Abstract

The pension fund industry is an essential pillar in the retirement provisions of millions of workers around the world. In the following decades, the importance of this industry will only grow, as public pensions are under increasing pressure and many developed economies are confronted with aging population. The main objective of the pension fund industry is to invest current savings on the long term, to allow for sufficient retirement income at old age. As such, the asset management process is the backbone of the industry, since it allows pension funds to transform current retirement savings into future consumption. In this Ph.D., I address current issues on asset management for pension funds, with a specific focus on the following subjects: portfolio allocation, investment costs, and alternative assets.

The first paper titled '*The Impact of Plan and Sponsor Characteristics on Pension Funds' Asset Allocation and Currency Diversification'* evaluates the role of plan and sponsor characteristics in pension funds' investment decisions. In this article, we present new empirical evidence on the investment behavior of 182 Belgian pension funds for the period 2001-2015. The results show that (1) pension funds with more active participants -or younger members- invest more in equities and have better diversified equity portfolios and (2) that larger pension funds invest more in risky assets. In addition, the results show that the sponsor firm plays an important role in the portfolio allocation process: pension funds in which employers pay higher contributions take more aggressive investment decisions, while pension funds in which employees pay higher contribution take more conservative investment decisions. Finally, we also find evidence that corporate culture and performance parameters affect the investment behavior of pension funds.

The second paper titled *'The Investment Costs of Occupational Pension Funds in the European Union: A Cross-Country Analysis'* evaluates the average investment costs' pension funds pay in different countries around Europe. In this article, we analyze the average investment costs

of occupational pension funds in fourteen member states of the European Economic Area for the period 2004-2015. In the academic literature, previous authors conclude that economies of scale for investment costs are limited, but our research clearly indicates that there are still important optimization opportunities in the European Union – especially in Eastern Europe. In contrast to these previous authors, our study builds on a cross-country analysis: the results show that (1) larger pension funds have lower investment costs than smaller pension funds and (2) that pension funds pay less investment costs in more mature markets. Finally, our results also show that inactive participants are an extra burden for pension funds and create additional costs.

The third paper titled *'The Investment Behavior of Pension Funds in Alternative Assets: Interest Rates and Portfolio Diversification'* analyzes the recent growth of investment in alternative assets. For this paper, we analyzed the CEM Benchmarking Inc. database with pension funds from North-America, Europe, Australia, and New Zealand. The empirical analysis includes 890 pension funds for the period 2000-2015. First, the results show that portfolio diversification trends play an important role in the growing popularity of alternative assets, most probably because these assets allow pension funds to optimize their portfolio structure. In general, the long-term investment horizon from pension funds, and other institutional investors, allows them to better absorb the short-term risks that alternative assets generate. Second, the results in relation to the interest rate are conflicting, since the fixed-effects model and the robustness test produce different outcomes. Hence, it would be relevant for future scholars to further address this subject with other datasets, which also include periods of rising interest rates.