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A framework for the analysis of financial reforms and the cost of official safety nets

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Abstract

The paper builds a multiperiod, general equilibrium framework for analyzing the macroeconomic effects of financial reforms in developing countries and the costs of maintaining official safety nets. When the creditworthiness of the non-financial sector is weak, the efficiency gains from financial liberalization may be countered by an increase in expected deposit insurance funding obligations, even when prudential supervision is strong. Moreover, given the distortions in a repressed financial system, attempts to reduce risk exposures by increasing bank capital/asset ratios may increase the funding obligations associated with deposit insurance, particularly when the debt-servicing capacity of non-financial firms is low.

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1. Introduction

Financial reforms in developing countries have sometimes ended in periods of financial instability (see Díaz-Alejandro, 1985), requiring extensive restructuring

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of both the financial and the non-financial sectors, and thereby draining large amounts of public revenue. Analyses of these episodes point to a number of factors that have contributed to financial distress, including: (1) inconsistencies between the financial reforms and the accompanying macroeconomic stabilization programs (especially where a lack of fiscal control led to rapid inflation); (2) destabilizing capital inflows or an appreciation of the real exchange rate; (3) inadequate prudential supervision that allowed some financial institutions to acquire undiversified and risky loan portfolios; and (4) inappropriate pricing of the (explicit or implicit) deposit insurance guarantees offered by the authorities [1].

The existing literature, however, has not yet provided an analytic framework that focuses rigorously on the interactions between the financial and non-financial sectors in the presence of credit risk and that addresses the macroeconomic effects of financial reforms in that context. This paper is an effort to provide such a framework, and thereby to draw deeper insights into the preconditions for successful financial reforms. The paper attempts to extend the literature by developing an optimizing model in which the uncertainties faced by financial intermediaries in making lending decisions are linked explicitly to production uncertainties faced by borrowers and by modeling the manner in which the microeconomic uncertainties faced by borrowers are related to macroeconomic developments and financial policies. To simplify these tasks, the analytic framework treats production uncertainty as the only source of randomness and assumes that problems related to asymmetrical information (i.e., adverse selection and moral hazard) are avoided through monitoring of borrowers by financial intermediaries and through prudential supervision of intermediaries.

Most countries implement financial reforms in an environment that initially includes extensive financial restrictions. These may entail ceilings on interest rates for deposits and loans, limitations on competition and entry into the financial sector, high required reserve ratios and various credit allocation rules. The model developed in this paper incorporates interest rate ceilings and reserve requirements.

In general, the potential burden that financial reforms can impose on public sector finances results from some form of explicit or implicit safety net that underpins the domestic financial system. As key elements, such safety nets often include the provision of short-term emergency liquidity assistance by the central bank, some form of private or official deposit insurance, and direct short- or

[1] Villanueva and Mirakhor (1990). McKinnon (1973, 1988), Shaw (1973), Fry (1988), Cho and Khatkhate (1989), Montiel (1991), Caprio et al. (1993) and Long (1993) provide analyses of financial repression, the transmission mechanism for monetary policy and the lessons of financial liberalizations in developing countries.