## Market prices

Business, Marketing



Banz (1981) analyse monthly returns over period of 1931-75 on the share listed on New York Stock Exchange. Over this period, the share of 50 smallest companies outperformed the share of 50 largest companies by an average of 1% per month. More recently, Fama and French (1993) do the similar test of small size effect. They examined the data from 1963-1990. As result, they also found the same tendency that small companies' shares generate the higher monthly return than large one. In this way, the small-firm effect can be an indicator for the future share return. And based on this effect, the return of a company will decrease when its size/market capitalization gets bigger.

However someone argue that the small size effect doesn't work recently, especially in 1980s to 1990s. During that period, the share of the large size companies generated higher return than the small one. For example in UK, Arnold (2003 pp618) show that in period of 1950s-1980s, the share of small companies produced the 5. 2% return higher than large one annually. But in period of 1989-2000, the large companies produce the 4. 3% return higher than small one.

Aronld (2003) believes that the reason of these opposite result in different period might because the too many investors notice this effect and rush to exploit it in the late of 1980s. As the general rule, people cannot make money by following market. Therefore this makes the small size effect be disappear! Malkiel (2003) also believe that the reliability of small size effect may be influenced by some bias, such as: these study which aims to test small size effect just use the data from the survived small companies. But the problem is this database didn't include the one that have bankrupted. So

these researches only test this effect through the performance of today's small companies, not the failed one. This may lead to the bias of their study.

Strong Form efficiency

Fama (1970) said in strong form efficiency, the share prices fully reflect all public and private information. Therefore the investors cannot get the excess return, even they have the inside information. Again, this does not mean that the investors can't success, it only means that success should not be predicted. However many studies have showed that only early exploitation of the new information or the patterns can earn the excess return.

Some insiders, such as the directors of the company who may grasp the price sensitive information earlier than the public can make the excess return. But this kind of " insider dealing" is illegal at all. As Arnold (2003) mentioned that inside dealing will cause a unfair game. Only the insiders can make the excess return, then the outsiders will feel be cheated. Once these outsiders lose their confidence on investment, the whole game is close to be end. In order to avoid this happen, all the capital markets traded the insider dealing as the crime!

Apart from these directors of the companies, there are some of the investment professionals are pure outsiders, but they also have lots of the superior information compared with the normal investors. They just grasp these information or knowledge about companies through analyzing the company's situation and its environment to make the predictability. As Arnold (2003) said that these investment analysts always visit the

companies and participate to discuss companies' opportunities and potential problems. Therefore they are very familiar with the companies' situation, so their predictability about companies' future will be very valuable!

In order to test this viewpoint, Jensen (1968) analyze 115 mutual funds in period of 1955-1964. As result he found that most of these portfolio managers can not beat the market at all. More recently, Fama (1991) also do some research on the performance of mutual fund and institutional portfolio managers. And he found that these people only made a small abnormal gross returns before the tax, but little of them can make the superior return and can beat market! We should notice that EMH allow the existence of the minor excess return. In this way, although the analyst may achieve some small excess return, but it can not proof that market is inefficient.

## **Further Explanation**

In these parts mentioned above, I have discussed the "for and against" empirical evidence for the EMH. Now this paper will provide the further explanation for EMH. As Malkiel (2003) said that all researches who claiming the death of the EMH are greatly exaggerated; and the views believe that market prices are predictable has been vastly overstated. Firstly, it's no doubt that some anomalies do exist in market place. However the central question is whether these anomalies can persist in the long time, and by exploiting these effects or indictors, whether it is possible for most investors to predict the future share price. Therefore the long-run reliability of these effects are doubtful! Lots of the evidence shows that these anomalies can not persist longer due to lots of investors rush to exploit the same effects

and indictors, and this will prevent these anomalies generate the ourperformance in the future.

Secondly, Malkiel (2003) believes that many of the anomalies is just the result of " data snooping", i. e. letting the computer search through the data sets of past share prices in the hopes of finding some relationships.

Therefore it is not surprising that some seemingly significant but wholly spurious correlations have been found, especially when some researches really hope their works can show some anomalous results rather than boring confirmations of randomness. (Malkiel 2003 pp74)

Next, maybe there are evidences of some investors beat the market successfully. However many people argue that outperformance by one or a few investor in a market cannot proof the inefficiency of market because it is difficult to determine whether outperformance is made by skill or luck.

Additionally, in many cases, strong performers in one period will make a underperformance in subsequent periods.

Lots of studies have found little or no correlation between strong performers from one period to the next. Therefore these examples can't proof that they success just due to exploiting true anomaly. Finally, even if there is a dependable predictable relationship, investors may not earn the excess return due to the transaction cost. For example, as Malkiel (2003) said that the transaction costs involved in trying to exploit the January effect are sufficiently large that the predictable pattern is not economically meaningful.

## Conclusion

What can we conclude about the EMH? From theoretical point of view, EMH is reliable. However market efficiency is difficult to test. The reason that there are lots of counterpoints come out may be explained as the shortcoming of current asset pricing models.(Ball 1978) With the passage of time, there will be some more reliable asset pricing model occur. One thing is clear that the academic tests are not the same thing as managing the real money.

From a practical point of view, markets are neither perfectly efficient nor completely inefficient. I do believe that irrational pricing and predictable patterns in share returns may well exist and even persist for periods of time. And the markets may also be influenced by fashions, such as the Internet bubble in late of 1990s evident the incorrect share pricing. In this way, for a short period of time, the market may lose its efficiency temporarily, but finally this kind of inefficiency will be corrected! In the long-term period, that is just an exception that only persist short period of time, so it can't proof that the market is completely inefficient.