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Tenga en cuenta

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Foreign reserves' strategic asset allocation Foreign reserves' strategic asset allocation* Carlos León**
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dvelabar@banrep.gov.co Abstract Despite foreign reserves' strategic asset allocation relies mainly on Modern Portfolio Theory (MPT), the unique characteristics of central banks obliges them to articulate and reconcile typical optimization procedures with reserves' management objectives such as providing confidence regarding the ability to meet the country's external commitments. Moreover, further involvedness come from broad economic factors as diverse as the openness of capital and current accounts, external debt's maturity and currency composition, and exchange rate regime. Therefore, in order to alleviate the divergence from theory and practice regarding foreign reserves' strategic asset allocation, this paper describes the methodologies and procedures developed and employed by the Foreign Reserves Department of Banco de la República. The mainstay of the paper is a long-term-dependence-adjusted and non-loss-constrained version of the Black-Litterman model for obtaining the efficient frontier from a set of investments complying with safety, liquidity and return criteria, where the choice of the portfolio which maximizes utility makes use of an estimation of the Board of Directors' risk aversion. Results exhibit the effects of the unique nature of foreign reserves management for emerging markets. Typical features of foreign reserves management by central banks, such as non-loss restrictions due to capital preservation objectives, result in increased complexity in the optimization process and in asset allocations significantly distant from standard MPT's optimality. Keywords: Foreign reserves, Black-Litterman, strategic asset allocation. JEL Classification: G11, E58, C11, C61. *We are grateful to Marco Ruiz and Alejandro Reveiz, who provided valuable comments and suggestions. Authors are grateful to the staff involved in this process, especially to Andrés Ramírez and Camilo Botía. This document relies on years of research and development at the Foreign Reserves Department of Banco de la República. The herein presented model is still under implementation, and some assumptions are made for illustrative purposes only. As usual, the opinions and statements are the sole responsibility of the authors and do not necessarily represent neither those of the Banco de la República nor of its Board of Directors. ** Research and Development Section Manager, Financial Infrastructure Oversight Department, Banco de la República. Involvement in this document occurred while working as Researcher for the Foreign Reserves Department, Banco de la República. [Corresponding author] *** Professional, Research and Analysis Group, Foreign Reserves Department, Banco de la República.