A STUDY ON FINANCE AND MARETING PROBLEMS OF SMALL SCALE INDUSTRIES IN MADURAI DISTRICT

1Dr.A,BALAMURUGAN, 2P.SIVASANKARI

1ASSISTANT PROFESSOR ,DEPARTMENT OF BUSINESS ADMINISTRATIONS, 2RESEARCH SCHOLARAR

1ANNAMALAI UNIVERSITY,

2ALAGAPPA UNIVERSITY

ABSTRACT

Small scale industries refer to businesses whose operations involve less capital investment, lower labour engagement and limited integration of technology, as compared to the large scale ones. These industries produce goods and services at a smaller scale but form an integral part of the economy. There is no clear distinction between small-scale and cottage industries. However it is generally believed that cottage industry is one which is carried on wholly or primarily with the help of the members of the family. As against this, small-scale industry employs hired labour.

Moreover industries are generally associated with agriculture and provide subsidiary employment in rural areas. As against this, small scale units are mainly located in urban areas as separate establishments.

KEY WORDS; marketing, DIC'S, NSIC

INTRODUCTION

Introduction to Small Scale Industries:

The result of the second All-India Census of registered small- scale units conducted by the Small Industries Development Organisation (SIDO) in 1987-88 was published in August 1992. Using the Data presented in this Census and the data presented in the first Census (conducted for the year 1972 and published in 1977), one can from some idea regarding the growth and structural change in modern small industry over the 15-year period, 1972 to 1987-88.

There has been a substantial growth of small-scale units over the 15-years period, 1972 to 1987-88. The number of units in the frame of the census reports was increased by 282 per cent. Investment in fixed assets rose by 267 per cent, production by 420 per cent and net value added by 284 per cent (1972-73 prices), and employment by 122 per cent.

Productivity of capital and labour also increased in varying measures between 1972 and 1987-88. For instance, the ratio of net value added to fixed assets increased from 1.06 to 1.10 or by 38 per cent, and net value added per person employed from Rs. 5.09 thousand to Rs. 8.81 thousand or by 73 per cent.

However, capital intensity also rose considerably from Rs. 48.19 thousand to Rs. 79.83 thousand or by two-third. In other words, "a lakh of rupees investment in field assets which employed 21 persons in 1972 employed only 13 persons in 1987-88, showing a decline of 40 per cent."

According to the Economic Survey, 1995-96, the number of small-scale units stood at 25.71 in 1994-95—indicating increase of 7.8 per cent over the previous year. The value of output of the SSI sector in 1994-95, at current prices is estimated at Rs. 2,93,990 crores—about 21.7 per cent higher than the output in 1993-94.

However, adjusted for inflation, the real growth of output of the sector in 1994-95 was 10.1 per cent. Estimated employment in the SSI sector rose from 139.38 lakh in 1993-94 to 146.56 lakh in 1994- 95, an increase of 5.2 per cent.

The important role being played by the small-scale sector in Indian economy would be clear from the fact this sector presently accounts for around 40 per cent of the gross turnover in the manufacturing sector, 6.9 per cent of the net domestic product and 34 per cent of the country's exports.

The Second Plan emphasized the role of small scale and village industries on the following six grounds:

(1) Employment Generation;

(2) Efficiency of Small-Scale Industries;

(3) Equitable Distribution of National Income;

(4) Mobilisation of Capital and Entrepreneurial Skill;

(5) Less Industrial Disputes; and

(6) Contribution to Export.

Let us now discuss these arguments in favour of small- scale and village industries in some details.

1. Employment Generation:

After agriculture, small-scale and cottage industries provides employment to the largest number of people. Given the acute unemployment problem in India with backlog of unemployment estimated at around 17 million in 1992, creation of employment opportunities will depend crucially on the development of small-scale and cottage industries

This would be clear from the fact that while employment in the factory sector as a whole (large scale, medium scale and small scale) increased by only 2.21 per cent per annum over the period 1972 to 1987-88, employment in small- scale sector grew at the rate of 5.45 per cent per annum. Thus small-scale sector was able to generate employment opportunities for about 2 million people over the period 1972 to 1987-88.

As far as future prospects are concerned, the rural non-farm sector accounting for about 22 per cent of rural employment can play a crucial role in the further expansion of employment opportunities in the rural areas.

An important constituent of this sector is the manufacturing activity consisting mainly of textile-based and agro-based products and units producing construction materials. In the urban areas employment potential seems to be the largest in the non-household, tiny sector segment of the manufacturing sector.

2. Efficiency of Small-Scale Industries:

A controversy has raged in this country over the issue of efficiency in the small-scale industries vis-a-vis large-scale industries. While some studies have pointed out that small-scale industries are more efficient, others point out that large-scale industries are more efficient. Thus no clear-cut answer

can be given to the question "which is more efficient—small- scale industry or large-scale

industry?' The fact is that the debate has been coloured by the ideological commitments of the participants.

Descriptive Statistical Methods

Descriptive statistics are often the most important part of the statistical contribution to SSMQ. The type of descriptive statistics to be applicable depends on how the data is collected. One example is a non-satellite study where independent data sets from both scales are analyzed. On the contrary, satellite studies have paired samples where differences between each SSM output and its corresponding at-scale outputs are analyzed (see section 7.0 of the full white paper[1]).

In general, descriptive statistics, in particular scatter plots, are extremely useful to both SMEs and health authorities in making a qualification assessment.

Inferential Statistical Methods

Statistical inference is the art of inferring characteristics of a population from results obtained from a sample data set drawn from the population. The SSM and at-scale outputs over a product's lifetime are the populations for which to infer the comparability.

Two key considerations for establishing comparability through statistical inference are:

For the SSMQ results to be applicable to the SSM and at-scale population, the SSMQ data set must be representative of populations.

For the SSMQ results to remain applicable during the lifetime of the product, the SSM and at-scale processes must be run consistently during the lifetime of the product, i.e., the processes must be stable.

Another consideration for statistical inference is the interpretation of multiple inferential methods that produce binary results, "equivalent" or "not-equivalent." These methods can make one of two errors, declaring "equivalent" when truly not equivalent and declaring "not equivalent" when truly equivalent. The probabilities of making these errors are small, say 5% or 10%; however, when many tests are run, say 20 or 10, there is a chance of one or two errors. This is an important fact often overlooked by scientists and health authorities in evaluating the statistical component in a qualification report. It is also an important rationale for not using statistical methods alone to qualify or not qualify a model.

A condition often associated with many inferential procedures, e.g., t-tests, is that the data may be treated as samples from a normal distribution.[2,3]

Difference Tests (T-test and F-test)

Difference tests, or null hypothesis significance tests (NHSTs), are statistical procedures that test the accepted state of nature (null hypothesis) against a new or alternative state of nature (alternative hypothesis).

Two difference tests are described. The t-test is used to compare the means between scales, while the F-test is used to compare the variances between scales. Variance is the square of the standard deviation and is a measure of the spread of data. Other tests to compare variances include the Levene and Brown-Forsythe tests.

T-test:

The hypotheses for t-tests are:

Null Hypothesis: Mean of SSM = Mean of at-scale,

Alternative Hypothesis: Mean of SSM ≠ Mean of at-scale.

These hypotheses make it clear that the scientist is undertaking this procedure with the accepted state of nature being equality of means and the alternative state of nature being inequality of means.[4,5]

F-test

The hypotheses for the F-test are:

Null Hypothesis: Variance of SSM = Variance of at-scale,

Alternative Hypothesis: Variance of SSM ≠ Variance of at-scale.

Like the t-test, these hypotheses make it clear that the scientist is undertaking this procedure with the belief that the accepted state of nature is that the two scales are equal in variances.

The F-test is appropriate for non-satellite study designs (independent samples). It is not appropriate for satellite designs.

Difference tests are often used in SSMQ because they are well known, come with a widely accepted decision rule (reject the null hypothesis if $p < 0.05$), and do not require a prespecified threshold for a practically significant difference.

The drawback of the difference tests is that the outcome of equality does not conclude equivalence between scales.

Equivalence Tests

Equivalence tests, often called "Two One Sided T-tests," or "TOST," are the appropriate tests for obtaining evidence of equivalency.[6]

The TOST is best suited for a designed experiment (satellite design). For non-satellite designs it may be desirable to forgo the formal inferential procedure and compute the confidence interval as a descriptive statistic.

The equivalence margin should be set prior to data analysis or, preferably, earlier. When the equivalence margin is set before data collection, health

authorities are assured that the TOST data were not used to select an equivalence margin that would guarantee an outcome of "equivalence."

Historical data, data that will not be used in the TOST procedure, can be used to select the equivalence margin. Many options are available, e.g., $\theta = 3 \times SD$, where SD is the standard deviation of historical at-scale runs.

The hypothesis for the TOSTs is:

Null Hypothesis: |Mean of SSM - Mean of at-scale| < -θ or |Mean of SSM - Mean of at-scale |> θ,

Alternative Hypothesis: -θ ≤ |Mean of SSM - Mean of at-scale |≤ θ.

Unlike the difference test setup, here the scientist is interested in rejecting the null hypothesis.

Quality Range Method

The quality range (QR) method is an inferential method that considers both the mean and the variability of the reference samples (e.g., at-scale) to establish the population ranges.

Several QRs exist, and for normal distribution assumed or tested, the general formula is:

Mean +/- k*std (for a 2-sided interval, so for low and high limits)

With mean = mean of the reference, e.g., the at-scale values and std=standard deviation of the reference, e.g., the at-scale values.

The value k varies regarding the different type of QRs; the most known QRs are sigma interval, prediction interval, and tolerance interval.

The SSMQ is claimed when all or a certain proportion of scale-down values (e.g., 90%[7]) are inside the QRs, and not only if the means of the at-scale and of the scale-down data are comparable.

The advantages of the QR method are that it presents visual graphical outputs with all individual values, for the reference values as well as for the test value (e.g., SSM), and that it facilitates understanding of the comparison output.

Small business enterprises face large number of problems in spite of their growth and development in India.

Some of them are discussed below:

1. Shortage of Funds:

Small business entrepreneurs don't have enough long- term or short-term funds. These are, therefore, short of both fixed assets as well as working capital. Even the banks do not come to their help in a big way. Financial institutions like ICICI, IDBI and IFCI help only large scale industries.

Lack of Latest Technology:

Small business lacks funds. Latest technology is not used because it is expensive. Only old methods and techniques are being used. Due to this they earn less margin of profit.

3. Shortage of Raw Materials:

There is shortage of raw material because of less working capital. They can't buy in bulk during the season and cannot enjoy the economies of large scale.

4. Shortage of Power:

Because of shortage of power, the small business enterprises are not able to use full capacity of the plant at their disposal. They cannot afford to have their own power generators.

5. Labour Problem:

The labour is mostly unskilled. Small business don't have resources to provide good training. Labour are also not paid well. There is no motivation for professional growth. Small business is incapable to bargain with powerful trade unions.

CONCLUSIONS

Both labour and capital productivity are low in small-scale industries, and

(ii) The ratio of material cost to value added is high in small-scale industries (suggesting, thereby, inefficient use of material input).

Sandesara used CMI data for 28 industries for the period 1953-58 and reached the conclusion that, for given volume of investment, small-scale units neither generate more employment nor produce more output compared to large-scale units.

In his paper published in 1988, Bishwanath Goldar compares for 37 industries at the three-digit level the technical efficiency of small-scale and large-scale industries for the year 1976-77. He found that the SSIs (compared to the large-scale industries) generally have low labour productivity, high capital productivity, low capital intensity (measured as capital per employee) and low total factor productivity.

He inferred that the modern small-scale sector is inefficient relative to the large sector in a large number of industries. He also found that the relative efficiency of the SSIs varies directly with capital intensity, so that the SSIs cannot be relied upon as a source of efficient employment generation.

The above analysis suggests that large-scale units are more efficient than the small-scale units. However, the evidence that the small-scale industries are relatively more efficient is equally strong. Using data presented in Annual Survey of industries for 1960, 1963, 1964 and 1965, Ramsingh K Asher showed that the small-scale sector is more efficient.

After the study, it showed that the small-scale factory combined the largest number of workers with a rupee's worth of fixed capital; that a rupee worth of fixed assets produced almost seven times an output in small as compared to large industries and that the value added by a rupee worth fixed investment in small factories was at least three times as large as that for a large factory.

Two All India Sample Surveys of small-scale industries conducted by the Reserve Bank of India in 1976-77 and the National Small Industries Corporation (NSIC) in 1979 corroborate the above conclusion. They show that the smaller units use capital more efficiently. Moreover, the profitability of the small-scale sector is greater than the profitability of the large-scale sector.

For instance, the RBI Survey found that profit after tax was 43.72 in the small-scale sector whereas it was 34.90 in the corporate sector. Profit after tax as per cent of net worth was 21.05 for the small-scale sector whereas it was only 7.90 for the corporate sector. According to R.N. Nagaraj, the plausible reasons for the relatively higher profitability in small-scale sector seem to be the lower wage and greater exploitation of labour on the one hand and fiscal concessions on the other.

After all this discussion on the efficiency of the small-scale industries vis-a-vis the large-scale industries what emerges is a totally confusing picture. While some studies show that large-scale industries are more efficient, others show that small-scale industries are more efficient. Therefore we cannot give any firm conclusion.

However, what we must add in the end is that factor endowments of a country must not be lost sight of. Since India is a labour surplus economy and since small sector (particularly village and cottage industries and traditional handicrafts) has a high employment potential, the problem of unemployment (and underemployment) can be tackled only when small-scale and cottage industries are promoted on an extensive scale.

3. Equitable Distribution of National Income:

One of the main arguments put forward in support of the small-scale and cottage industries is that they ensure a more equitable distribution of national income and wealth.

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