

Financial management of Spanish pension plans: Comparison to the UK market

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MOTIVATION OF THE THESIS

The thesis is motivated by the growing importance of institutional investing in general, and of pension funds in particular. Specifically, the ageing process that Europe is facing along with the recent solvency problems of some pension funds have called for an improvement on the regulation of Spanish pension plans as well as for the necessity of increasing the control over managers' behaviour.

Given the enormous assets under management of pension funds (private Spanish pension funds manage around €85,842 million in 2007) the analysis of performance and managers' behaviour of these financial institutions is worth. Therefore, the thesis examines some hot topics that deserve great attention of analysis, especially in a growing market such as the Spanish pension industry. It is also important to note that another reason that has lead us to investigate pension schemes is the scarce number of studies focused on these collective investment in comparison to investment funds, being this gap even larger in the case of the Spanish market.

CONTENTS

The PhD is divided into three parts. The first part consists of just one chapter that introduces the specific characteristics of the Spanish pension industry and shows some statistics of the

situation of pension funds in other international markets. In this introduction we summarise the characteristics of the Spanish pension framework focusing our attention on private personal pension schemes given that they are the most important private pensions in Spain.

In the second part of the thesis relevant topics related to the management and performance of Spanish pension plans are studied from an empirical point of view. Research papers about performance persistence have been abundant trying to find whether this phenomenon exists or not since it would be very useful information when it comes to making investment decisions. As a result, we firstly provide empirical evidence on the performance persistence. This leads us, in a second step, to check the influence of past performance on new investment flows (money and investor flows). Finally, this chapter also deals with the so-called «smart money» effect by examining the relationship between investment flows and future performance by using non-parametric and parametric methods.

After these analyses focused on the investors' perspective, we examine managers' behaviour by analysing the investment style followed by Spanish pension plans using the return-based style analysis as well as its consequences to performance. Finally, we also investigate if pension managers are engaged in herding behaviour on their strategic style allocations by using

the traditional herding measure proposed by Lakonishok *et al.* (1992) along with some improvements. In other words, we examine whether pension managers change their asset assignments bearing in mind their competitors' movements. Furthermore, we also test the existence of intertemporal imitation and informational cascades.

Finally, the third and last part of the thesis is devoted to the specific features of the pension provision in U.K. Specifically, it summarises the situation of the pension framework in UK in order to address the different empirical analyses on a sample of UK personal pension plans. The main objective of this part of the thesis is to provide evidence of the different phenomena in a developed market such as the UK.

CONCLUSIONS

Regarding the first part which summarises the characteristics of the Spanish pension framework, we provide evidence of the importance of pension schemes during recent years, especially in Spain.

In relation to the persistence phenomenon, we conclude the existence of persistence in the returns achieved by pension plans based on both parametric and non-parametric methods. This phenomenon is more important in the short-term as shown in financial literature (see, e.g., Hendricks *et al.*, 1993 and Brown and Goetzmann, 1995). Furthermore, our results confirm the extensive evidence that past return is very important for investors when it comes to making investment decisions (see, e.g., Sirri and Tufano, 1998). Note, however, that this influence is different depending on the portfolios analysed. On the other hand, there is not evidence about the smart money effect. The controversy about the existence of this latter phenomenon will probably lead the academic community to further investigate this issue in the coming years. In this sense, our analyses contribute to the existing literature in several ways. First, we use some statistical tests that have not been previously applied to these topics and second, we follow a cross-sectional approach as opposed to the well-documented time-series framework which allows us to provide a new perspective.

The results obtained when using the return-based style analysis proposed by Sharpe (1992) show the adequacy of the style models proposed despite they are not exhaustive due to the multicollinearity problems detected. This fact leads to contribute to financial literature by analysing the consequences of imposing the portfolio constraint when non-exhaustive models are used. On the other hand, we confirm the importance of the investment style when it comes to explaining the performance yielded by each portfolio, as shown by financial literature (see, e.g., Ibbotson and Kaplan, 2000). Moreover, our study adds to the literature in several ways. First, we carry out not only individual analyses but also aggregated studies and second we determine the importance of some well-known biases such as survivorship bias and look-ahead bias on the strategic asset allocation decisions. It is important to note that the incidence of these biases on performance persistence is well documented by previous studies but not in the case of investment styles. Finally, we also propose the use of an alternative performance measure that has not been previously applied despite its usefulness to managers and investors.

The analyses of herding behaviour also allow us to contribute to the literature given that we use the qualitative approach along with the quantitative method. Furthermore, we overcome some limitations detected by Bikhchandani and Sharma (2000) and Wylie (2005) in the traditional herding measure proposed by Lakonishok *et al.* (1992). Our empirical results show a strong evidence of convergent behaviour among Spanish pension managers. Moreover, the informational cascade analysis shows that some portfolios have capacity to anticipate the strategic investment movements of other managers.

Finally, our analyses of UK personal pension plans also confirm the existence of performance persistence in the returns obtained by these portfolios although this phenomenon is weaker than that observed in the Spanish market. A significant influence of past returns on money flows is also observed in this market regardless of the length of the financial information used. However, no evidence of smart money is found. Further research on this issue should be conducted as pointed out by Keswani and Stolin (2008)

since more comprehensive datasets could lead to interesting conclusions.

Regarding the return-based style analysis of UK pension plans, we confirm the importance of asset allocation decisions on portfolio performance. It is remarkable that UK portfolios seem to be a little more aggressive than Spanish plans with more marked equity assignments. In relation to convergence behaviour, we highlight the extent to which UK managers are engaged in herding behaviour. Although different studies have tried to explain this phenomenon using different perspectives such as reputation concerns, compensation schemes and informational cascades, more research on the causes of this imitative behaviour in UK and Spain could enrich the literature in this area.

RESUMEN:

La Tesis Doctoral está escrita y defendida en inglés en contexto de doctorado Europeo. Sin embargo, también contiene un breve resumen en castellano para su completa difusión. De forma muy sintética podríamos decir que el objetivo de la tesis es el análisis financiero de los planes de pensiones españoles y de Reino Unido con el objetivo de comparar ambos mercados.

Tras un capítulo introductorio con la descripción del mercado español de planes de pensiones y de la importancia de estos instrumentos de ahorro en otros mercados, la Tesis desarrolla cuatro capítulos empíricos. Dicho análisis empírico comprende el estudio de los dos puntos de

vista, análisis del comportamiento de los inversores y el análisis de la gestión realizada por los gestores en los dos mercados analizados, el mercado español y el mercado británico.

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