Optimal portfolio allocations and funded pension systems: the case of Chile

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Abstract

The paper uses 101 years of historic data on domestic and foreign financial assets performance from the point of view of a Chilean investor to investigate optimal portfolio allocations from a mean variance standpoint. The key conclusion is that the share of international unhedged investments is substantial even in mean variance optimal minimum risk portfolios (20%), unless the period 1980-2002 is assumed to be drawn from a different distribution and previous history is disregarded. In addition to that, the paper finds that mean variance optimal investors would have generated substantial demand for an asset replicating the return profile of an efficient pay-as-you-go pension scheme. The latter conclusion would however be mitigated if labour income risk and departures from log-normality of returns are included in the analysis.