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Efficiency evaluation of the Portuguese pension funds management companies

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ABSTRACT

This paper ranks the pension funds management companies according to their change in total productivity for the period 1994–2007. We estimate the change in total productivity, breaking this down into technically efficient change and technological change by means of data envelopment analysis (DEA-Malmquist index). The aim of this procedure is to seek out those best practices that will lead to improved performance in the market. The implications arising from the study are considered in terms of managerial policy.

1. Introduction

The accurate, reliable assessment of funded and privately managed pension funds remain a critical prerequisite to managerial decision-making, especially in the face of higher customer expectations, shrinking profit margins, and little brand loyalty. Systematic performance evaluation can meld the components of complex value-creating pension funds systems by directing strategy formulation as well as monitoring implementation at the operational level. Effective systematic performance evaluation should improve managers' overall understanding of the process being evaluated (e.g. inputs/outputs), influence behaviours throughout the system, and provide useful information to system members and sponsors.[1]

This current research is based on our observation of the Portuguese funded, and most of them privately managed, pension funds growth, which call for performance evaluation.

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[1] We adopted OECD pension terms, OECD (2003b).

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In this paper, we analyse the comparative efficiency of Portuguese pension funds management companies, assessing the sector's efficiency by using a variety of metrics to measure inputs and outputs that combine financial, as well as operational, dimensions. Moreover, we evaluate total productivity with the Malmquist index. This is in line with the ongoing discussion about how privately managed funded pensions must be best organised and operated.

The particular contribution of this paper lies in its analysis of a sector not much analysed in the financial literature and in its testing of the role played by the rapid legislation change since its inception in 1985, namely considering asset allocation limits, in the growth of the efficiency of the national market. The paper adopts the Malmquist index to estimate the change in total productivity. Furthermore, this paper enlarges the findings of Barros and Garcia (2006), where performance assessment of the pension funds industry was done with a stochastic frontier model.

The paper is organised as follows: in Section 2, we describe the contextual setting, considering the Portuguese funded pension funds sector; in Section 3, we survey the existing literature on the topic; in Section 4, we present the data and results; in Section 5, we discuss the results and we make concluding remarks.

2. Institutional setting

The recognition that the maintenance of a high level of social protection must be based on a multi-pillar system has led, in Portugal as elsewhere, to the creation of conditions for the development of the so-called complementary retirement schemes on a voluntary basis (Garcia, 2004). Additionally, to ensure the system's financial sustainability beyond 2050, it seems to be necessary to implement further-reaching modifications including the introduction of a mandatory complementary pension, either in individual or group schemes, combined with the establishment of a ceiling for the State pension (Silva et al., 2004). These pension reforms are occurring worldwide (Barr, 2003; ISSA, 2004).

Pension funds have been in existence in Portugal for more than 20 years now, that is, since 1985. Those were financing occupational funded pension plans. In 1989, personal retirement savings schemes (PRSS) were established in order to stimulate long-term saving by families. Later, in 1995, personal saving plans in shares schemes (PSPSS) were introduced.

Market activity is currently regulated by the provisions of Decree-Law Nr. 12/06, 20th January, which integrates into a single body a whole series of aspects that previously were dispersed throughout a range of legal documents. This legislation adapts the Community Directive 2003/41/EC of the European Parliament and of the Council, of 3 June of 2003, on the activities and supervision of institutions for occupational retirement provision Official Journal of the European Union (2003).

As in other countries, pension funds currently constitute (collectively) one of the largest institutional investors, channelling into productive investment ever-increasing volumes of savings from families and companies and occupying a prominent position in the organisation and functioning of the national capital market. In fact, the pension funds industry represented 12, 4% of GDP in 2007.

Pension funds can be managed either by specialist enterprises created for this exclusive purpose, and which operate under the designation pension fund management companies, or by insurance companies which are legally authorised to carry out life insurance activities in Portugal.

The great majority of them, about 65%, are managed by specialist pension fund managers representing 96% of the amounts under management, enhancing the role of pension funds management companies.

Although the number of specialist management companies has changed over the period 1994–2007, it is possible to consider a balanced sample of 12 companies, as follows (Table 1).

3. Literature survey

Pension funds management is an issue that is getting more and more importance as risks are increasingly being shifted to individual households with pension systems reforms undertaken worldwide (European Commission, 2003; OECD, 2001, 2003a, 2005b; World Bank, 1994, 2001). Accordingly, regulatory and supervisory developments should aim to change pension funds management institutions behaviour for the better. Market participants' confidence in the system may be strengthened with