Measuring Biased Beliefs in Stock Picking: An application to Russian Mutual Funds

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How do we assess our skills? We might infer we have a disposition for some tasks when we successful complete them and our success rate is above average. Anyway, our self-judgement is not always unbiased; instead, for most of us it is easy to attribute successful outcomes to specific dispositions and failures to unlucky events beyond our control.

When we move to the field of finance, the overestimation of the degree to which one is responsible for his or her financial performances can be seen as this individual being too confident in his or her portfolio selection skills and consequently in his or her ability to identify and predict best performing securities.

Notwithstanding a trader's capability, it would be impossible to carry out trades giving returns consistently above average in a true efficient market. Anyway, in concrete financial markets, which are affected by small or large forms of inefficiencies, this is still possible and can be ascribed to two factors: quality of information accessed by the trader and ability to process it. As it follows, investors can show a bias both in their self-assessed ability to process financial information and concerning the actual quality of the "rumours" or other confidential data which they have access to, that is to say they have biased beliefs concerning their private information.

Private information is very likely to be local information. Indeed, we expect that a trader or a fund manager have easier data accessibility when there is proximity to the source of the information. This argument works against the theories of international diversification of portfolios and instead supports strategies focused on domestic portfolios.

Without the presence of behavioural biases, it would be always possible to obtain better returns by exploiting private information; unfortunately, an investor might often overrate the information s/he has, which will lead to unwelcomed portfolio results.

All that given we might be inclined to classify investors which overweigh their portfolios with local stocks, but without obtaining good financial performances, as investors too confident in the value of the their local information and/or in their ability to process it. It is anyway not simple to assess when a portfolio is overweighed with whatever type of security in objective terms. In the following, we propose a methodology to obtain this assessment in a formal way, with respect to professional investors (fund managers) and consequently we propose a measure of investors biased beliefs.

Let us assume that we have two types of professional investors: the first is a fund manager whose fund target is geographically focused within a given region; the second is a manger whose fund has no specific geographic focus, but who has a privileged access to the information for the given region. Hereafter these archetypal investors are identified as the "foreign manager" and the "local manager".

In order to understand to which degree a fund is focused on a specific region, it is possible to obtain its top 10% holdings and identify the asset domiciles. With respect to foreign managers, we can rank their funds on the basis of the fund geo-localisation as shown by top holdings. Let us assume, now, that a local manager is above the median foreign manager as regard the level of local stock holdings. Taking the median foreign manager as a reference, we can say that the local manager has a portfolio focused on domestic stocks, if top domestic holdings rank above the median. In as far as the manager gives up to international diversification to favour local stocks, s/he is supposed to (be able to) leverage private local information and processing it to obtain positive (or anyway better) returns. If this is the case, the local manager will obtain better performances than the median foreign manager will. Depending on market conditions, these performances could be positive or even negative, but in any case they should be above the median.

Of course, the above reasoning assumes no biased beliefs in processed local information; therefore, when the results are below the median, we can infer that the local manager is too confident in local private information which s/he tried to convey into the portfolio selection process.

This final consideration suggests that a researcher might use the relative rank above as a measure of the biased beliefs i.e. manager overconfidence. That is, the more a local manger ranks above the median as regard local holdings, but below the median as regard performances, the more this manger is overconfident in his/her private information.