Comments on “**Testing Semi-strong Form Efficiency of Stock Market by Salman Syed Ali & Khalid Mustafa**”

*Published in “The Pakistan Development Review” 40: 4 Part II (Winter 2001)*

First, I would like to congratulate the authors for a competent and well-crafted work which investigates in a rigorous manner the extent to which publicly available news affects stock market prices. A large number of tests, replicating many which have been carried out for the US Stock Market, show that the Pakistani stock market appears to be more or less efficient in this respect. That is, publicly available information is sufficiently speedily incorporated into stock market prices that speculator would be well-advised not to speculate on this basis. It would be worthwhile comparing these results with those obtained for other emerging stock markets. In this respect, it is important to note that it is regional studies like these are not typically published in global international journals. However studies similar to these are being carried out in many different countries with emerging stock markets.

For those of us researching issues related to LDCs, it would be very useful to directly cultivate research links with other LDCs. Currently the educational/research model in use is the center-periphery one, where all of us read the major international journals published in USA and Europe as well as our own local journals, but we do not typically read work published in local journals in Turkey, Iran, India etc.

However, the most relevant and significant research for us may well be that available in other LDCs.

Specific comments related to technical aspects of the paper are as follows. The author’s comments in the second paragraph that various empirical regularities violating the efficient markets hypothesis have been discovered on US data. In many cases, it has been discovered that these violations are due to a small number of outliers. Once these outliers are removed, the efficient market hypothesis does appear to work in developed markets. This is in contrast with the picture that emerges from research on emerging markets. Typically (though not in the present study) more violations of efficiency are found in emerging markets. This suggests the hypothesis that efficiency is created by a process of learning over time. As speculators learn to exploit inefficiencies in emerging markets these markets gradually become more efficient. A cross country study examining evidence over different emerging markets, indexed by the date at which stock markets became functional, would therefore be of great interest. In the present study, it would be of great interest to use recently developed outlier detection techniques to assess the extent to which the results obtained are influenced by the presence of outliers. Incidentally, the authors use the terms weak, semi-strong and strong efficiency without defining them or indicating where definitions are to be found.

The authors use the variable NS = “News Surprise” as the difference between the number of news items on a given day minus the average number of news items on the previous twenty days. While this is consistent with the literature, there are other plausible definitions which would be worth exploring. The graphs in Figure 1 show some unusual properties of NS which are not mentioned or explained. For example, NS is overwhelmingly large and positive on Mondays. If there was no news on Saturdays or Sundays, one would be able to explain this by saying that Monday news actually covers three days worth of news. But this is not really the case, since newspapers do cover news on Saturdays and Sundays. While Tuesdays, Wednesdays and Thursdays appear balance visually, Fridays display a preponderance of negative news surprises. It is not at all clear why this should be so and what will be effect of this pattern on the analysis of the paper.

The authors test the hypothesis that stock returns form a random walk in Section 3.1. They find that the correlation at lag 2 (with two day old returns) is significant and conclude that weak form efficiency does not hold. This is not a correct conclusion. When a lot of significance tests are carried out at the 95 percent level, then about one in twenty of the tests will conclude significance incorrectly.

The way to correct for this problem is to raise the significance level to 99 percent or higher, depending on the number of tests being conducted. If this is done than the authors results do show weak efficiency of the stock market returns.

The excess returns on Monday and negative returns on Friday may be consistent with the hypothesis that there is fundamental underlying real growth rate in the economy. On the average, stock prices will also grow at this (small) rate. The return on Monday reflects the accumulation of three days worth of real growth and hence would be expected to be higher than the return on the other days. The short day on Friday would similarly reduce the returns relative to the average return. It would be worth examining the extent to which the results of the authors are compatible with this hypothesis and also the associated real rate of growth of the economy.

Finally, the authors have simply counted news items and used this as a basis for tests. In fact, most news can easily be classified (and indeed this is done by authors in some cases) as news which would have a positive or a negative effect on the stock market. Counting would aggregate over the positive and negative items and results in a substantial loss of power in the tests. If the news were classified into positive, neutral and negative items, this would substantially increase the power of the subsequent tests. In addition, the authors are testing for effects of aggregate news on the aggregate stock market return. It would probably be more appropriate to look for impact of HUBCO and IPP news on energy related stocks. This would substantially improve the ability of tests to detect effects.

To summarize, the authors have done an excellent job of initiating research on the efficiency of our stock market with respect to publicly available news. There are many directions for further research as well as ways to improve and refine existing results. We hope that other authors will take up the challenge and carry out the necessary research.