

AN ECONOMETRIC STUDY OF THE CONSOLIDATED PORTFOLIO OF INDIAN SCHEDULED COMMERCIAL BANKS, 1951-1972*

V. S. CHITRE

I. *Introduction*

THE purpose of this paper is to test the empirical validity of the theoretical model of portfolio selection by banks originally briefly illustrated by Karlin [1] and further developed by Porter [5] and Orr and Mellon [4]. The present author has elsewhere reformulated this model in a manner in which it can systematically analyse the portfolio choice of banks in situations involving any number of assets and alternative regimes of reserve requirement regulations [2]. In that paper, we developed a typical bank's demand function for financial assets by postulating that the bank maximized its expected profits taking account of liquidity requirement in view of the imperfectly foreseen inflow and outflow of deposits. It was assumed that the various financial assets of the bank can be ranked in terms of the degree of liquidity of the asset category. Then the problem of asset choice of the bank is seen in terms of the traditional idea of keeping the balance between the liquidity and the profitability of the bank's portfolio. An asset with a lower degree of liquidity is held by the bank because it offers a higher yield, or equivalently, an asset with a lower yield is held over and above what might be necessitated by legal requirement because of its greater liquidity in enabling the bank to meet unexpected reserve losses (i.e., excess of deposit outflow over deposit inflow) at cheaper cost. It is shown in [2] that the solution of the above optimization problem leads to simple equations relating the cumulative totals of successive asset categories of lower and lower liquidity to the appropriate interest rate differential and the bank's total deposit liabilities. In the present paper, we use the annual data on the consolidated portfolio of Indian scheduled commercial banks for the period 1951-1972 taken from the Business in India Table regularly being published by the Reserve Bank of India, to test by means of the multiple regression analysis how far the portfolio equations developed earlier can explain the behaviour over time of the ratios of the various financial asset categories for the Indian scheduled commercial

* I am thankful to Shri. D. B. Sardesai and Mrs. S. Joglekar for valuable assistance in computer programming and statistical work respectively.