Article

INPUTS, OUTPUTS, AND A THEORY OF PRODUCTION AND COST AT DEPOSITORY FINANCIAL INSTITUTIONS

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I. INTRODUCTION

THE TOOL OF ANALYSIS most often applied to the behavior of financial institutions has been portfolio theory. The inadequacy of this approach stems from the total omission of production and cost constraints under which financial firms operate, and thus the role of these constraints in determining the equilibrium output mix and the scale size of the financial firm. Although various studies have proposed to describe the operations of the financial firm (mostly commercial banks) by utilizing the concepts of the theory of the firm, thus correcting the deficiencies of portfolio analysis, they have not been completely successful in developing an adequate model of the banking or other financial firm [3; 16; 17; 19; 27].[1]

The lack of success of previous studies in developing a positive theory of the financial firm can be attributed to the incomplete application of the essential elements of the theory of the firm to financial institutions. Specifically, previous writers have failed to: (1) appropriately classify outputs and inputs of the financial firm by failing to consider the criteria on which the financial firm makes economic decisions, and (2) analyze the technical aspects of production and cost for the financial firm. The purpose of this paper is to develop a model within which the role of production and cost can be analyzed and the behavior of the financial firm understood within the context of a profit maximizing producer rather than, as viewed from the portfolio approach, as a rational investor. The analysis presented in this paper shows the following: (1) contrary to existing literature, in order to develop a positive theory of price and output decisions of the financial firm, explicit concepts of outputs and inputs of the financial firm must be developed and these concepts must be consistent with the criteria on which the firm's economic decisions are made; (2) by carefully analyzing the technical aspects of the financial firm's production process, a model of financial firm behavior can be developed which is consistent with the theory of the firm; (3) in contrast to the traditional firm, the technical production conditions facing the financial firm result in optimality conditions where the marginal revenue products do not, in general, equal the

1. The model developed in this paper deals with depository financial firms, however, it could be adapted to non-depository financial firms with only slight modification, if one so desired. Depository financial institutions have a distinguishing characteristic in common in that a large portion of their costs are incurred in providing services to depositors as partial payment for the use of funds. This is not a characteristic, for example, of "finance companies."

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