

CHAPTER 4

OPERATIONAL EFFICIENCY IN BANKING SECTOR – A CONCEPTUAL FRAMEWORK

4.1 Concept of Efficiency

When we address ourselves to the concept of 'Efficiency', we soon realize that 'Efficiency' is a loose term indeed; a host of different concepts of 'Efficiency' come readily to the mind. To an engineer efficiency may mean ratio output/ input or percent (thus speaking of the efficiency of a machine) while the cost accountant uses the ratio, standard cost/ actual cost, percent or its inverse to measure the efficiency of a firm, department or cost centre. An economist, when he refers to the efficiency of a firm, generally means one of two ratios. First concerns the firm's success in producing as large as possible output (or what amounts to the same thing, producing a given output with least inputs), this he calls productivity or technical efficiency. Second measures, also a ratio of output to inputs, are in value terms. Sometimes it takes the form of the ratio, value of output/value of input (Amer & George Allen, 1969).

"Efficiency" from the view point of the working of a machine or a plant and a cost accountant from financial aspects regarding cost or cost control and an economist use productivity as an indicator of efficiency. For a marketing manager 'efficiency' means ability to earn profits through customer satisfaction. Thus 'efficiency' means different things to different people.

4.1.1 Definitions of Efficiency

The term "efficiency" has two definitions which are based on the interpretation of the term.

Koopmans Definition (1951): 100 percent efficiency is attained by any DMU if and only if, none of its inputs or outputs can be improved without worsening some of its other inputs or outputs (Koopmans, T.C.,1951).

In most management or social science applications the theoretically possible levels of efficiency will not be known. The preceding definition is therefore replaced by emphasizing its uses with only the information that is empirically available as in the following definition:

Relative Efficiency: A DMU is to be rated as fully 100 percent efficient on the basis of available evidence if and only if the performances of other DMUs do not show that some of its inputs or outputs can be improved without worsening some of its other inputs or outputs (Cooper, 2004).

In this research, the researcher has adopted second definition of efficiency which is related with relative efficiency concept for the following reasons:

- A. Efficiency is a relative term. Efficiency can never be absolute; and it will always be relative to some of the criterion. In any sphere of activity, efficiency is ratio of results achieved to the means used. It is an ability of individual or organization to produce the desired effect with minimum of efforts, expenses and wastes. Therefore, in most of the situations, 'efficiency' is a relative concept and must involve comparisons.
- B. Relative efficiency measures producing maximum value of output with given value of inputs; or equivalently, using minimum value of inputs to produce a given value of output (Bhat, 2001). Efficient change is a change that increases value and an inefficient change is the change that decreases value. An economically efficient situation may be inefficient when it is judged on different criteria.
- C. On the production-possibility frontier, all resources must be properly utilized. Unutilized resources reflect that more services and goods could be created, which means that the entity was not evaluated on production possibility frontier earlier.

So, it can be concluded that, the concept of efficiency is not an absolute concept; and it is relative. We cannot say that any DMU_x is absolutely efficient. A firm's efficiency level is determined by cost, price and product complexity. While the efficiency of banks has increased the demand for and implementation of newer technologies, better connectivity and robust standards will continue to drive the industry towards efficiency further.

4.2 Categorization of Efficiency

Efficiency could be categorized into different categories based on scope of efficiency targeted; the efficiency can be decomposed into scale efficiency, scope efficiency, technical efficiency and allocative efficiency (Chen, 2001). A bank has the scale efficiency when it operates in the range of constant returns to scale (CRS).

Scope efficiency occurs when the bank operates in different diversified locations. When the bank maximizes the output from the given level of input technical efficiency occurs and when bank, chooses revenue maximizing mixes of output, allocative efficiency occurs.

‘Efficiency’ will also vary according to whose point we are considering. That is, whether the researcher studying efficiency from the point of view of an individual firm or of the community. The adjective ‘economic’ when applied to efficiency refers to the community view and economists are concerned with this particular concept “Economic Efficiency”. Thus ‘efficiency’ can be broadly being studied from two stand points (Refer Fig. 4.1). First, from the view point of an economy as a whole, which is termed as “Economic Efficiency” and secondly, from the view point of an Individual business enterprises, which can be termed as “Operational Efficiency” of existing units or projects of a firm is to be studied.

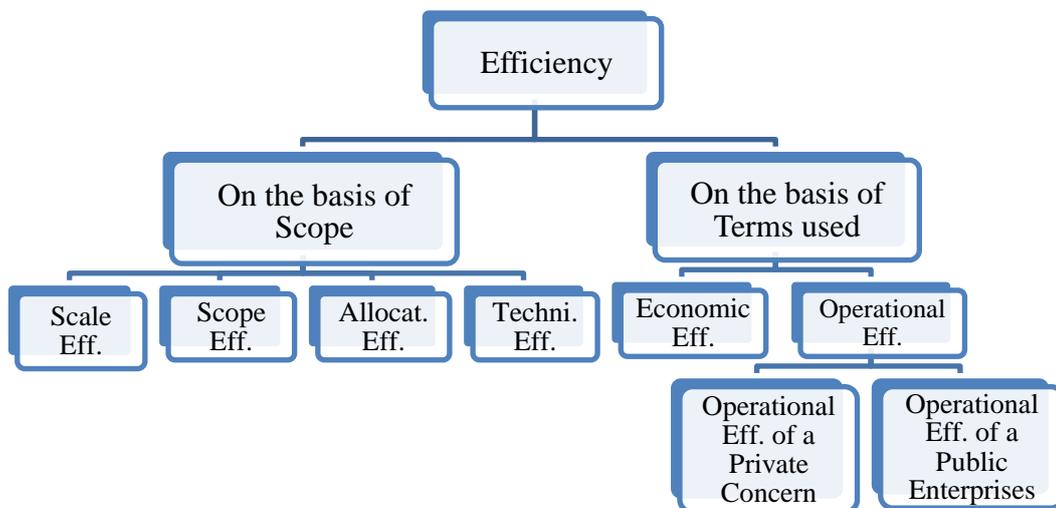


Figure 4.1 Categorization of Efficiency

“Operational Efficiency” of a business can be further studied from the stand –point of a private concern or a public concern. This is necessary because of the fact that ultimate goal of the private business is to ‘maximize profits and dividends’. Therefore, rate of profit earned by private business serves as a measuring rod of its efficiency. But maximization of profits and dividends is not the chief goal of public enterprises. Since, the present study relates to public sector banks which come under

Government ownership are therefore concerned with ‘Operational Efficiency’ from the stand point of public sector banks only.

4.3 Concept of Operational Efficiency

The concept of operational efficiency in public entity can be defined in number of ways such as effectiveness that may range from enforcement of the laws and regulations with which they have been charged to enduring that all possible stakeholders have the opportunity to participate in the policy process. The size of the organization and operational technology employed by the organization has also been considered as an important factor of operational efficiency.

‘Operational efficiency’ refers to the efficient utilization of human and material resources or the efficient use of people, machines, tools and equipment, materials funds. Better utilization of any or a combination of these, can increase output of goods and services and reduce costs. Operational efficiency is the tactical planning of an organization to keep a healthy balance between cost and productivity. It identifies the wasteful processes that contribute to drainage of resources and organizational profits. It deals with minimizing waste and maximizing the benefits of resource to provide better services to the customers. To face tough competition lowering costs is a best option as internal wastage contributes to enhanced cost. Any input that is not processed through system into useful output is waste. It means producing more goods and services with no greater use of resources or maintaining the same level of production using fewer resources.

4.4 Operational Efficiency in Banking Sector

While dealing with banking efficiency analyses, the very first question which strikes in the mind of the research analysts is that why regulators, customers, managers, and stakeholders bother about the relative efficiency of banks? The answer of this question will be different depending upon the perspectives of interested parties. From the regulators’ perspective, inefficient banks are riskier and have a higher likelihood of failure. Further, the efficiency of banks is directly linked to the productivity of the economy. Without a sound and efficiently functioning banking system, the economy cannot function smoothly and efficiently. When banking system fails, the whole of a nation’s payment system is in jeopardy. From the point of view of customers, only efficient banks can offer better services at reasonable prices.

The standpoint of stakeholders is that only efficient banks ensure reasonable returns. The perspective of bank managers is that in a dynamic and competitive market environment, only efficient banks will survive and maintain their market share, and inefficient ones will eventually be eliminated. The efficient banks are better able to compete because of their lower operational costs and can steal business away from less efficient banks. In sum, the relative efficiency of banks is always a matter of serious interest to the regulators, customers, stakeholders, and managers because efficiency is a broader concept; it involves optimally choosing the levels, and mixes of inputs and outputs.

In developing economy like India, where propensity to consume is high and as a result savings of the people are less, banks play a strategic role in attracting more deposits from the people and then deploying these saving as lubricants for various sectors of the economy. The performance of banks has become a major concern of planners and policy makers in India, since the gains of real sector economy depend on how efficiently the financial sector performs the function of financial intermediation (Rangarajan, 1997). Efficiency operation of banks has become an important issue in India. In the financial market, banks still play a predominant role. Every organization, be it a manufacturing company, a service firm (like a bank, a transport undertaking or an educational institution), or a govt. department, constantly trying to improve its operational efficiency, consistent with its objectives and in accordance with its short and long term objectives. Banking business is no exception to all this. Banks now are normal business enterprises. They offer product in the form of services and they too work for profit. They too have equal concern for customer retention and bank managers now usually talk of customer retention. Earlier the most of the banks were offering services in respect of deposit, withdrawal, loan, draft and money transfer and mostly manual not using the so called innovative devices. In order to survive and adapt to the changing environment, banking firms are putting more stress on understanding the drivers of operational efficiency like technology, infrastructure and employees, process of delivering quality service to its customers and performance bench marking. The need to be cost competitive is at the heart of effective competition in today's financial markets, because efficiency is mainly concerned with cost relative to output imparts the ingredients to long term commercial success.

In order to compete with non-bank financial institutions, banks should increase their levels of efficiency.

Operational efficiency is connected with diverse aspects of its operations, as its financial soundness, its profitability and quality services to customers. Here, in this research the word efficiency is a combination of growth & performance, productivity, profitability, and technical efficiency. The banking business as a whole has been given more emphasis on deposit mobilization, credit deployment and branch expansion. However now days it has also started giving emphasis on operational efficiency. It will not be possible to increase profit without improving efficiency and productivity. The increasing competition enforced the commercial banks to become cost effective and efficient in using the resources to perform well. The main objective of operational efficiency is to achieve “economic growth at less technical and social cost”. The challenge of improving operational efficiency is more significant with the adaption of new technology in banking. It has empowered banks to not only handle enormous volume of transactions but also provide products and efficient services to garner new business in the face of tough competition in the market place. Well-trained employees and common policy and standards contribute better to greater operational efficiency.

Measurement of efficiency of banking institutions serves two important purposes. It helps to benchmark the relative efficiency of an individual bank against the ‘best practice’ bank(s) and secondly, it helps to evaluate the impact of various policy measures on the efficiency and performance of these institutions. As the banking system provides transaction services and payment system, an efficient banking system has significant positive externalities, which increases the efficiency of economic transactions in general. In the Indian context, we have seen unfolding of few financial sector reform measures since the early 1990s. An important objective of these measures is to increase the operational efficiency of the banking sector as a whole as well as of individual institutions. In fact, policy makers have clearly recognized that inefficiency is an important factor contributing to the high level of cost of banking services in India (Government of India 1991, Narasimham Committee Report-1).

4.5 Dimensions of Operational Efficiency in Banking Sector

4.5.1 Growth Performance

The aim of every institution is to grow. A growth in number of variables in the right direction is required for overall growth and sound performance of the banks. During the post nationalization period, the banks have grown functionally, geographically and multi-dimensionally in various business parameters. With an increase in branch offices, the banks attracted a lot of deposits. Whatever be the type of deposits, an increase in the quantity of deposits of banks is an index of their growth. The growth in deposits naturally tempts the banker to increase his advances and investment portfolio. The growth in advances or investment is really an index of bank's growth. Banks cannot survive without balanced growth in these variables: the growth of one variable affects other variables too. The growth in deposits and advances if managed properly will contribute to the growth of profits, and if not cared, may lead to the growth in negative. Growth in profits can lead to growth in reserves and consequently to equity. A growth in number of variables in the right direction is hence required for an all round growth and sound performance of the banks. A thorough examination of the 'growth' performance of public sector banks is undertaken in the present study.

'Growth' is generally considered as the most important parameter of operational efficiency. 'Growth' is the outcome of a bank's general management function. Of course the policies and priorities of the Reserve Bank of India and the Government of India play an important role in this respect. The general economic environment, prudential funds management etc. also have its bearing on 'growth' of the banks. The performance of public sector banks is assessed on the basis of the performance of a number of sub-parameters. Table 5.1.1 (A) to 5.1.5 (D) put forth the identified sub-parameters of 'growth' and their performance during the study period of 1990-1991 to 2011-12.

4.5.2 Productivity Performance

Productivity has become talk of our times. I.G. Smith has rightly pointed out that "Productivity is a difficult subject for both student and practitioner, difficult in terms of definition, measurement and attempt to achieve an increase. At present, the subject of productivity and its measurement is characterized by too many loose ends

and a great deal of confusion”. Shocked and confused by declining rate of productivity, various firms and governments are searching for answer and action. Action however requires understanding of the issues and concepts. Productivity as a phenomenon has not only been studied by economists but also by management scientists. Economists have attempted to measure productivity and estimate its impact on output and growth. Rostas’s book ‘Comparative Productivity in British and American Industry’, which appeared in 1948 constituted a pioneer work in this field. Management experts like F.W. Taylor and Mc Gregor developed certain techniques and theories in order to enhance productivity of workers and other employees.

In fact, different definitions are used in different situations. The reason for this is that some of the questions relating to productivity are best answered with one kind of productivity measurement and other with another kind. People in areas such as accounting, economics, engineering and Industrial or organizational psychology interpret productivity in different ways. Productivity is:

Productivity= Total Output/ Total Input

So, productivity is the ratio of output to input. This definition applies in an enterprise, an Industry or an economy as a whole. In simpler terms, productivity is only the arithmetical ratio between the amount produced and the amount of resources used in the production.

The outputs of banks are not homogenous. In banking business it is also difficult to identify an efficient amount of resources needed to produce service outputs which are intangible. This makes the identification and measurement of output extremely difficult. So, in banking business measuring productivity is often much more difficult to evaluate than a manufacturing business entity where the product is tangible. However, as the economies grow the importance of services and territory sector increases, so measuring the productivity becomes very important. Thus we can say that if operational efficiency is a broad term then productivity is just a yard stick of efficiency.

4.5.3 Profitability Performance

Everything in the world is result- oriented and a firm, too, is not an exception to it. So the goal of a firm is to maximize profits. Profits and profitability play the same role in the business as blood and pulse in human body. The survival of a human

being is impossible in absence of adequate blood and ability to generate blood. The same may be applied to business. It is very difficult for a firm to survive without prospects and ability to earn adequate profits. Profits and Profitability are, therefore, the nerve and knot of a business (Gupta M.C, 1989). Lord J.M. Keynes remarked “Profit is the engine that drives the business enterprises.”

Profit is the ‘raison d’être’ of business enterprise. It is considered to be the primary and ultimate objective of an enterprise. In case the enterprise is unable to make profits, capital invested is eroded and in due course of time the enterprise ultimately cease to exist. Moreover, profits play a distinct role in allocation of scarce economic resource and guides investment into the most beneficial uses. An enterprise can discharge its obligations to various segments of the society through profits only. That is why “desire to maximize profits is the strongest, the most universal and the most persistent of the forces governing the decisions and actions of the firm (George, J.Stigler, 1952). In other words, profit is the fulcrum around which the entire business activity rotates.

Banking is an important institution in the development process and transformation of an economy. Profit is an absolute measure of any firm’s performance. In financial terminology, profit of a certain concern is understood as the quantitative relationship of its profits (net or gross) with various variables relevant to profit generation, such as quantum of owned funds or share capital or the level of working funds or the size of the turnover or the like, while profitability refers to the profit-making ability of an enterprise. In the case of banks in our country, however any measure of profitability will be that of accounting profit, rather than of the operational one. This is so because bank’s published accounts do not present a ‘fair’ picture because, banking being a business of confidence, the banks are permitted (and required) not to disclose some very vital accounting information, and are well- known to be creating year after year fairly secret reserves through accounting undervaluation of their assets and the like. The profitability level of banks, as seen through their published accounts, is therefore, believed to be well below their actual value i.e., the operational profitability level. But only the profit maximization is not, a basic reason of the existence of public sector banks. Therefore, only profitability cannot be used as a parameter of measuring operational efficiency. Moreover, even satisfactory profits can make inefficiency. This happens when prices are quite high owing to high

demand or other reasons. Similarly, a proper degree of efficiency can be achieved without maximizing profit. (This happens when public utility fixes low charges on account of welfare objective). It is, therefore, clear that profitability is not synonymous with efficiency though as an index it guides the management for greater efficiency. For this very reason, profitability is used as a yardstick of measuring Operational efficiency.

4.5.4 Technical Efficiency

Technical efficiency is the major criteria for measuring efficacy of banks. Technical efficiency means producing maximum output with given inputs; or equivalently, using minimum inputs to produce a given output (Yang, 2005). Technical efficiency deals with employing labor, capital and machinery as inputs to produce outputs based on the best practice in a given sample of decision making units, which means, given the same technology and the same external environment no waste of input resources is considered in producing the targeted outputs (Bhat, 2001). Technical efficiency is measured by the relationship between the physical quantities of output and input. Using technical efficiency, there is always relative efficiency score. When we call a system inefficient, we are claiming that we could achieve the desired output with less input, or that the input employed could produce more of the output desired. Since the purpose of this study is to measure the operation productivity of a given entity, the research will focus on the technical efficiency only.

In the light of various banking sector reforms & developments as well as apparent challenges in the Indian banking Industry, it is interesting to know whether the banks have efficiently performed or not and what are the parameters of the efficiency measurement. The word operational efficiency in a general concept and is purely a developmental tool applied to a part or to all of the conduct of activities of a banking business over a period of time. It is used to measure the efforts extended to achieve the targets efficiently and effectively. The achievement of targets involves the integrated use of human, financial and reference to past or projected technical efficiency, management responsibility or accountability or the like. It also reflects the quality in terms of growth & performance and results achieved by the management of banking business. It considers the accomplishment of objectives as well as goals

setting for the company comparing the present progress with the past, although in context of the present. It also covers financial cost and social aspects.

Hence to conclude, that the ability of the organization to mobilize and exploit its tangible resources has become more decisive than investing in and managing the physical resources. It is rightly said that anything which can be measured can be controlled. Measuring operational efficiency of banks has been an important area and it has undergone continuous development and modifications. Since the inception of the concept, it was felt that it was difficult to identify an efficient amount of resources needed to produce services outputs which are intangible and mostly rely on Profitability to check the operational efficiency. As the contribution of services sector has been growing rapidly in a developing nation like ours, the management experts as well as academicians have been trying to develop advanced methods of measuring it. So, True efficiency can be measured only by using financial and non-financial key indicators in the best possible manner.