## **SANDRA RIGOT**

University paris North, france

# RETURNS AND DETERMINANTS OF PENSION FUNDS' ALLOCATION TO PRIVATE EQUITY: COMPARING VENTURE CAPITAL AND LEVERAGE BUYOUTS.

### Abstract:

While private equity funds have become responsible for an enormous amount of investment in the economy due to the increasing interest of pension funds, the literature that analyses private equity allocation is very scarce. These types of investments are not only attractive for pension funds because they allow them to diversify their portfolios, but also for the economy. Indeed, they can be seen as long term investment because they undertake investment in real companies, supplying equity at different stages of their evolution with different structures of funding.

In order to identify the flows and capture the underlying trends in asset allocation of pension funds, the objective of this paper is to investigate the effect of private equity allocation on global returns and the main characteristics of pension funds investing in private equity funds , particularly in venture capital and leverage buyouts, related to their liabilities profile and their mode of management, based on a reliable, confidential database in Canada and the United States over the 1996-2011 period.

Our results first evidence a positive and significant effect of private equity allocation on global returns. Distinguishing between venture capital and leverage buyout shows that the impact of the first category on returns is higher than the second one. Second, the results based on a Tobit model for allocation to private equity show some important differences with respect to allocation to more traditional assets (i.e. equity). Indeed, defined benefit plans allocating to private equity are bigger, more diversified and mainly private funds. They do not consider the age of their members when deciding this type of allocation. This last result is important because it is not in accordance with the life cycle theory, contrary to what we might expect. Furthermore, in accordance with the literature, they present high discount rates, implying an incentive to allocate to more risky assets like private equity. Finally, pension funds do not give more importance to innovation oriented venture capital with respect to the more short-term profitability derived from LBO. Therefore, they do not seem to particularly participate in the funding of the innovation via VC investments, whereas they have long term liabilities that give them a strategic advantage to take risks and immobilize capital.

### **Keywords:**

Pension funds; private equity, asset allocation, long term investment

#### JEL Classification: G23