Relative performance of SRI equity funds:
An analysis of European funds using Data Envelopment Analysis

Antonella Basso and Stefania Funari
Ca' Foscari University of Venice

Abstract

Green, social and ethical mutual funds, on the whole often referred to as socially responsible investment (SRI) funds, have seen an increasing interest among investors.

This phenomenon is relevant both in the United States and in Europe, and it is also very dynamic; for example, in 2009 the number of European SRI funds has grown to 683, for a total asset under management of 53.276 billion euros.

The investors' behaviour that leads to socially responsible investment decisions in general and to investments in SRI mutual funds in particular has been investigated in the economic and financial literature from different points of view over the years, in particular with respect to the determinants of these investment choices.

Given the ethical considerations which drive green, social and ethical investments in general, ethical investors may be willing to accept even lower financial returns, if they are counterbalanced by appropriate ethical achievements. Actually, the literature on ethical investing has long investigated the issue of the eventual penalisation incurred by investments in SRI mutual funds, in search for an answer to the question whether it is possible "*to do well while doing good*".

If one wishes to evaluate the overall performance of SRI mutual funds it is necessary to use a technique which enables to take into account both primary objectives pursued by ethical investors: the ethical objective and the desire to get an optimal reward-to-risk result. A methodology that can be used to this aim is data envelopment analysis.

The main aims of this contribution are first to analyse the ethical level of European SRI mutual funds, secondly to measure the overall performance of the European SRI mutual funds with appropriate DEA models and, finally, to investigate whether investors have to be prepared to give up something in terms of financial returns when investing in a socially responsible manner in Europe.

The time period considered in the analysis, the triennium June 2006-June 2009, has recorded a heavy economic recession and this have posed a challenge for the analysis of the performance of mutual funds and the application of data envelopment analysis, since in the triennium considered, the mean returns of most mutual funds turned out to be negative. In order to overcome this difficulty, we propose some modified DEA models specially envisaged in order that they can be used regardless of the phase of business cycle.

In order to take into account the different motivations of investors, we use different DEA models, based either on a basic CCR model or a model for exogenously fixed output.

In the empirical analysis carried out these modified models are used to evaluate the performance of SRI equity mutual funds in the different European countries in which some socially responsible mutual funds are domiciled.

The paper presents the ethical measure used to assess the degree of socially responsibility of mutual funds, analyses the presence of SRI mutual funds in Europe, discusses the three different DEA models proposed to evaluate the performance of SRI mutual funds in the presence of negative mean returns, presents the results of the empirical investigation carried out on European SRI mutual funds and finally compares the performance indicators for SRI and non SRI mutual funds, with the aim of determining if the socially responsible mutual funds entail a sacrifice in terms of financial performance.