Which Banana Piece Could be Your Retirement Nest Egg?

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In a defined contribution (DC) pension system, the interest rate risk is borne by the affiliate. In Colombia, the DC system is in charge of private companies and the capital is managed through a multifund scheme, a similar system exists in México since 1997. These systems have a responsibility on capital management; they focus on means, not on results, fact that could be not crystal clear for the affiliate. Retirement planning should take into account this financial risk, fact that is not always adequately communicated.

In this paper, a capital accrual process in a DC system is discussed, the model takes into account the age at which contributions begin, the contributions made as time passes by and the capital accrual. The model allows illustrating how the affiliate could perceive the interest rate risk and how this risk affects the final capital that he could have at the end of his accumulation phase. Some statistical conclusions about the process are presented.

Some considerations are made in order to have a model suitable for Colombia, another model is obtained for Mexico and a comparison between these two capitalization systems is made. Finally, taking into account the obtained results, some retirement planning considerations are discussed.

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