

Liquidity-Risk Measurement, Monitoring and Regulation Proposal for Colombia

Issue No. 18 AUTHOR OR EDITOR Juanita González Daniel Osorio

The importance of properly monitoring and regulating liquidity risk is associated with systemic risk and with stability of the financial system. If institutions do not measure liquidity risk adequately and if it is not well regulated, financial institutions could see their positions affected by a liquidity shock. Before designing a regulatory scheme, an operational definition of liquidity risk must be established. Literature offers two complementary definitions of liquidity risk.¹ The first is associated with a bank's inability to honor its obligations on time, because it does not have the liquid resources to do so (Basel Committee on Banking Supervision, 2000).

According to this definition, the structure of the bank balance sheet is divided into short-term and long-term assets and liabilities. When an institution does not have the liquid assets to meet current and maturing obligations, the liquidity risk is high. This "liquidity shortage" must be covered, either by liquidating a portion of the liquid portfolio, or by substituting liquid liabilities with other longer term liabilities.

Two conditions for good liquidity-risk management can be derived from the foregoing. The first consists of measuring the liquidity shortage as precisely as possible. This implies knowing, for example, when assets and liabilities mature, and the likelihood of their being renegotiated. The second implies having enough capacity to convert illiquid assets into cash or to substitute liabilities, when necessary.

Ever since the financial crisis in the late nineties, but particularly after the events that led to the "ordered" liquidation of LTCM (Long Term Capital Management) in 1998 by the Federal Reserve Bank of New York, some works have proposed a new notion of the liquidity risk that financial institutions face.

The idea underlying these works deals with the fact that measuring liquidity shortage, as the traditional version suggests, does not detect an institution's liquidity needs adequately during times of stress.² In such situations, a rapid attempt by an institution to sell part of its illiquid assets (to reduce its liquidity shortage) can be curbed by market liquidity. And, in the event of a systemic shock, that liquidity becomes a constraint to solving the institution's liquidity shortage. However, the first definition does not take that potential constraint into account.

Any scheme to regulate liquidity risk must attempt to deal with these two definitions, if it is to minimize the materialization of risk in the form of a liquidity crisis. The objective of this article is to propose an alternative for measuring, monitoring and regulating liquidity risk in Colombia's financial system. The article is divided into six sections, the first being this introduction. The current regulatory scheme and its primary drawbacks are described in the second section. The third outlines several alternative methods for measurement that are now being used and will serve as a basis for our proposal. Section four contains the proposal itself. Some of the conditions for its practical application are examined in section five. Finally, several thoughts on the scheme are presented in section six by way of conclusion.