

# The Preponderance of Stock Picking Techniques: The Practice of Applied Money Managers

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Received: September 22, 2013

Accepted: March 20, 2014

Online Published: March 25, 2014

doi:10.5430/afr.v3n2p87

URL: <http://dx.doi.org/10.5430/afr.v3n2p87>

## Abstract

This study examines the diverse methods practitioners of money management use in order to choose stock investments. Practitioners mainly use fundamental analysis and technical analysis. Very few use the Efficient Market Hypothesis as a key method. We emphasize fundamental analysis and the diverse techniques which are subsumed under it. Market timing and industry analysis are two contenders to stock picking, even though, it is possible to have stock picking together with the other two techniques. When we deal with stock picking techniques, we discover they use discounted cash flow, multiples and balance sheet approaches. Additionally, they consider industry forces such as demographics and psychographics.

**Keywords:** Stock picking, Demographics, Psychographics, Discounted cash flow approaches, Asset valuation approaches, Debt book value, Market value demographics, Psychographics and industry analysis

## 1. Introduction

There is a debate about whether markets are efficient or not. The theorists who are in the efficiency camp believe that all public information is reflected in the stock prices. The proponents of the efficiency market hypothesis (EMH) believe that investors may not beat the average rate of return (ROR) of an index such as the S&P, for example (Fama, 1970). The one method according to which the investors can beat the market is by having private (non-public) information. Thus, the recommendation of that viewpoint would be to not attempt to surpass the ROR at a given risk. In other words, the efficiency camp would suggest investing in an index fund, since one cannot do better than the index fund. Furthermore, there are greater fees involved with managing money actively.

Another viewpoint that of inefficiency in the stock market would argue that superior security analysis could lead to superior ROR at a given risk (Rosenberg, Reid and Lanstein, 1985). Thus, it behooves investors to pursue practical money management actively, so they can beat the S&P index, let us say. The basic viewpoint which contradicts the efficiency hypothesis is technical analysis. It is diverse methods which purport to forecast rate of return developments. Technical analysis recommends to its proponents to aggressively invest based on historical trends and patterns (Lo, Mamansky and Wang, 2000).

The third viewpoint that differs somewhat from the efficiency view is fundamental analysis. Fundamental analysis is an approach which examines economical, financial, political, social, and legal factors. It believes these factors importantly affect prices since they affect the ROR and risk of the investments. Its proponents feel that superior analysis of money managers will lead to higher ROR, leading to better investments. Security analysis is valuable,

since it will attain the aforementioned. The implication is that money managers ought to pursue active fundamental analysis to attain better values and ROR (Graham, 2005)

Fundamental analysis usually uses a top down approach which consists of first a market and economy analysis, second, an industry analysis and third a company analysis. A company analysis is the most critical one. According to the evidence, superior ROR for diverse firms could occur in an environment of declining ROR for an industry. Of course, this is the exception rather than the rule, but, nevertheless, it is informative. It is easier to have superior company ROR in an industry which is doing well (Cavaglia, Brightman and Aked, 2000).

However, there is another fundamental technique which is of a different nature. It is a technique which starts with bottoms up analysis. This approach does not examine the economy, or the international environment, or the industry. We are not saying that stock pickers will definitely not consider the economic and industrial factors taking place, but they will consider them casually, if at all. Those types of investors will simply look at a particular firm and examine its prospects. This technique considers its environment, but it primarily examines the company itself. This approach is called stock picking. (Hagstrom, 2001) One of the famous stock pickers is Warren Buffett. Another one is Peter Lynch (Lynch, 1993).

The paper proceeds as follows. First, there is a section about the studies relevant to this study. Second we talk about the methodology of the paper. Next, we discuss the results empirically. Finally, we offer a few conclusions.

## 2. Review of the Literature

There are several approaches in stock picking. One is the asset valuation approach. This approach takes the assets of the firm and develops diverse measures. The asset valuation approach examines the financial statements and makes determinations. One of the approaches is the book value per share (BVPS.) In this approach, divides the book value (BV) of the equity by the number of shares. Therefore, it suggests that this is a comparable concept to the price per earnings per share (P/E) of the firm. The second approach is the replacement cost per share, says that the price per share will not deviate too much from the replacement cost per share and it suggests since arbitragers will buy the firm, if replacement cost per share falls below price per share. From the replacement cost we subtract the total debt and then divide by the number of shares. The third approach of liquidation value per share (LVPS) sets a floor price for the stock. It takes the liquidation value of the assets and subtracts the total debt of the firm and then divides by the number of outstanding shares.

The second basic group of valuation techniques is the multiples one (Goodman and Peavy, 1983). There are several such ratios, of the most important are the price/sales, price divided by cash flow (P/CF), price over operating profit (P/OP) and price over earnings per share (P/E) ratios. The most popular by far is the P/E ratio. The reason that we look at this is to know how much does the market pay for the earnings per share (EPS) of a stock. However, other ratios or multiples of other variables have been developed. The first is the P/sales. It was developed, since EPs can be volatile. Sales are less volatile, so our criteria would have less volatility. P/CF was also developed for the above reason as well as especially since a few firms may have negative EPs but positive CF. Finally, a few analysts want to know what the ratio is for operating profit due to the fact that they want to separate operating profit from financial and tax issues.

The third is the dividend yield view. This approach divides the dividend by the price of the stock and gives us a relative ratio also. Low ratios can indicate expensive stocks, or low dividends indicating inability to produce a lot of earnings. High ratios can indicate cheap stocks, or rich dividends and earnings.

The fourth is the discounted cash flow approach. This is similar to the dividend yield, except that in this case we define cash flow as either as operating cash flow, or free cash flow. Many analysts argue that free cash flow is a better measure of cash flow than dividends. We include it for completeness. Presumably, the reason investors want to invest in a security is to receive the money generated by that security. Since they receive the cash over time, in order to make sense out of competing investments, they need to express the values in terms of now. Thus, they use the DCF approaches. The other models we use should really be complementary to the DCF models. Fundamentally, the present value of cash flow of diverse definitions determines the value of a stock. Two of the DCF views are the discounted dividend (DDM) and the DCF model.

The final view is the view of Fama and French who found that market cap, degree of debt of the firm and the ratio of BV/MV influence the ROR (Fama, French, 1992). Researchers subsequently have corroborated the Fama/French outlook. Specifically, they showed that higher (lower) debt firms have higher (lower) ROR. This is reasonable because higher/lower debt has higher/lower risk. Next, market cap is a substitute for the "fame" of a firm. Fama and French show that non-recognized firms do better than well-recognized firms in their ROR. Finally, they show that

the higher/lower BV/MV is the higher/lower ROR. The reason is that if BV/MV is higher, (lower) the stock price is relatively lower (higher), and so its ROR becomes higher/lower.

### 3. Research Methodology

The survey which appears in the appendix was mailed to 5,000 portfolio managers (financial advisors). We received 820 responses. We emailed the survey five times in order to receive a higher response rate. The time period was 2002.

We ask them three questions. The first question asks them whether they follow the efficiency market hypothesis, or the fundamental analysis, or technical analysis. Of course, if they use technical analysis, they contradict the view that one may not beat the market with the usage of private information. If they use fundamental analysis, they have to use diverse techniques. A few of those techniques are industry analysis, market timing and stock picking. Since we are interested in stock picking, we ask them the different techniques which apply to it. Those techniques are all the ones we have mentioned, such as whether they use asset valuation, or multiples, or cash flow, or market capitalization, or book value to market value, or the indebtedness of the firm.

### 4. Empirical Results

The first approach we test is the asset valuation one. Our respondents use those techniques frequently. They choose BVPS, RCPS and LVPS by 72%, 44% and 70% respectively. Thus, money managers follow asset valuation techniques quite a lot.

The second basic approach is the diverse multiples ratio approach. This approach has several sub approaches. There are the price to sales, price to EPS, price to cash flow ones. The price to sales and cash flow techniques are attractive techniques for cases where the earnings of the firm are negative. Also, cash flow is a better measure of return than earnings. However, the P/EPS ratio is the most widely used ratio of multiples. It is an indicator of the market's belief in the continued prospects of the company. A higher (lower) P/E ratio indicates more optimism (pessimism) in the future earnings of the firm. The problems of multiples are that there may be irrational exuberance or the opposite in the market. The range of multiples has been quite dramatic, so that we may wonder about its objectivity. The respondents choose P/E, P/OP P/sales and P/CF by 82%, 73%, 60% and 40%, respectively. These answers show that portfolio managers use these multiples substantially in managing money.

The third stock picking technique is the discounted cash flow one and its variations. A substantial percentage of practitioners, sixty six percent (44%), utilize the DDM approach. It is an additional view which can be used. Applied financiers choose and DCF models by 82% respectively.

Fourthly, we wanted to test the theory of Fama and French who showed that debt level, market cap and the BV/MV of a firm affect ROP and price. Our respondents chose the above by 61%, 69% and 49%, respectively.

In industry analysis, analysts use demographics and psychographics to evaluate the demand for the product and consequently the ROR of the industry. The examination of demographic and psychographic factors, however, continues with the company analysis as well. If we were to examine an automobile, a builder, a brewer, a personal computer and a pharmaceutical firm, we would receive different results. Population size and growth affects all of the aforementioned industries quite substantially. Age distribution would influence the pharmaceutical firm quite much more than the other firms. Geographic distribution may not affect the pharmaceutical company, or the distiller at all, while it may be very important for automobile demand. Income distribution affects the car, builder and personal computer firms a lot but does not influence pharmaceutical sales much and probably affects the money spent on drinking minimally. Family size affects the number of autos, the size of houses and the sales of PCs, but has no bearing on pharmaceutical or alcohol sales. Occupation of family influences PC sales substantially. It influences the other firms less. Family formation is crucial for builders. It really does not affect the other firms much. Head of the family may affect size of houses and perhaps auto sales somewhat, but would not influence the others much (Reilly and Brown, 2003).

Portfolio managers apply the concepts of demographics strongly in their managing of portfolios. The three top choices they have are age distribution (77%), population growth/level (73%) and geographic distribution (66%). Following those demographic attributes, they choose income distribution (63%), family size (39%) and occupation of family (31%). Lastly, family formation and head of family receive only 18% and 13 % of the responses, respectively.

Lifestyles importantly can affect all of the above firms where the auto and housing producers would be influenced the most. Our practitioners responded that they emphasize it 19% of the time.

The constraints of this study are first that a survey instrument has the bias of the respondents. Second, the practitioners may not be exactly sure of how they do choose. Third, the survey is somewhat dated and reflects the view of the practitioners near that time period.

## 5. Conclusion

Our respondents mainly use fundamental analysis or almost 70%. 53% use technical analysis which directly contradicts the efficiency view. There is overlap between technical and fundamental analyses, since it surpasses the 100% result. Finally, about 6% follow the efficiency market hypothesis. Among the specific approach, the most popular approach is industry analysis by 86%, stock picking is the second most popular by 72%, technical analysis is third by 53%, demographic approach is fourth by 43% and market timing is fifth by 36%.

We have shown that practitioners of money use several different sub-techniques in picking stocks. They use discounted cash flow methods, but they are not the only ones. They supplement them with multiples and asset values approaches as well. They also choose equities in a context of the industries in which the equities are found. Thus, they use industry analysis of the demographic and psychographic kind.

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### Appendix

#### Questions

- A. How would you rank the approaches of investments you follow?
- |                                 |     |
|---------------------------------|-----|
| 1. Efficiency Market Hypothesis | 50  |
| 2. Fundamental Analysis         | 570 |
| 3. Technical Analysis           | 432 |
- B. Which of these basic approaches do you use?
- |   |          |
|---|----------|
| 1. Industry analysis                    | 662(86%) |
| 2. Demographic /psychographic forecasts | 377(43%) |
| 3. Market timing                        | 361(36%) |
| 4. Technical analysis                   | 432(53%) |
| 5. Stock picking                        | 642(72%) |
- C. If you use stock picking, which specific technique do you use?
- |  |          |
|--|----------|
| 1. Discounted dividends                    | 282(44%) |
| 2. Discounted cash flow                    | 526(82%) |
| 3. Book value per share                    | 462(72%) |
| 4. Liquidation value per share             | 449(70%) |
| 5. Replacement value per share             | 282(44%) |
| 6. Price to sales value per share          | 385(60%) |
| 7. Price to operating profit per share     | 469(73%) |
| 8. Price to earnings per share             | 526(82%) |
| 9. Market capitalization                   | 443(69%) |
| 10. Degree of leverage of the firm         | 392(61%) |
| 11. Book value over market value of equity | 315(49%) |
| 12. Dividend yield                         | 424(66%) |
| 13. Tobin's Q                              | 327(51%) |