken, S., Liberman, A., and Eagly, A.H. (1989). Heuristic and systematic information processing within and beyond the persuasion context. in *Unintended Thought*, edited by J. S. Uleman and J. A. Bargh. New York, Guilford Press, 212-252.
- Chen, S., Duckworth, K., and Chaiken, S. (1999). Motivated Heuristic and Systematic Processing. *Psychological Inquiry* 10, 41-49.
- Cianci, A. M., and Kaplan, S. (2010). The effect of CEO reputation and explanations for poor performance on investors' judgments about the company's future performance and management. *Accounting, Organizations and Society*, 35, 478-495.
- DeBondt, W. F. M. (1998). A portrait of the individual investor. *European Economic Review*, 42, 831-844.
- Looney, C. A., Valacich, J. S., Todd, P. A., and Morris, M. G. (2006). Paradoxes of online investing: Testing the influence of technology on user expectancies. *Decision Sciences*, 37(2), 205-246.
- Moser, D. V. (1989). The effects of output interference, availability, and accounting information on investors' predictive judgments. *The Accounting Review*, LXIV (3), 433-448.
- Pownall, G., and Waymire, G. (1989). Voluntary disclosure credibility and securities prices: Evidence from management earnings forecasts, 1969-73. *Journal of Accounting Research*, 27(2), 227-245.
- Simmons, J. P., and Nelson, L. D. (2006). Intuitive confidence: choosing between intuitive and nonintuitive alternatives. *Journal of Experimental Psychology: General*, 135 (3), 409-428.
- Teoh, S. H., and Wong, J. J. (1993). Perceived auditor quality and the earnings response coefficient. *The Accounting Review*, 68(2), 346-366.
- Waymire, G. (1984). Additional evidence on the information content of management earnings forecasts. *Journal of Accounting Research*, 22(2), 703-718.
- Williams, P. A. (1996). The relation between a prior earnings forecast by management and analyst response to current management forecast. *The Accounting Review*, 71(1), 103-113.

# MANAGEMENT DISCRETION OF ACCRUALS PRIOR TO THE DEMUTUALIZATION OF PROPERTY-LIABILITY INSURANCE COMPANIES

Jane Weiss, University of Idaho

## ABSTRACT

*This study examines whether management of property-liability insurance companies use their discretion in estimating the claim loss reserve in the year preceding demutualization. Since valuation of a mutual insurance company is a critical component of the conversion process I posit that the incentive to manage surplus by either overstating or understating the insurer's largest accrual, claim loss reserves, is dependent on management's role subsequent to the conversion process. If management has a significant role (i.e., principal shareholder) after conversion, the incentive is to overestimate the loss reserves to transfer wealth from policyholders to themselves. The regression for 53 property-liability insurance companies that demutualized identifies that claim loss reserves are overstated as a means to decrease surplus and that a significant role by management in the post conversion company provides the incentive to overstate the loss reserve in the year preceding the conversion. The study provides an opportunity to study the impact of the regulatory process on management discretion in loss reserves, provides further insight into the demutualization process, and extends earnings management research. Finally, while prior literature identified stabilization of earnings and avoidance of regulatory intervention as reasons for management discretion in loss reserves, this study documents management of policyholders' surplus for management benefit, as an additional effect of discretion in the reserve estimate.*

# EMOTIONS AND INVESTMENTS

**Malek Lashgari, University of Hartford**

## ABSTRACT

*This paper provides a review of factors influencing and enhancing the decision making process in investments. When faced with the state of uncertainty prevailing in the market investors may aim for minimizing regret from their actions. This appears to be as a result of reflexive responses, feelings and emotions as well as reflective processes. In particular, understanding, managing and regulating emotions appear to help in the decision making process.*

## INTRODUCTION

In the context of the modern financial economics investors are assumed to possess a rational behavior, acting on the basis of maximizing their expected utility of final wealth in a market that is characterized with the availability of complete information regarding the payoff structure of financial assets. This implies that the average return and the likely fluctuations around it are known in advance and the distribution of returns follows a normal curve. Furthermore, investors are assumed to be risk averse and thus would be willing to invest as long as the average payoff consists of a reward adequately compensating for the risk involved.

An investor who is risk averse is expected to take a risky venture when the rise in wealth is expected to be greater than the fall in wealth. While the pleasure of gaining a dollar, on average, is less than the suffering from losing a dollar, investments are made as long as there is a net premium or reward for taking the risk involved.

The development of the behavioral finance during the past three decades has however shown that investors may possess a loss aversion behavior and aim for avoiding the decline in wealth. Investors appear to sell financial assets that have risen in price too quickly while keeping the loss producing ones for a long time. That is, investors react differently to gains and losses as they feel positive emotion from a gain in price but a much stronger negative emotion from an equal amount of loss. In the mind of an investor a dollar gained in the retirement account does not cancel a dollar lost in the personal account.

Furthermore, investors view a dollar received in dividend income differently from a dollar gained in capital gain even in the absence of differential taxes and transactions costs as they appear to consume the dividend while saving the capital gain. The feeling is that earning the capital gain had required more effort—taking more risk—as compared to the predictable stream of dividend income (Kahneman and Tversky, 1979; Thaler, 2000 and Statman, 2010). This view is different from those in the neoclassical finance as for example in Modigliani and Miller's (1958) irrelevance of the dividend policy of the firm as the dividend income and the capital gains are assumed to have the same value for the investor in the absence of differential taxes and transactions costs.

Emotions, intuition, and gut feeling appears to be an integral part of thinking and decision making and tend to raise the capacity and in the speed of actions by combing the reflective and reflexive parts of the brain. In a market characterized by conflicting signals money managers may form an opinion based on the likely actions of others by increasing the state of knowledge and gaining information advantage by the merits of signals transmitted by business enterprises. In this

process Tuckett and Taffler (2012) believe that money managers form an emotional relationship with their investments tantamount to love and hate depending on the outcome.

Zweig (2010) states that emotion may override cognitive and analytical reasons in the decision making process and is contagious in the market. Emotional reactions of losing money for example is based on the function of amygdala in the brain as the risk perceived by the reflexive part of the brain, which will lead to a fast response in deciding to sell. As many people appear to share the same information, the intensity of selling will rise and lead to a sharp decline in price.

## CONCLUSION

Emotional intelligence complements the theories formed in behavioral finance. Ameriks, Wranik and Salovey (2009) examine the role of emotions in the investment decision making process. They study the degree to which investors identify, understand, interpret and effectively use their emotions and find that emotional intelligence will add value in decisions with uncertain outcome.

## REFERENCES

- Ameriks, John, Tanja Wranik, and Peter Salovey (2009). *Emotional Intelligence and Investor Behavior*. Charlottesville, VA, the Research Foundation of CFA Institute.
- Kahneman, D. and A. Tversky (1982). Prospect Theory: An Analysis of Decision Under Risk, *Econometrica*, vol. 47, pp. 263-291.
- Modigliani, Franco, and Merton Miller (1958). "The Cost of Capital, Corporation Finance and The Theory of Investment, *American Economic Review*, Vol. 48, No. 3, June, pp. 261-297.
- Statman, Meir, "What is Behavioral Finance," in Wood (2010, ed.), *Behavioral Finance and Investment Management*. Research Foundation of CFA Institute, pp.1-12.
- Thaler, R. H. (2000), "From Homo Economicus to Homo Sapiens." *Journal of Economic Perspective*, Vol. 14, No.1, pp.133-141.
- Tuckett, David and Richard J. Taffler (2012). *Fund Management: An Emotional Finance Perspective*. Charlottesville, VA.
- Wood, Arnold S. (ed.) (2010). *Behavioral Finance and Investment Management*. Research Foundation of CFA Institute.
- Zweig, Jason, "Fear," in Wood, ed. (2010), *Behavioral Finance and Investment Management*. Research Foundation of CFA Institute, pp. 24-46.

# **SURVEY OF THE DIFFERENT TYPES OF STOCK ETF'S AND THEIR USES IN THE PORTFOLIO CONTEXT**

**Samuel Penkar, University Of Houston-Downtown**

## **ABSTRACT**

*There has been an explosion of ETF's (Exchange Traded Funds) over the last decade with currently hundreds of stock ETF's available for investors. This study takes a comprehensive look at advantages and disadvantages that these funds offer to investors in meeting various strategies that investors might have as part of their individual portfolios. The study further analyses the different types of funds along a number of different parameters to help in choosing which types of funds might be appropriate for different portfolio objectives. ETF's are useful for a myriad group of investors from hedgers to speculators and like call and put options, they provide numerous arrays of portfolio possibilities. This study also lists the most popular (by trading volume) ETF's in each category which will be useful to investors and portfolio managers.*

## **INTRODUCTION**

In recent years, Exchange Traded Funds have become extremely popular because they have a number of advantages over mutual funds. They can be used in a variety of ways to achieve an investor's portfolio objectives, be it from hedging to speculating, momentum investing, portfolio long short strategies to name a few.

There are numerous advantages of investing in ETF's over mutual funds:

1. Due to the fact that most ETF's are passively managed, the management fees for them are generally much lower than similar mutual funds. This can make a significant difference in returns over the long term.
2. Exchange traded funds can be bought and sold on exchanges anytime during the day while mutual fund shares typically are bought and sold at the end of the trading day.
3. For the short-term speculator, most mutual funds will not allow frequent in and out trading, whereas with ETF's, this is not a problem.
4. For the speculator, the availability of 2X and 3X long and short ETF's provide leverage without the risk of receiving margin calls. Additionally, for a long-short strategy, mutual funds cannot be used as it is not possible to short mutual fund shares.
5. ETF's also lend themselves well to a sector rotation strategy used in momentum investing. Given the fact that there are sector ETF's, it is easier to switch sectors as compared to having to buy and sell individual stocks for each sector rotation with purchases and sales of multiple stocks. This can lead to significantly high trading costs.

However, ETF's do have some disadvantages as compared to mutual funds. Brokerage commissions need to be paid on both purchase and sale of ETF shares, while this is of no

consequence with purchase and sale of shares of no-load mutual funds. This factor gains an even greater significance where an investor might be using a dollar cost averaging strategy where frequent purchase of odd-lot shares will further add to the brokerage commission.

## **FUND CHARACTERISTICS**

There are a number of investment companies that have created ETF's. Some of the more well-known ones being State Street Global Advisors (SPDRs), Vanguard, Ishares, Proshares and Powershares. Some of the more popular ETF's trade more than ten million shares a day. Obviously, given the hundreds of ETF's available, most try to create a specific index that they try to emulate. For example, in the broad market category, some might have a goal of replicating the Dow Jones Industrial Average, others try to mimic the Nasdaq 100 while still some others might have an objective of mimicking the Standard and Poor's 500 index. Further, the different ETF's might have different weighting schemes from equal weighting to weighting according to the size or market capitalization of each security that makes up the index. It thus becomes necessary to fully understand the objective of any ETF, one needs to go to the sponsoring group's website.

A list of the major stock ETF categories as well as a few of the largest ETF's in each category with the online addresses of the sponsoring agencies is provided in the references page. As stated earlier, the large-cap category contains numerous ETF's that are replicating a number of large-cap indexes. The largest by far in this category is SPY which replicates the S&P index and has a daily trading volume of more than 80 million shares. This fund was created in 1993 and has a total market value of \$170 billion. It replicates the S&P 500 index. In the large cap category, the Powershares (QQQ) with a market Cap of \$44 billion is based on the NASD100 index. Other funds replicate the DJIA, the Russell 1000 and Russell 3000 indexes, the S&P 100 index etc. Some funds are market-cap indexed while others are equal weighted indexed.

The two largest Mid-Cap ETF's are iShares S&P Mid-Cap (IJH) and SPDR Mid-Cap 400 (MDY) ETF, where both funds have total assets in excess of fifteen billion dollars. Average trading volume for both is in excess of one million shares each day. The number of Mid-Cap funds are much fewer than the Large-Cap funds. Most of the funds are weighted average funds and linked to the S&P MidCap 400 index.

The largest fund by far in the Small-Cap category is the iShares Russell 2000 (IWN) with total assets in excess of twenty five billion and a daily trading volume exceeding thirty million shares. The above broad sector funds in addition to replicating the various indexes, have the usual additional objectives such as growth, value, high yield etc.

There are numerous funds in numerous industry sectors that are very useful for the momentum trader. The most common momentum strategy is to identify those industry sectors that have done well during the last period (generally based on monthly or quarterly returns) and investing the portfolio in the most profitable sectors or sectors from the prior period. This strategy is then repeated every period. The expectation is that those sectors that performed well in the prior period will maintain their momentum during the next period.

Alternately a long-short strategy can be employed where the portfolio is invested in the most promising funds while at the same time selling short those funds that have lagged the most during the last period. The additional benefit of this strategy is to hedge the portfolio from the

movement of the overall stock market. These actions are available using ETF's that cannot be done using mutual funds. The various industry categories and the largest fund in each sector are listed below:

Consumer Goods – Consumer Staples SPDR (XLP)  
Energy – Energy Select Sector SPDR ETF (XLA)  
Financial Group – Financial Sector SPDR (XLF)  
Health Sector – Health Select SPDR (XLV)  
Industrials – Industrials SPDR (XLI)  
Materials – Materials Sector SPDR (XLB)  
Precious Metals – Vectors Gold Miners (GDX)  
Real Estate – iShares ETF (IYR)  
Technology – Tech. Select Sector SPDR (XLK)  
Utilities – Utilities Select Sector SPDR (XLU)

A similar momentum strategy can also be productively used in the international stock market with a rotation of various country stock indexes. A simple rotation or a long-short can be employed. Following are the most traded country stock index ETF's:

EAFE – iShares MSCI EAFE index (EFA)  
Europe – Vanguard European Stock Index ETF (VGK)

Additionally, the investor can choose to invest in Ultra Market ETF's as part of an overall portfolio strategy. These funds provide a leverage of two times an index and three times an index. The advantage with these funds is that the leverage is created by the fund and thus there is no risk of an investor getting a margin call. However, obviously the fund does have to pay interest on the borrowed funds which could magnify losses if the fund value drops. The major leveraged funds are ProShares Ultra S&P500 (SSO), Direxion Daily Small Cap Bull 3X (TNA) and the Direxion Daily Gold Miners Bull 3X Shares (NUGT).

Similarly, instead of an investor needing to sell shares short for purposes of a hedging strategy, it is possible to invest in Contra Market ETF's where the ETF's create a shorted portfolio based on an index. Possible fund possibilities are the Direxion Daily Small Cap Bear 3X Shares (TZA), the ProShares Short S&P500 (SH) and the ProShares UltraShort S&P500 (SDS). From the investors point of view, here too the investor does not risk a possible margin call to cover his short position as compared to if he had individually sold stocks or an index short.

## CONCLUSION

With the advent and popularity of ETF's, a new spectrum of possibilities has been made available to an individual investor or a portfolio manager. Given that the ETF management fees are low as compared to mutual funds or the individual purchase and sale of numerous shares, using ETF's as an investment vehicle makes a lot of sense. However, it is necessary to research to funds

objective and other details by going to the fund creator's web site or by accessing a secondary information site.

## REFERENCES

[www.direxionshares.com](http://www.direxionshares.com)  
[www.etfsecurities.com](http://www.etfsecurities.com)  
[www.ishares.com](http://www.ishares.com)  
[www.powershares.com](http://www.powershares.com)  
[www.proshares.com](http://www.proshares.com)  
[www.spdrs.com](http://www.spdrs.com)  
[www.vanguard.com](http://www.vanguard.com)  
[www.wisdomtree.com](http://www.wisdomtree.com)  
[www.aaii.com](http://www.aaii.com)  
[www.finance.yahoo.com](http://www.finance.yahoo.com)  
[www.morningstar.com](http://www.morningstar.com)