

## An index to capture market health

By C K G Nair & M S Sahoo, Last Updated: May 18, 2007, 01:08:00 AM IST

### Synopsis

This price is so important: it is a barometer of the whole economy, present and future, not just of the stock market.

We are obsessed with prices. We are particularly paranoid about rising prices. A charming exception is the stock price. We wish this price to go up and up, perpetually. Governments may fall if this price plunges sharply.

This price is so important: it is a barometer of the whole economy, present and future, not just of the stock market. It eclipses other developments of the stock market, including its fundamentals. No diagnostic study or analysis of the stock market is complete without the use of this barometer.

A number of price indices have been developed scientifically and are being maintained professionally to capture and measure the behaviour of this price from different angles and many exotic products have been developed around its behaviour. There are multinationals who are exclusively engaged in the construction and maintenance of stock indices. Policy makers to market participants use these indices to earn their livelihood.

A stock price index hides more than it reveals. It reveals the health of the listed companies and the economy, but eclipses the health of the stock market. The reforms made over the years in the stock market have improved the efficiency of stock index in reflecting the health of listed companies.

The stock index is a better barometer today in comparison to what it was, say, a decade ago, because it has the support of better information availability and processing capability arising from IT-based market design and disclosure requirements. It has reduced information asymmetry to a great extent, but with a lot of information crowding that has made filtering the 'right' information a growth industry.

Any assessment of the health of a stock market only on the basis of the rise or fall in stock prices leads to the assessment of the economy in the medium to long run and market sentiments in the short run.

The assessment of the health of the stock market, therefore, requires a more holistic approach, involving evaluation of the structure, processes and designs of the market contributing to the fairness, integrity and credibility of the market. This calls for the development of an index to track the health of the stock market comprehensively.

This would involve identification/development of performance indicators (parameters) that can capture the health of different components of the market, determination of their weights in the index, maintenance of database to capture these parameters scientifically on an ongoing basis and churning out the index at regular intervals.

The index should capture the entire market. All segments of the markets such as primary market, secondary market, tertiary (derivatives) market, collective investment schemes and globalisation of the market, need to be represented in the index.

Their weights would vary depending on their relative importance. For example, since primary market has a predominant role in capital formation and resource allocation, which are the main objectives of the stock market, it may have a relatively larger weight.

The elements within each segment needs to be determined based on the expectations of the country/economy, regulators, intermediaries, issuers and investors who are the major stake-holders in the stock market. All of them expect that the market should be efficient, defined in the neo-classical sense of low transaction cost.

Similarly, they expect the market to be safe. The elements that may be considered in each segment may, therefore, include: the cost of transactions, safety of transactions, reliability of transaction infrastructure, ease and product range, quality and speed of enforcement actions, quality of intermediation services, level of investor protection, and transaction volumes.

Under each of these elements, there can be a few parameters. For example, the safety element may have parameters like property rights, risk management mechanism, certainty of transactions, etc.

The level of investor protection may be derived from the number of complaints received against issuers and

intermediaries, average time taken to redress a grievance, expenditure on investor awareness and education, the size of investor protection funds, funds used from investor protection funds, etc.

The level of participation may be measured by the amount raised from the primary market, turnover in the secondary market, number of beneficial accounts with depositories, etc. However, these need to be suitably adjusted for seasonal or extraneous factors. For example, the volume of transactions may be very high because of macroeconomic fundamentals without any improvement in market design.

This needs to be addressed through relative figures such as volume of transactions in stock market vis-à-vis that in banking channel or as a percentage of GDP. Thus, assuming 'm' segments in the market, 'n' elements in each segment, and 'p' parameters in each element, there would 'mnp' parameters in the index.

Many of the parameters identified may not be amenable to quantification. In such cases, proxies need to be used. For example, the ease of transaction is very subjective. One way to look at can be the availability of transaction front ends close to the location of participants.

Another could be the liquidity in the market so that a participant does not have to incur substantial search costs. Further, some parameters could become obsolete and hence may have to be substituted with appropriate new parameters, to remain abreast of the changes.

The parameters as well as their weights also need to be fine-tuned by an iterative process keeping in view the practical constraints and need for timely availability of the index. Of course, developing such an index involves major exercises on the learning curve. This comprehensive index would reveal the health of the stock market.

The contributory factors to the movement of this index will alert the authorities on hot spots and help in timely and informed policy making. The availability of such an index will release the stock index for its limited, intended use, from the present overarching one.

***(The authors are civil servants. Views are personal)***