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Labor-use efficiency in Indian banking: A branch-level analysis☆

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Abstract

This paper uses data envelopment analysis to measure labor-use efficiency of individual branches of a large public sector bank with a sizable network of branches across India. We find considerable variation in the average levels of efficiency of bank branches across the four metropolitan regions considered in this study. In this context, we introduce the concept of *area* or *spatial efficiency* for each region relative to the nation as a whole. Our findings suggest that the policies, procedures, and incentives handed down from the corporate level cannot fully neutralize the detrimental influence of the local work culture across different regions. Most of the potential reduction in labor cost appears to be coming from possible downsizing in the clerical and subordinate staff. Our analysis identifies branches that operate at very low levels of labor-use efficiency and possible candidates for increased supervision and control.

Keywords: Bank; Efficiency; Branch; Cost

1. Introduction

Although the last decade has witnessed a significant proliferation of research on cost efficiency of banks, the unit of analysis has typically been a bank as a whole rather than an individual branch of the bank. Given the lack of easy access to branch-level data, this is understandable. It remains true, nonetheless, that commercial banking is based on the operation of a network of bank branches that act as the key contact points between the bank and its customers. Branches facilitate the financial intermediation process by mobilizing deposits that generate funds to be invested by the bank. In a practical sense, they act as foot soldiers who ultimately win or lose the battle for sustaining the bottom line of the bank. They are involved in all the crucial steps of modern banking like cost management, recovery management, technology, risk management, and governance. Therefore, their performance is of considerable interest to the bank management and policymakers on the one hand and to academicians on the other. It is useful to benchmark the relative efficiency of an individual branch against the 'best-practice' branch(es) because it sets specific goals to be attained by the management of the branch. It identifies under-performing branches that may be candidates for increased supervision and control. In a more general sense, benchmarking may help improve our understanding of the

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underpinnings of efficiency of the bank as a whole. A 'true' best-practice bank frontier against which all banks could more accurately be compared would be constructed from banks with branches that are all fully cost efficient [1]. Therefore, inefficiency of a bank in comparison to the benchmark 'best-practice' technology based on bank level observations understates the inefficiency as it is being compared to an inadequate frontier.

A major factor contributing to high cost inefficiency of banks, especially in developing economies in Asia, is high operating cost emanating from overemployment of labor [2]. In general, operating costs of banks are higher in India than in other Asian countries. For example, in 2003, operating costs of banks per million dollars of total assets were $10,100 in China, $13,800 in Korea, $16,100 in Malaysia, and $17,100 in Thailand [3]. In contrast, operating costs per million dollars of assets of commercial banks in India during the same time stood at $22,400. Moreover, labor costs alone accounted for more than 60% of total operating cost of Indian banks. By comparison, the share of personnel expenses in the total operating costs of banks in other selected Asian countries, as mentioned above, varied from 34% to 39%. There is, thus, considerable room for cost reduction by eliminating labor-use inefficiency of Indian banks. Against this background, this study makes an attempt to contribute to the branch efficiency literature from the banking perspective of developing economies like India. In particular, the paper evaluates and analyzes the regional differential in labor-use (in)efficiency of bank branches within India. The Indian banking sector is of special interest for several reasons. Firstly, apart from being one of the fastest growing emerging economies, India has one of the largest public sector banking system of the world and generates employment of around one million persons.[1] Secondly, the vast network of nearly 66,000 commercial bank branches provides the base of the finance led growth and development process in India. Thus, the issue of labor-use inefficiency of bank branches in India is especially important.[2] Thirdly, the unique diversity of socioeconomic development and growth across regions in India makes a special case study of differences in labor-use efficiency between different geographical areas.[3] Finally, the evolving regulatory environment of the Indian banking system, especially after the financial deregulation initiated since 1991–1992, adds urgency to the need for proper human resource management in order to eliminate under-utilization and to bring establishment expenses at par with international standards.

Our study differs from the existing literature in several respects. First, we focus mainly on labor-use inefficiency. Hence, our findings provide direct guidance for the optimal deployment of labor inputs, separately for each category of employees. Second, the study is designed to measure the branch-level labor-use inefficiency of a single bank across India's four biggest metropolitan cities, viz., Mumbai (erstwhile Bombay), Delhi, Kolkata (erstwhile Calcutta), and Chennai (erstwhile Madras).[4] These cities are characterized by varied work cultures, diverse economic conditions, and disparate socioeconomic demographics. Because the administrative procedures and management style are fairly uniform nationwide across the branches of the same bank, our analysis permits one to measure the effects of differences in the regional characteristics on efficiency across regions. We have introduced a new concept called *regional* or *spatial efficiency* extracted from the measured efficiency based on a *grand* frontier. Finally, we investigate why some branches perform better than others by examining their size, deployment of deposits, labor productivity, service quality, etc.

In particular, we address the following questions in our paper:

- What are the levels of labor-use efficiency of the individual branches when measured against a bench-

[1] The banking system in India comprises commercial and co-operative banks, of which the former accounts for around 95% of banking system assets. Besides a few foreign and Indian private banks, the commercial banks comprise 19 nationalized banks (majority equity holding is with the government) and the State Bank of India (majority equity holding being with the Reserve Bank of India) and its seven associate banks (majority holding being with State Bank of India). These 27 banks constitute the public sector (state-owned) banking system in India and account for, on an average, over 80% of commercial banking assets.

[2] This is quite apparent from the following statement by Bimal Jalan, the former Governor of Reserve Bank of India: Inefficiency in the use of resources, tolerance of waste and slothfulness at branches contributes to low productivity of banks and is also often reflected in high spreads. The important challenge of managing transformation would, for the banking sector in India, mean moving from high operating cost, low productivity and high spread to being more efficient, productive and competitive [4].

[3] It may, however, be emphasized that the role of geographical location in explaining efficiency differential across regions is really a proxy for differences in work culture and economic conditions.

[4] Ideally, one should analyze the entire branch network of the bank. Due to non-availability of data of branches in other regions, we have restricted our analysis to the branches of selected four metro cities.