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CONTENTS

To
The Deputy Librarian
V. U.

EDITORIAL

Dear Sirs,

It is my great privilege of extending my thanks and warm regards to all my fellow - colleagues in the Editorial Board and learned Reviewers for their effective co-operation in smoothening the work of timely publication of this important professional journal. On behalf of all the members of the Editorial Board, I am grateful to those associate who have kindly contributed to this volume and in fact the volume is enormously enriched with their research oriented ideas focussed in the articles in multidisciplinary areas. I assured you through the Editorial in the first issue of this journal, published in March, 1996 , the improvement of the quality of the journal in forthcoming issues . I am sure that the readers will appreciate the modest endeavour taken by the Editorial Board to achieve the goal to a certain extent in both the fronts, quality in writings and also in printing. It is now published in Desk Top Printing form . Emerging business environment calls for higher degree of professionalism and this type of professional journal should bring out different aspects of that atleast by phase . As commerce is a bunch of multidisciplinary subjects, we have tried to cover articles of different related disciplines, like Accounting, Finance,Management, Economics, Farm profitability, application of Quantitative Techniques, different problems associated with Mergers & Break-ups and the like. Still there are many areas and sub-areas relating to COMMERCE remaining uncovered in this issue, possibly due to certain inevitable constraints inherent in University publications and obviously for lack of sufficient response from potential resource persons. There is no complacency on our part. Definitely we shall leave no stone unturned to make our subsequent issues richer by incorporating well-thought out contributions from established talented resource persons, specially based on field experience and research findings. Of course, everything depends on whole-hearted co-operation from our resourceful friends which, I am sure, will not be lacking for the forthcoming issues.

It needs no mention that the opinions and views expressed in different articles, published in this volume are exclusively of the authors and should not be misconstrued as those of the Editorial Board .

Any kind of suggestion received by us from any corner to make the Journal as befitting as any Professional Journal , will be sincerely appreciated.

March, 1997

Sd/ Prof. D P. Pande
Editor-in-Chief

ALLIANCES AND BREAK-UPS IN CORPORATE FIELD

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Alliance between and break-up of enterprises are pretty common in the corporate sector. In so far as India is concerned, economic environment in the decade of nineties is said to be different from what it was in previous decades. It becomes necessary to understand whether the change in environment has affected march into or withdrawal from alliances.

This essay first considers such aspects of the merging and demerging process as are considered to be relevant by this author and then proceeds to relate them to Indian experience.

1
CHANGE IN ENVIRONMENT

Business environment refers to the sumtotal of conditions which affect the outcome of business decisions but over which the individual business unit has no direct control. The change in business environment in the closing decade of the twentieth century has been marked by what has come to be known as globalisation and liberalisation.

The concrete form of the globalisation process is the restoration of a great measure of the convertibility of the rupee . On the foreign exchange front there is little difficulty in getting release of foreign exchange for imports or for making other current payments . Non-residents can easily repatriate their earnings on investments in India and withdraw their funds to the extent of original investment. Only residents cannot yet have foreign exchange for buying properties, claims or ownership rights abroad . Under the revised exchange control regulations more imports and increased opportunities for foreign firms to invest are subjecting domestic enterprise to foreign competition.

On the domestic front liberalisation has expressed itself in the form of relaxation of control of capital issues and much greater freedom of entry of domestic firms to any field of production. This has meant emergence of competition from within the country.

When the market is protected against imports through import restrictions, the desire for reaping monopoly profits drives firms to join hands.The motive behind combination is different under competition.

Competition brings with it competitive uncertainty and secrecy. Combinations might help reduce the area of such uncertainty. Limitation of competition by combination reduces the number of players in the field but not to the extent of elimination of all players except one. Such combination might generate economies of scale and improve competitive strength.

2

FORM OF ALLIANCES

Alliances between companies may range from gentleman's agreement to full merger. Organisationally the movement from looser forms to more rigid forms is marked by an increase in the degree of concentration of control over the combining firms in the same hands and lessening of degree of independence of the combining units.

Legally complete merger brings about the loss of the previous legal identity of one or more of the combining firms. In alliances other than amalgamation the entities continue to retain their separate legal existence.

Commercially among the uniting firms till the amalgamation process is completed any transaction of one firm with another firm remains a transaction external to the firm . In the post-merger phase external transaction between the firms become internal transactions for the bigger firm. Market pricing gives way to transfer pricing in a system of divisional control in a merged unit with several divisions.

When separate firms come under the umbrella of holding company, the transactions among the subsidiaries and the parent company transactions with its subsidiaries are external to the units under the umbrella but become Intra-group transactions from the point of view of the group .

3

CHOICE OF THE FORM OF ALLIANCE

Form of alliance is a matter of managerial choice . First of all, the options available to a company for further expansion are internal growth through its own resources or external growth through acquisition of other companies . Acquisition of a going concern might be the quickest way of gaining entry into the business of that company.

When it is a case joining hands with other firms, the choice of the form of alliance will naturally be governed by such factors as costs and benefits of each form, feasibility of adoption of a particular form in a given legal and institutional framework and possible sources of funding the merger proposal .

At the one end of the spectrum is the amalgamation of units which bring unity of control and makes implementation of a common policy possible. At the other end of the spectrum are loose types of associations governed by understandings and the looseness of the form might make it difficult to enforce any common code.

On the one hand amalgamation might make the combined unit too unwieldly for management. On the other hand amalgamation might reduce the tax liability of the amalgamated unit when loss-making and profit-making companies are brought under the same umbrella. The MRTP Act., 1969 lays down the requirement of obtaining prior approval of the Union Government for the merger, amalgamation or takeover of other undertakings for firms with assets above a certain value.

Associations which fall short of full merger might be preferred to keep the management options open-whether to go for further integration or to opt out of the association.

Controlling interest in one company may be acquired by another company through ownership of fifty percent or even less of the voting shares. In the case of holding company the subsidiary continues to retain its separate existence and identity and enjoys independence greater than what it would have enjoyed as a fully merged company . An acquired company might be made a subsidiary of the acquiring company or a division of the acquiring company and this is again a case of managerial choice .

A factor to be considered here is that there are no legal provisions regarding compulsory consolidation of accounts . The absence of the legal necessity of consolidated group accounts might provide opportunities to companies to hide intra-group accounts. Another factor in the parent subsidiary relationship is that there is no legal obligation for the holding company to necessarily meet the liability of its subsidiary.

Competition is there and there is the need for adaptability and thurstfulness on the part of the business. Surely the assessment of this need will influence the choice of the form of working together by the companies.

4

METHODS OF JOINING TOGETHER OF COMPANIES

Differences in methods of joining together can be understood by making a reference to the role played by consent of parties concerned. A takeover bid is an attempt by a company to acquire such number of voting shares of another company as will enable the first company to gain control over the Board of Directors of the second. Here the approach is purchase of shares of the company to be taken over and is over the head of the existing management . Takeover bids are known as raids . A company under existing rules can purchase not more than thirty percent shares of another. Hence a raider can buy thirty percent through his own company and has to provide his own funds to buy additional shares .

Amalgamations are, however, based on voluntary agreement between the shareholders and directors of the amalgamating companies.

Takeovers represent an external force. The initiative for amalgamation comes from within the company . Takeover results in the change of composition of ownership of shares and does not by itself mean merger .

Needless to mention companies with growing sales, famous brands and wide distribution network but low market capitalisation become takeover targets. A company enjoying the brand equity of promoters will be avoided by raiders. A takeover bid for a Tata company will simply not be successful.

5

FUNDING OF TAKEOVERS AND MERGERS

The funding process for takeovers can now be explained. Takeover bids are usually made on the basis of market valuation of shares and comes in the form of cash payment per share or an offer of proportionate number of its shares or a mixture of both.

Companies can use their surplus cash to acquire controlling interest in another company and use the assets of the acquired company to take over another company. There might be a series of takeovers. Under the Reserve Bank of India guidelines banks cannot provide funds for takeover.

Since repurchase of its shares by a company is not yet allowed, promoters of a company have purchased shares of the company in the open market often at a premium to consolidate their stake and to defend themselves from the threats of takeover . If the Indian companies are allowed to buy their shares back in the open market, companies can overcome hostile takeovers.

A SEBI committee has recommended that when a person, group or body corporate acquires, through takeover or otherwise, 95 percent shares of a public listed company and the latter company gets delisted, residual shareholders should sell their shares to the 95 per cent owner at prices based upon SEBI guidelines. Otherwise the residual shareholders may get squeezed by the buyers to accept a lower price. (SM, 10 March 1997, p 15).

6

PURCHASE CONSIDERATION AND SWAP RATIO OF SHARES

The elements that enter in the valuation of business in the context of merger are several . One is the present value of the earnings in the business. The earnings of the business might be earnings before interest and taxes and have to be estimated and the discount factor could be the market or agreed rates of interest .

Another element in the valuation process is the average market price of the shares of each of the merging companies. Here the time period for which the averages are to be computed has to be agreed on.

Still another element is the net asset value or NAV of the combining companies. Here again the valuations of components of NAV have to be accepted by parties concerned . There arises further the question of the valuation of brand and this valuation is a difficult job.

Again weights might be attached to each of these elements and valuation may be done on the basis of weighted average. However the weights to be attached come within the sphere of personal opinion.

Whatever may be the text - book criterion of valuation, the valuation has to be acceptable to the parties concerned. Subjective factors, which defy quantitative measurement, are perhaps more important than objective criteria. The parties may leave the task of valuation to outside appraisers and this brings an element of arbitration in the valuation process.

SOME RECENT INDIAN EXPERIENCE IN MERGING

Some case reports on mergers in India in the last one year have been collected from newspapers . There have been many cases but only a few are considered. But the cases serve to illustrate what has been written before.

The amalgamation of Hindustan Lever Ltd (HLL) with Brooke Bond Lipton India Ltd (BBLIL) is the most important case of merger for the year 1996 . The main features of this merger are as follows :

1. The new entity will continue to be known as HLL. The merger makes HLL the company with highest capitalisation.

2. Both the companies were subsidiaries of UNILEVER and the parent company, UNILEVER, will continue to retain its majority stake in the post-merger HLL.

3. The 1996 merger was preceded by the earlier merger in 1992 of LIPTON and Brooke-Bond which were subsidiaries of HLL.

4. Amalgamation will be at a Swap ratio of nine shares of HLL for every twenty shares of BBLIL. The valuation for amalgamation has been made by a group of solicitors and investment bankers. HLL's post-amalgamation equity will go up by about thirty-five percent. A notice about amalgamation has been sent to nine stock exchanges in which the shares of the two companies are listed.

5. There has been some restructuring in the same year of 1996 . Fertiliser and Heavy Chemicals, which formed a part of HLL portfolio, has moved out to Hind Lever Chemicals Ltd which is a subsidiary of HLL.

6. HLL will continue with its chemicals business even though the parent,UNILEVER, has decided to sell off its chemicals business. (ET, 17 Mar 1997, p.1).

7. HLL and BBLIL deal in different types of products. Hence the merger will mean diversification of output for the post-merger HLL. A balanced portfolio of products would insulate the company against any future setbacks in any single segment.

8. With different types of products made by HLL and BBLIL, a common marketing arrangement does not seem to be possible. However export divisions of both companies will be

merged into a single entity.

9. Merger of HLL and BBLIL will also mean pooling of cash resources and hence better use of cash by the merged entity. It will also provide more leverage while raising debt. (ET, 20 April 1996, p.1).

10. Benefits derivable from diversification of output and centralisation of cash reserves seem to be the driving force behind the merger of HLL and BBLIL .

11. Profits are not comparable when there is restructuring of business by merger or otherwise. The chairman of HLL has said that the two indicators that are comparable are the earning per share and return on net worth. (ET, 22 March 1997, p.1).

On the question of merger certain tendencies in the Indian financial sector may be noted . The State Bank of India has been advised to merge the associate banks with itself to prevent wasteful competition. The State Bank of India was losing money by extending financial support in the form of capital. (ET, 21 May 1996, p.1).

The Bank of India has been asked to bring down its equity holding in two of its associate banks where it holds the majority stake.(ET, 13 Dec. 1996, p.13) . The Bank of India is considering making associates its subsidiaries. The Finance Minister has suggested the merger of some of the nationalised banks to enable the merged banks to fund major projects of infrastructure development. (SM, 18 Dec. 1996, p. 12) .

The Industrial Development Bank of India has been advised to reduce or dispose of its holdings in Small Industries Development Bank of India (SIDBI) and Industrial Finance Corporation of India (IFCI) to be a wholesale bank.(ET, 4 Feb, 1997, p. 13).The recent absorption of Shipping Credit and Investment Corporation of India (SCICI) by the Industrial Credit and Investment Corporation of India (ICICI) is expected to eliminate overlapping in target areas of finance and the Shipping Department will be developed as a strategic business division.(SM, 19 Mar. 1997, P. 12) . The Hindustan Ciba Geigy Ltd has absorbed Sandoz (India) at an agreed swap ratio of shares and the absorbing company has started with a new name with 51 per cent Swiss ownership . This company will concentrate on pharmaceutical and medical products and is considering demerger of chemicals business. (SM, 19 Nov. 1996 , p. 13) .

Large nationalised banks have been asked to explore the possibility of entering into the insurance sector through subsidiaries. Such entry might enable the banks to take advantage of the existing market penetration power, exchange of information of credit record of customers, customer guarantees etc. and thereby increase the competitive strength of banks in financial intermediation. (SM, 19 Dec. 1996, p. 12).A merger of Air India and Indian Airlines has been suggested in the light of expected synergy by the merger of two carriers. (SM 19 Dec. 1996, p. 8) .

A conversion of the belting and engineering divisions of Andrew Yule into two separate joint venture companies is under way. (SM, 9 Nov.1996, p. 15) . The IFCI as the operating agency of BIFR has invited offers for the takeover /merger of a company engaged in the manufacture of Vanaspati at Imphal. (SM, 8 Feb. 1997, p.3) . Four companies of the Nirma group have decided to merge into Nirma Ltd The reasons given for this merger are achievement of economies of scale, reduction of overheads , distribution synergy and greater ease in raising funds with expanded capital base. (ET, 29 Mar. 1997, p. 13) .

Control of a company may be by means other than majority interest. Promoters or those who have effective control over Tata group companies like TISCO, TELCO, TATA POWER, etc. have a stake of less than 20 per cent. Under the Brand Equity Scheme of Tata group any company using Tata name for itself or for its products or having association with Tatas will have to pay a fee for the gain that they make from their association with the House of Tatas. The proceeds of the fee will be used to monitor the conduct of various companies. (ET, 3 Mar. 1997, p.1) .

Furthermore brands are bought and sold. BINACA brand name was purchased from Reckett Coleman (India) Ltd by S.K. Burman Private Ltd of Dabur fame. BINACA brand products can now use the extensive distribution network of Dabur. (ET, 12 Mar. 1997, p. 13) .

NOCIL, a company of the Arbind Mafatlal group, is seeking to demerge its rubber, chemicals and plastic product business into a separate company to be set up with foreign collaboration . These two businesses were earlier acquired in 1994 by NOCIL from another company . The need for foreign exchange seems to lie behind the current move. Hence this is a case first of merger and then of demerger. (ET, 1 April 1997, p.3).

The cases cited about different forms of business restructuring including merger are too few for the total number of cases. But they give a broad idea about what is happening in the field of corporate restructuring in India. The following elements should help the formation of this broad idea :

1. Indian experience in the decade of nineties has been along lines familiar in other countries and in past years.

2. Recent combinations in India have been less of horizontal type (buying out competition) or vertical type (acquiring sources of supply) and more of lateral type with additional product

and lines of activity.

3. Defensive motive rather than the motive of building monopoly seems to be more pronounced in the context of growing competition.

4. Merger has been among companies which had previous business relationships. Merger among subsidiaries has been common and the merged unit continues to remain a subsidiary.

5. Merger in the case of one company has been accompanied by demerger in another . A merged unit consists of several lines of activity and each line of activity is usually organised into a separate division. A division may be detached from one company and attached to another . Hiring of a division from one company to another has been pretty common.

6. For the comparison of post-merger performance with pre-merger performance the only available indicators are earnings per share and return on net worth.

7. Synergy has been expected to be released in combining manufacturing, administrative, marketing, research and financial resources.

8

FINAL OBSERVATIONS

Merger is a phase in business restructuring which is a continuing process. Sometimes there may be greater tightening of links; in other times links may grow loose. Merger might fail because the post-merger unit might grow to be too big for the management to cope with or anticipations about changes in product, market or technology might go wrong or expectations about cash flow might remain unfulfilled. Big firms might then break up into smaller or more manageable units.

Reference : ET or The Economic Times
SM or The Statesman

BRAND ACCOUNTING

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ABSTRACT

One of the important issues in UK and USA now is that of putting values on brands in the balance sheet. Brand is a non-goodwill intangible asset. International Accounting Standards Committee,(IASC), understanding the necessity and importance of these assets issued Exposure Draft, E 50, in June1995, which gives the approach to accounting of Brands and other intangible assets . But if the investors consider that this information is important, then only the recognition of these assets are relevant. How this information explains the market behaviour has been discussed here .

It has been deliberated upon how to measure the impact of brands on market by measuring the marketing ROI and ultimately how the model can be extended to know the impact of different brands.

At the end it has been discussed what other components should be emphasised to improve the brand power and in turn the market share .

INTRODUCTION

The definition of accounting (AAA, 1975) is to "provide information which is potentially useful for making economic decisions and which if provided will enhance social welfare". Accounting has now become an interdisciplinary subject as it conveys information to the decision makers covering different aspects of decision making like behavioural, sociological,economic, etc. With these in mind, we want to have a meaningful understanding about the "Brand" and "Brand perception". This will help us in developing the concept of "Brand Accounting" and its utility in the organisation .

This paper was presented by the author as Key Note Address in the annual seminar of the Calcutta Branch of the IAA held under the auspices of the Dept. of Commerce with Farm Management, V.U. in March, '97 .

BRANDS

Shakespeare might have written "whats in a name" but marketeers believe that brand name is very important marketing strategy for any commercial product. Margaret Crimp (1) defined brand as follows :

A brand is a product or service which has been given an identity; it has a 'Brand name' and the added value of a 'Brand image'.

This image is developed in advertisement and in all the other communication associated with the product including its packaging. LIC's logo,the lamp and the folded hands, is brand mark which has its identity which can be recognised but can not be pronounced. Whereas City Bank's 'City house', 'City mobile' etc. can be so pronounced .

TYPES OF BRANDING

Branding can be of two types :
(a) 'Individual Branding' - which is one time affair e.g. Reliance's Public Issue - 'Khazana' or Essar's 'Steel Bond'.

(b) 'Umbrella Branding' - where more than one products are linked with a single brand name e.g. Canara Bank's schemes like - "Campep","Canstock", etc.

The idea of 'Umbrella branding' may be due to the fact that the advertising and promotion costs of subsequent products can be reduced considerably, 'Spillovers' occur and information about one product influence the demand for subsequent products . But the spillovers can be negative also. So if the customers are dissatisfied with earlier product, the demand for subsequent product may be affected .

Earlier we were familiar with corporate name used for branding - Bajaj Scooters, Bajaj Mixers, Bajaj Water Heaters, etc. Today's philosophy mostly is 'one product-one brand name,' so that the uniqueness in the brand name is projected. However mixed approaches are also not rare . Hindustan Lever's detergent bar is not 'Surf '; it is 'Rin'. Again the cheaper variety of detergent bar is not 'Rin - popular' but 'Wheel'. Further the company's low cost detergent powder is branded as 'Wheel'. So in the whole game, it is important to find a vacant position in the consumer's perceptual space; and that space is to be occupied (even throwing something out) and that space is to be defended by brand positioning .

USP & BRAND IMAGE

The Unique Selling Proposition (USP) and "Brand Image" models were developed by New York advertising agencies in early 1960s . U S P was developed by Rosser Reeves in 1961 and 'Brand Image' concept was developed by David Ogilvy in 1963 . USP propagates that advertisement is nothing but effective product positioning through Unique Selling Proposition. In reality, on rare occasions U S P is straight forward projection of unique and desirable attributes. Often difference between brands in a product field are marginal . There U S P is likely to be suggested by studying consumer habits and attitudes in the product field. The USP once defined must be repeated in every communication about the brand and similar to Pavlov's dog ; repetition is the essence of the process .

As against USP, "Brand Image" is based on developing creative advertisement. As per this concept consumers do not buy products or services ; they buy brands. A customer does not say give me a soap - he asks for 'Margo' or 'Rexona' or any other brand name of a soap . So by developing a personality of the brand (as opposed to attaching a proposition to it) the brand loyalty is strengthened .

BENEFITS OF BRAND NAMES

It is said that mint can only make money without advertisement. This means that for every commercial product or service branding is needed . But collins (2) has a different opinion . He argues that brand names are not so important for industrial products, where product performance, product quality, delivery, service and price etc. are stronger determinant for competitive advantages . No doubt these components are important, but brand names still have advantage . David Shipley et al (3) conducted a study in 1988 about the perception of 10 possible benefits of 'Brand name' on a 5 point scale (where 1 = Strongly disagree and 5 = strongly agree). The results are as follows :

Perception of Brand Name Benefits

		Large firms	Small firms
		Mean	Mean
1)	Provide product identity	4.73	4.41
2)	Valuable part of achieving marketing success	4.56	4.26
3)	A major asset to the firm	4.53	4.01

(Continued)

		Large firms	Small firms
		Mean	Mean
4)	Make buying easier	4.14	4.00
5)	Help with product positioning	4.07	3.47
6)	Help with market segmentation	3.93	3.40
7)	Can provide competitive edge	3.01	3.93
8)	Of value to customer	3.73	3.61
9)	Provide legal protection against copying	3.53	3.08
10)	Help with order processing	3.51	3.07

The highest means for both the samples are "provide product identity", "Valuable part of achieving marketing success" and "a major asset of the firm ". These three perceived benefits bring forth three very important accounting dimensions :

1)Accounting the impact of individual brand is possible, since brand name provides product identity i.e. products are identifiable by brand names .

2) Since the brand provides a "valuable part of achieving marketing success", impact of brand on profitability may be determined indirectly by calculating the marketing ROI .

3) Since brand names are considered as major assets to the firm, like other assets it has a direct financial worth, which in accounting terminology is "Brand Equity".

Tauber (4) writes (1988) on 'Brand Equity' as : "The brand name suddenly has emerged as the most covered corporate asset of all . Brands no longer are merely products competing for market share; they are annuities ..."

ISSUES TO BE DELIBERATED UPON

Now starting the discussion on "Brand Accounting" we shall limit ourselves to the following issues :

1) How can an intangible asset like brand name be accounted for ?

2) Brand name like any other fixed asset has direct impact on bottom line. Can we determine the brandwise marketing ROI ?

3)Considering profitability strategy what other components should be emphasised to improve brand power and in turn market share .

THE FIRST ISSUE

Assets are categorised mainly as fixed and current asset . Fixed assets are further classified as tangible and intangible . By proper use of tangible assets revenues are yielded, but intangible assets are also important for the business . Intangible assets include, goodwill, patent, copyrights, trade marks, formulae, licenses, franchise, research and development cost, separately identifiable brand names etc. These assets have no physical existence for earning profit ; their values are limited by their future anticipative benefits . International Accounting Standards Committee (IASC), understanding the importance of "Non-goodwill Intangible Assets " issued Exposure Draft, E 50, in June 1995

BRAND EQUITY

One of the important issues in UK and USA today is that of putting value of brands in the balance sheet . A spokesman of the Philip Morris Company - which own the Marlboro brand was reported saying " I would sell my fixed asset at $ 30 million, but I would not sell the Marlboro name for $ 300 million " (5) .

Tauber (6) defines the concept of brand equity as "the incremental value of a business above the value of its physical asset due to the market position achieved by its brand and the extension potential of the brand ".

Equity valuation theory states that stock price should be a function of earnings, growth and risk [Modigliani and Miller (1958) (7), Miller and Modigliani (1961, 1963, 1966) (8 to 10)]. Accounting theory describes intangible asset as an amount in a corporate acquisition which leads to above average earning. Since these assets reflect the extra earning power above the amount implicit in the price of the individual asset (less liabilities), it includes the amount for growth opportunity .

IASC EXPOSURE DRAFT 'E - 50'

In the area of non-goodwill intangibles, the current IASC Exposure Draft states :

"An intangible asset should be recognised as an asset when

(a) It is probable that future economic benefits associated with the asset will flow to the enterprise, and

(b) The cost of the asset in the enterprise can be measured reliably"

(IASC Exposure Draft, E 50, paragraph 21)

In simple words, intangible assets can be recognised if future economic benefits and cost of acquisition can be recognised . So in the cases of brand names, at the time of initial recognition, the probable future flow of benefits are to be estimated . When a brand is purchased from another enterprise, the purchase consideration agreed in the exchange transactions is readily determinable and therefore the cost of brand can be measured reliably .

Sometimes a single cost of acquisition is negotiated for the total net assets acquired and the cost of the individual identifiable assets and liabilities acquired is measured by allocating the cost of acquisition to these assets and liabilities by reference to the fair values . Thus out of total cost of acquisition the cost of brand may be determined .

In some cases the brand equity is internally generated . There the cost of developing and maintaining the brand equity can be measured reliably and accurately . The cost of maintaining the brand should be added to the carrying amount of the asset to the extent that it is probable that future economic benefits, in excess of the originally assessed benefits, of the existing asset will flow to the enterprises(Para 57 of E - 50). Thus, as per E - 50 for brand equity , expenses are to be capitalised to cost the asset. Carrying amount is to be ascertained . Proper recording is to be done through books of accounts . Amortisation is made from the carrying amount during the accounting period. The fresh additions should be made and accounted for . At the end of each accounting period net amount of asset is computed to arrive at the carrying amount of the asset . Due to recognisation of the asset, computation, disposal of asset etc. should be properly disclosed .

A QUESTION ON E - 50

The IASC's exposure draft on non-goodwill intangible assets posed eighteen questions across eleven different categories . Question six, which fell under the category of "recognition" asks: "Should the (non-goodwill) intangible assets be recognised in financial statements provided they meet the recognition criteria ? " The issue is that whether non-goodwill intangible assets should be capitalised on the balance sheet and subsequently amortised over some period or the cost of non-goodwill intangible assets should be written off immediately to the net income of stockholders' equity ? The issue presented in the IASC's exposure draft provides a testable research question:what is the association of non-goodwill intangible assets to a firm's equity value ? If the investor considers this to be of future economic benefits, then such finding would be supportive of capitalisation .

TWO REGRESSION ANALYSIS

To determine whether goodwill and the balance of other intangible assets actually provide value - relevant information or not, Martha Loudder et al (11) use a least square regression model. The book value of assets and reported earning are compiled from financial reports ('88 to '93) . In all, four equations are formed with 6 years data . A key insight obtained from the analysis is that the information regarding intangible asset can provide information about manager's expectation, about future cashflows .

Similar other studies have been conducted by Paul Wertheim et al in May 1996 (12) . The study has used equity valuation models to determine the market's perception of the underlying characteristics related to goodwill, non-goodwill intangibles, convertible debt and redeemable preferred stock . The relevant portion of the study may be summarised as follows:

> For most firms, goodwill is a much larger component of total intangible assets than non-goodwill intangibles and market does tend to view goodwill as an asset while valuing equity . However IASC suggested the recognition of all other types of intangibles and the findings are supportive of capitalizing non-goodwill intangibles on firms's balance sheet .

THE SECOND ISSUE

Assets are used in the business to earn revenue to satisfy the equity holders . Brand equities like other intangible assets are not physical assets, but are helping the enterprise to earn revenue. It may be that, its share in the total asset structure is very nominal, but the need and necessity is significant. Its need is fully felt as a powerful strategy for competitive advantage. So the question comes : how its effect can be measured in terms of profitability .

Since brand name has direct impact on marketing, so from the total ROI we shall have to segregate the marketing ROI . Chatterjee's approach to the concept of marketing ROI in this context is simple and straightforward . The illustration given in his book (13) is as follows :

Corporate, Non-marketing And Marketing ROI

	TOTAL	NON-MARKETING	MARKETING	REMARKS
1. Capital Employed :				10% represents automobiles, warehouse, office equipments, etc. used by marketing department.
Fixed Assets	100	90	10	
Working Capital	100	40	60	60 represents finished Inventory and Net Receivables .
	200	130	70	
2. Financial Charges @10%	20	13	7	10% is the assumed effective rate taking into account both own funds & loan funds employed .
3. Sale	400	320	400	320 is the transfer value of goods from manu facturing to marketing .
4. Marginal Cost	300	270	350	350 includes 320 & another 90 being variable marketing expenses .
5. Contribution (3-4)	100	50	50	Assumed
6. Fixed Cost :				
Operational	40	17	23	
Financial Charges	20	13	7	
Total	60	30	30	
7. Net profit (5-6)	40	20	20	
8. ROI (7 on 1)	20%	15%	29%	

The above model may be extended to calculate inter-brand performance by making necessary assumptions .

THE THIRD ISSUE

The Profit Impact of Marketing Strategy (PIMS) is a database which has been created in 1972 at the Marketing Science Institute in Cambridge, Massachusetts . Some 450 companies contributed confidential financial, market, customer and quality information on their lines of business. The database stores information of more than 3,000 strategic business units of these companies without identifying them by name . PIMS attempts to establish a link between strategic planning and profit performance . It is a computer based regression model for identifying the factors of variables that are related most strongly to the ROI .

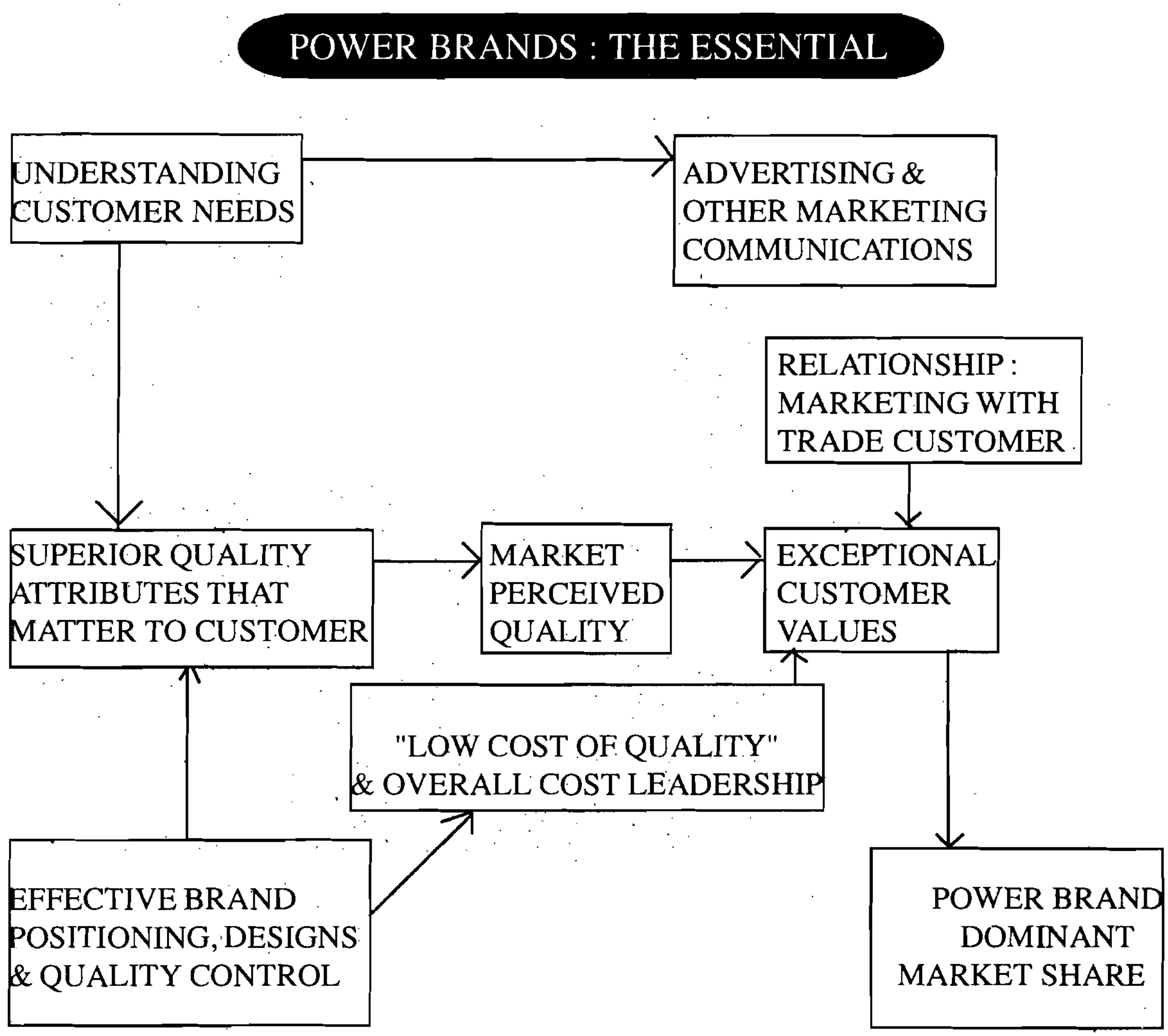

Fig-1

Since 1975 the PIMS database has been maintained by Strategic Planning Institute, an independent Cambridge based membership organisation . Bradley T Gale (14) who was formerly MD of that organisation suggested a model for developing power brand and by that a dominant market share . A power brand is that brand which means satisfaction, quality and value to the customer . The model is given as in fig. (1). Based on PIMS data he concluded that Brands that begin with large share of market tend to lose share. By contrast those that begin with superior market perceived quality tend to hold or gain share . So along with brand positioning, market perceived quality and cost leadership should be equally emphasised for increasing the market share .

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Subjectivity in Brand Valuation*

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'Brand' means particular kind or variety with an identifying mark; thus it may be differing from product to product, also from producer to producer for a same product and obviously from one type to another type for the same product within a particular company. With the modern marketing techniques through advertisements of different nature, brand has got wide importance. Also in the present context of free market economy and consequently in the present age of corporate mergers and take-overs, brand has become very much important. At this juncture, it can be simply remembered of an Indian mega-merger in the year 1993, when Hindustan Lever Ltd. (HLL) acquired Rs. 400 crore Tata Oil Mills Company Ltd. (TOMCO) for bringing in five soap and four detergent brands including the latter's brand "Hamam". Thus a pertinent question may arise : how a brand can be valued ? But, before that let us know some of the common benefits enjoyed both by the producers and consumers from 'branding' a product.

The following are some major benefits to the brand-owners :
a."Customers Loyalty", to a specific brand may fetch a higher price in comparison to that of an unbranded product, almost of equal quality and quantity.

b.Specific marketing campaign is possible through advertisements or any other means if the product is branded.

c.By establishing specific qualities to a certain brand, the producer can earn 'goodwill' and continuous prosperity.

Similarly, the consumers enjoy the following advantages for branding of a proauct :
a.Selection of product can be easily done if there is a certain brand associated with some known qualities.

b.The customers also enjoy specific certification as regards standardisation of any product if there is a brand, viz, ISI mark .

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c.Since any new product is full of uncertainties, the consumers can keep their faith and trust (which are technically known as 'loyalty') on old products with specific brand names and also sometimes make comparisons between the old and the new .

With the recognition of the above, economists and accountants have agreed to the status of brands as intangible assets with high degree of consumers' loyalty. Naturally, the question of valuation of such intangible asset also emanated, but not before the later part of 80s. Earlier thinking was to value brand (if really it was to be done) alongwith the valuation of 'good-will'. There is neither any international nor any country specific standard on showing brand valuations as intangible assets. We may refer to SSAP 22 on "Accounting for Goodwill", which is mandatory for all UK companies . At present , SSAP 22 allows only 'acquired goodwill' to feature in the balance sheet . Thus, keeping Brand as an intangible asset in any company's balance sheet could be done after a slight modification in the standard accounting practice. But the more relevant question is : how it can be mathematically done ?

Measurement of 'brand loyalty' has been most successfully tried to be done by application of Markov Chain and the concept of transition probabilities. There are mainly two types of consumers in this context — hard - core buyers and switchers. What we can know through Markov Analysis are : share of brands on any future date depending upon present transition probabilities and current market share, and also market share in steady (equilibrium) state. Thus this is a statistical approach with high mathematical calculations towards valuation.

But the economists' and accountants' approaches towards brand valuation which are more in use are full of subjectivity. Let us discuss them one by one :

a.Market Forces' Valuation : This type of valuation is based on an imaginary concept of a market , where like ordinary products brand is also to be purchased and sold alongwith the presence of a large number of buyers and sellers . Actually, in the present context of corporate take-overs, that imaginary concept of market has become almost real with the existence of take-over bids between the acquiring company and the acquired company. Any existence of a third company, which is also interested in the acquired company's brand/s may make the situation more interesting. However, whatever the case may be such bids are often becoming entirely subjective. Of course, the acquiring company makes a calculation of the acquired brand's present market share and prospective earnings from the same brand. Yet the valuation process is entirely subjective depending upon many psychological factors like defeating the competitor acquiring company, adding the new brand to its existing brands, exhibition of its own strength etc.

b.Cost-basis Valuation : Valuation of brand under this method is based on R & D costs and advertisement expenses incurred by any particular company on creation of any particular brand and corresponding 'brand loyalty'. In this valuation process, the inflation factor may also be considered to update the costs.

However, the subjectivity lies in this approach in that it is often required to pay a higher amount in terms of R & D costs and advertisement costs to create a brand having comparatively lower consumers' loyalty. Again, the consideration of inflation factor increases the subjectivity in that one valuer may assume a higher inflation rate for the same period for any particular brand.

c.Discounting of Future Cash Flow (DCF) Method : Brands, having strong customer loyalty are expected to fetch a series of cash earnings at equal intervals of time.Brands of highly established nature may fetch the revenues in form of annuity and other brands in form of different proceeds at different times. Whatever the case may be, by applying a 'suitable' discounting factor, the valuer will calculate the present value (P.V.) of the particular brand after considering initial expenses if any either in acquiring or in establishing any brand and also the subsequent expenses, if any (also converting them into P.V.s).

The subjectivity lies in chosing a 'suitable' discount rate. The rate 'suitable' to one valuer may not be 'suitable' to other. Depending upon risk factor, interest rate etc.,such discounting rates are determined.

d.Capitalisation of brand premium : 'Brand premium', in this context, refers to the additional income that is expected from a brand having 'strong' customer loyalty as against any other brand which has 'weak' or 'not so strong' customer loyalty. But for this calculation, the two products must be truly equivalent. The 'normal rate of return', which is the main element in such valuation approach is the root of subjectivity.

$$\text{Value of 'brand'} = \frac{\text{Brand premium}}{\text{Normal rate of return}}.$$

Like the discounting factor, the choice of 'normal rate of return' also depends on many factors and is entirely subjective.

e.Capitalisation of Brand Earnings : Under this method, future maintainable earnings from a brand name is capitalised by multiplying it by an appropriate factor. This factor depends upon the number of years during which such earnings will be obtained from the brand, normal rate of return, the inflation factor (to make the valuation more realistic), introduction of separate weights for earnings of different time periods. Subjectivity, in this approach, lies in almost each of the determinants, specially in the normal rate of return and inflation rate.

To conclude the above discussion, it can be said that though there is at present no accounting practice for brand accounting , it can be effectively done by keeping 'brands' in the asset side of the balance sheet as intangible assets and also keeping an equivalent amount in the liability side in Revaluation Reserve . Of course, before that the legal formality should be completed. Accounting practices guideline should be issued by parent accounting bodies in each country in that line so that by keeping 'brand' in the asset side, any company does not flout the law. In spite of this situation, two companies in the UK, namely, Grand Metropoliton PLC and Rank Hovis Mc Dougall PLC and one company in India, Lipton India Ltd. (now merged with Brooke-Bond India Ltd. and has been existing now in the name of BBLIL) among other few examples all over the world have done accounting for brands with slight difference existing in their practices. However, it is the reality that brand accounting will not be any difficult job for the accountants and managers if brand valuation can be effectively done. But, the main hindrance in this path is the subjectivity existing in the valuation approaches . However, in no way the need to value brands and to do their accounting can be ignored and necessary steps should be taken in this line in India along with the other countries in the present age of corporate merger and advanced marketing campaign, at the same time making accounts more transparent .

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MULTINATIONAL ACCOUNTING AND REPORTING : NEED FOR HARMONISATION

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Accounting and reporting by Multinational Corporations have some special features which are discussed below :

a.The financial statements are the results of aggregation of underlying transactions carried out in a number of countries ;

b. The transactions are denominated in various currencies ;

c. It leads to cross-national comparison between companies which are based in different countries ;

d. The geographical spread of the Multinational Corporations and its users are quite wide and open where the financial statement is analysed by residents of different countries; and

e. Every set of user in each nation has got respective user expectation along with each National Generally Accepted Accounting Principles(GAAPS) .

Objective and Philosophy of International Accounting Harmonisation :

The principal objective of harmonisation of accounting practices among different countries is to foster comparability of the financial information of different companies in their published financial statements.

Causes of Accounting and Reporting Differences :

There exists differences in accounting practices and reporting procedures of companies among countries throughout the world. No two countries are found identical in all respects so far as their accounting practices and reporting practices are concerned. The following are the causes of differences :

— Differences in accounting methods ;
— Differences in legal system ; and
— Differences in taxation .

Differences in accounting methods :

Differences in accounting methods may be attributed to the following factors : (a) Different social system, business convention, trade practices ; (b) Social ethos, myths and value judgement; (c) Different financial system ; (d) Differences in the convention of accounting ; (e) The influence of the state ; (f) Statutory provisions, tax legislation and incentives ; (g) Difference in the role of regulatory agencies; (h) Differences in conceptual framework ; (i) Differences in currency translation and transaction .

Differences in Legal System :

The legal system of each country differs to a great extent. The difference in company law and commercial codes has a resulting effect in framing rules, commercial practice and business prudence for accounting and financial reporting. The western legal system may be divided into two categories as discussed below which influence the accounting plan (Nobes and Parker, 1989).

Western legal system

Common Law	**Codified Roman Law**
England and Wales	France
Ireland	Italy
	W. Germany
	Spain
United States	Netherlands
Canada	Portugal
Australia	
New Zealand	Japan (Commercial)

The accounting and reporting practice has been rooted in the legal system.

Differences in Taxation :

Taxation laws being different in many countries also cause difference in accounting practices of corporate entities. For example, EEC countries have been following 'classical' and others are adopting 'imputation' system of corporation tax. In Germany, commercial accounting is the same as that of the tax accounting. There has been an explicit expression of principle of bindingness of one over the other. In the U.K. there has been a difference in respect of depreciation charge under commercial accounts and also under tax accounts. The depreciation charged under commercial accounts is governed by trade custom along with business prudence and the Accounting Standard, SSAP - 12.

The SSAP - 12 points out that :
"Depreciation should be allocated to accounting periods so as to charge a fair proportion of the cost or valuation of the asset to each accounting period expected to benefit from its use ...."

Management should select the method regarded as most appropriate to the type of asset and its use in the business so as to allocate depreciation as fairly as possible. The standard can hardly help in determining the method of judging the scrap value and the expected life of an asset ; rather convention and pragmatism take the precedence over the rules (Nobes, 1985).

The amount of depreciation for income tax purposes in the U.K. is influenced by several considerations such as capital allowance, tax depreciation allowance to standardise the amounts allowed, depreciation allowance available as investment incentives.

In India, the Accounting Standards set up by the Institute of Chartered Accountants of India (ICAI) since April, 1977 has been accorded statutory recognition under the Finance Act, 1995, although it had criticised the Accounting Standards (AS) on the plea that in several respects the AS provides various alternatives. In 1996, February, the Central Government had issued two AS s which are mandatory for all assessecs . The Finance Act, 1996 has empowered the assessing authority to reject the books of an assessee if the books and accounts do not comply with the standards specified under section 145 of the Income Tax Act, 1961 .

The magnitude and impact of difference can be observed from a comment appeared in1988 in the Financial Times Lex Column :

" The traditional P/E ratio comparison has been dogged not just by particular national discrepancies in, say, the consolidation by subsidiaries, but by entirely different philosophies of financial reporting. Simply put, U.S and U.K accounts are directed primarily at current and potential investors and thus, tends to provide a realistic estimate of earnings, while German and Japanese accounts are drawn up with the tax authorities in mind and therefore understate earnings ."

Expression of Auditor's independent opinion :

The expression of auditor's independent opinion is slightly different in the U.S.A as compared to Indian system, although the basic substance and contents remaining more or less the same. The financial statements of publicly held corporations and many other corporations are subject to an independent audit that forms the basis of forming an opinion of the professional auditing firm. For example, the auditor's opinion in the U.S.A runs like :

> " In our opinion, such financial statements present fairly, in material respects, the financial position of .... corporation and subsidiaries as of June 30, 1994 and 1995, and the results of their operations and their flows for each of the 3 years in the period ended June, 30, 1994 are in conformity with generally accepted accounting principles."

As compared to this, our Indian practice has been found to differ in three respects, namely, (a) our auditor need not express the 'true and fair' financial position in material respects although this is implied but not explicitly provided under section 211 of the Companies Act, 1956 . The 'flows' of the transactions affecting financial position and operations need not be explicitly opined in auditor's certificate : While we are attaching a Statement of Changes in Financial Position (SCFP) or Fund Flow Statement as a supplementary to the traditional Financial Statement, this is truly a flow of transactions. Hence, the moment SCFP is made mandatory, the explicit opinion on 'flow'of transaction will then form a mandate on the auditor.

Our auditors are not required to mention that the books are drawn in conformity with generally accepted accounting principles rather our auditor mentions the opinion that the Company's Balance Sheet and Profit and Loss Account are in agreement with the books of account, read with notes thereon, give the information required by the Companies Act, 1956 in the manner so required, and give a true and fair view. In one company, namely, Chemplast Sarmer Ltd., Madras, for the year ended 31st March, 1996, the auditor has to certify separately the Cash Flow Statement for the year ended 31st March, 1996 and to give opinion that the statement has been prepared by the company in accordance with the requirements of listing agreement Clause 32 with Stock Exchanges and is based on and in agreement with the corresponding profit and loss account and balance sheet of the company covered by the auditor's report of the even date.

In Indian context, it has been observed that on more than one occassion the statutory auditor's report is misunderstood. Such reports are based on the presentation of records rather than on the performance of the companies. The report submitted by the auditor may be true and fair, according to the presentation of records. But a company that is performing poorly, or is even sick may not get a mention in the auditor's report .

Cash Flow Valuation Method :

A New York based institutional research firm uses a new valuation base called 'Surplus Cash Flow' (SCF) valuation method. It is calculated as pre-tax income plus depreciation minus capital expenditure . The research firm uses other methods namely, it outlines both Uncommon Value Criteria and Uncommon Risk Criteria. The Uncommon Value Criteria include : (i) a price to book value of less than 1.5 times ; (ii) a yield greater than market ; (iii) a price to earnings (P/E) ratio less than the market ; (iv) debt to total capital of less than 33 pc ; (v) a price to SCF multiple of less than 7.5 pc.

The Uncommon Risk Criteria are as follows :

(i) a price to book value of less than 1.5 times ; (ii) a yield less than the market ; (iii) a (P/E) ratio 30pc greater than the market ; (iv) debt to capital of over 50 pc ; (v) a price to SCF multiple of more than 12.5 pc. This type of method of valuation is not prevalent in other countries where a MNC operates.

Harmonisation through Directives and Accounting Standards :

The AS formulated by the FASB will not be enforceable unless approved by the SEC of the U.S.A. In Australia, the AS set up would not be enforceable unless approved and implemented by the capital market regulating authority . Even when the ASs are approved, they are approved with altered provisions, additions or deletions (Choi and Mueller, 1992). That renders harmonisation effort difficult.

Prior to 1957 French-German practice influenced the accounting practices in EC countries. The EC Fourth Directive was issued to resolve the differences and the EC Fourth Directive and the French Plan Comatable General had many elements in common intending to bring harmony in MNC reporting. French was the first country to accomplish complete integrator to comply with the tenets of the Fourth Directive. The result of the Fourth Directive was a compromise between the Continental European and Anglo-Saxon Systems with emphasis more on disclosing the nature and effect of differences between countries (Redebaugh and Gray, 1993) .

The use of directives as a means of harmonizing accounting practices is a unique phenomenon which is found only in the EC. Although the EC is concerned with harmonizing accounting practices only among its member countries, it has also to take into consideration the harmonisation programmes that have been initiated elsewhere in the world. It has particularly to be concerned with the harmonization efforts being made by the agencies operating on a global scale . As a matter of fact, pressure are now mounting on the EC to coordinate its efforts with those of the International Accounting Standards Committee (IASC) which is operating with the principal objective of development of accounting standards capable of serving as a basis for global accounting harmonization.

The International Accounting Standards Committee happens to be the most prominent of the agencies that are currently involved in global accounting harmonisation. The agency has been struggling hard to draw up a set of definite accounting standards in order to provide a basis for internationally comparable accounting efforts. To date, it has produced thirty two (32) accounting standards on various important accounting and reporting issues. These standards have started gaining support from the international business community. The International Organisation of Securities Commission (IOSCO), which is the international body for securities, is now seriously considering a proposal for giving official backing to IASC standards.

According to Anthony Carey,Secretary to the erstwhile U.K. Accounting Standards Committee's International Sub-committee, 'the decision of the EC to support IASC as the appropriate channel through which to promote harmonization within the community and between it and outside countries, is a practical solution .'

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TQM CONCEPT IN HIGHER EDUCATION OF INDIA

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Universities, colleges and other institutions of higher learning are the main establishments of higher education. Their functions are to preserve, generate, disseminate and advance knowledge through fundamental and applied research as well as to increase the effectiveness of training in skills through the improvements in the techniques of application of knowledge to fulfil personal,societal and national needs. The programmes of higher education, thus, have a direct bearing on human resource which is considered a precious form of the same. Efficient human resource is, however, undoubtedly related to the quality of education.

The quality of higher education in India has become questionable primarily because of inadequate responsiveness to changing environment, created by factors like information explosion and globalisation. Along with this, financially unsustainable increase in enrolment for higher studies make it imperative for the institutions to ensure the relevance and quality of their programmes as well as products. In this backdrop, an attempt has been made in this paper as to how the concept of TQM (Total Quality Management) , as applied to the business world can be extended to the institutions of higher education for improving quality.

State of Higher Education in India

The institutions of higher studies in India cater to wide ranging needs of students after school level. Since Independence there has been a marked increase in the number of Indian Universities, Colleges and Institutions of higher education. There were only 27 Universities and 666 Colleges during 1950-51 . According to latest UGC statistics, at present there are 200 Universities (13 Central , 151 State and 36 Deemed Universities), 14 Institutions of national importance, 8210 Colleges affiliated to various Universities and 110 Autonomous Colleges. The total enrolment of students in higher educations which stood at about 4 lakhs in 1950-51 increased to 50 lakhs in 1994-95 . During the said period the financial outlay for higher educations has increased 10 times. A major portion of the finance, however, goes towards keeping the system running with little to spare for development and new programmes.

Quality and Total Quality Management

Quality may be defined as the totality of characteristics that bear upon its ability to satisfy stated or implied needs. The concept of quality has been evolved in thought and attitude from a simple idea of 'conformance to specification' to direct all employees to be quality conscious in all activities of the organisation and has entered into its third generation. The first generation concentrated on 'defect correction' while the second generation is characterised by the 'evolution of statistical process control which is a little more upstream. The third generation of quality control thought can be said to consist of quality function deployment and the like which incorporates the 'voice of the customer' at the conceptual stage itself. TQM is an approach of the third generation with a strong philosophical base which encompasses many of the concepts upon which total quality control systems are based and goes even further in emphasising that quality should be managed into the system .

Total quality can be described as an attitude of mind which leads to appropriate behaviour and actions . TQM is a methodical way of guaranteeing that all functions within an organisation happen the way they have been designed in order to meet the specific needs of the customers. It is essentially a process, a way of doing things, which makes use of a number of techniques but ultimately depends on the attitude and behaviour of all those involved. As the TQM approach is basically aiming at quality, everyone in the organisation is to genuinely believe in quality and to act on that belief.

Quality In Education

It is very difficult to define quality in education for several reasons. Instead, it would be appropriate to consider few characteristics or variables which are relevant for determining the quality like teacher-student ratio, infra-structural facilities (library, laboratory, building, classroom equipment, research facilities, hostel, etc.), facilities for extra-curricular activities (sports, NCC,NSS,debate, quiz, etc.) and dedication of the teachers. Besides the above, other related or auxiliary variates may also be considered if necessary. For instance, along with the size of the teaching staff, an index of their qualifications or along with the size of the students, their academic performance at entry level may also be considered.

The quality of higher education is thus, closely associated with the above variables, few of which cannot be measured easily. However, the institutions of higher studies are usually rated on the basis of their performance related to certain prescribed parameters viz.,(i) academic performance based on examination results, scholarships, percentage of successful students, merit of the students, etc., (ii) extra-academic performance based on distinctions obtained in sports,drama,debate,quiz,art, etc., (iii) performance in later life assessed on achievements in further studies or achievements in high echelons of services of various kind , etc.

Steps to Develop TQM in the Institutions of Higher Studies

Initially the concept of TQM was developed by a group of American quality experts, W.E. Deming, Joseph Juran and Philip Crosby, in the context of corporate business. By definition, however, the concept can be extended to service sectors as well like education in general and higher education in particular. Many educational institutions of the Western countries have adopted the principles of TQM in their organisations. Higher education, in our country, is such an area where despite huge investment society's requirement has not been met. In view of the social need and globalisation of opportunities TQM in the institutions of higher education is, perhaps, justified. Moreover it reduces wastage in education and increases its efficiency by pursuing the basic idea of the maximisation of the use of amenities provided for a given amount of expenditure, or, alternatively, the minimisation of the amount of expenditure required for providing a given set of facilities.

While applying TQM in the institutions of higher studies following are the necessary steps required to develop the concept subject to modification or alteration to suit individual organisation :

1. Awareness about quality in education to be developed among the authority, management, teachers, students, guardians and other employees of the organisation in view of need of the society, rapidly changing environment, cost of higher education,etc. and ensure that quality improvement can only be achieved by joint effort.

2. Set the goals of the organisation to achieve the desired quality.

3. Forget that there is no further scope of improvement in quality in the process of imparting education to students.

4. The system should aim at taking account of the development of joint responsibilities too.

5. Ensure that the responsibility of each member / group is clearly specified.

6. Students are to be considered as 'output' of the organisation and the teachers, on the other hand , are the main 'architect' of the product.

7. The parents (as financial sponsors) and employers in particular, and society in general are the ultimate beneficiary of quality output.

8. Identify the relevant characteristics with variates, if any, which are to be considered in describing quality .

9. Record the entire process by analysing the programmes, policies, achievements and information on variations from the norms.

10. Ascertain the international and external factors which hinder the quality improvement.

11. Plan a strategy to minimise the potential causes of poor quality.

12. The achievement of quality in education may require higher levels of skill, knowledge and management. Therefore, a result oriented management has to be developed in the organisation.

13. Quality programme may also require additional finance which are to be procured well in advance by tapping the possible sources.

14. Review or introduce reward system so that it supports the objective of TQM . The system for students may include scholarships, exemption from paying fees, awarding certificates of honour or medals, etc. while the system for teacher may include financial as well as non-financial rewards like additional opportunites for further studies or research, promotion, etc.

15. Develop appropriate just-in-time (JIT) system so that everything goes on as per scheduled programmes and well designed academic calendar.

16. Measuring quality in education or appropriate system for laying down standards,etc. are all good, but significant results from TQM will not be obtained unless total commitment to quality is achieved.

Conclusion

It may be stated that the quality of higher education cannot be improved unless financial inputs are increased in proportion to requirements in a planned way. It is worthwhile to mention that costs per student for higher education is huge in comparison to primary and secondary education, and government expenditure per student is also high and rising rapidly. Social rates of return incorporating the external benefits reaped by the society as a whole is a matter of concern for all. Standardisation of higher education is, thus, much sought after.

TQM , however, calls for much more than just standardisation of education. Unless the quality of teaching and research is constantly improved, educational institutions would become stagnant and consequently fall behind to deliver quality education . Here TQM can play a crucial role as it imbibes the concept of perpetual need for quality improvement as against static standardised system and encompasses all the sections of the entire programme.

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WORKING CAPITAL FINANCING : EFFECT OF COST ON SELECTION OF VARIOUS SOURCES

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1. Introduction :

Traditionally it is said that cost has a considerable effect on the determination of capital structure of a firm . Modigliani and Miller (1) are, however, of different view . According to them, the cost of capital of a firm is independent of its capital structure . But many other experts in the line like E.W. Walker (2) and S.C. Kuchhal (3) think that the proposition of Modigliani and Miller is tenable in equilibrium state only and it is unrealistic to assume the existence of that equilibrium position . Thus it may be accepted that cost acts as a dominant factor, if not the sole factor, in formulating the capital structure of a firm . Since the capital structure includes both long-term and short-term obligations, the cost can be expected to have an impact on working capital financing as well .

Working capital has two segments in it - permanent and seasonal . The first segment has all the characteristics of fixed assets and, as such, it may be presumed to be financed out of long-term sources composing capital structure of a firm . Naturally the cost, more specifically the weighted average cost can be said to have impact on the financing of permanent portion of working capital, though as regards the seasonal segment there may be some difference of opinion . Investment in second portion of working capital arises from seasonal spurt in activities . Due to the abruptness of needs sometimes costlier sources may be used to finance these seasonal spurts . But in this case also the cost consideration cannot be totally brushed aside, as the use of short-term sources to cater the seasonal needs causes the reduction of idle capital and thereby reduces the real cost of capital .

Besides cost, some other factors have also their roles in the choice between long-term and short-term sources . The question of stability, availability or otherwise, the abruptness of the need etc. are some of the examples of those factors . But in case of choice among several short-term sources, the cost should play possibly the sole role, since other factors, as stated earlier, remain more or less same in each type of short-term sources . The cost that figures in this context is, however, the specific cost of individual sources, not the overall cost as mentioned earlier . The important sources of short-term finance are trade credit, public deposit and the bank loan in the form of overdraft and/or cash credit . Let us measure therefore the specific cost of these three short-term sources and see how far their selection depends on cost advantage.

2. <u>Cost of Bank Loan</u> :

The before-tax cost of bank loan can be obtained in $\frac{Xi}{NPL}$, where X refers to 'amount to borrow' , i to annual interest rate and NPL to net proceeds from loan (i.e. amount to borrow less its cost of raising). If there is no raising cost, then the before tax cost of bank loan will work out to be the interest rate only .

The interest payable on bank loan is statutorily deductible in full from the profits of a company for tax purpose. Thus, the after-tax cost of bank loan will come down to

$$\frac{Xi}{NPL}(1\text{-}t),$$

where t stands for corporate marginal tax rate . In case X equals to NPL (i.e. when there is no raising cost), the after-tax cost of bank loan comes out to be the interest rate less the tax rate. Since the after-tax cost is the net cost to be borne, we may ignore the before-tax cost of bank loan for at least the purpose of this article .

During last decade (1981-90) the average interest rate of bank loan was 22.3% (4) . Throughout the period the corporate tax rate for general type of companies was 55% (5) . Therefore, the after-tax cost of bank credit was 22.3 (1-0.55) i.e. 10.04% only . The exact cost of bank loan might be slightly higher if the raising cost would have been taken into consideration .

3. <u>Cost of Public Deposit</u> :

After-tax cost of public deposit can be given by the formula used for cost of bank loan since the interest on public deposit, like interest on bank loan , is now deductible in full for computing taxable income . Before the Finance Act, 1985 certain portion of interest payable (15%) was not exempt from tax, and hence the after-tax cost of public deposit was given then by :

$$\frac{XiR'}{NPL}(1\text{-}t) + (1\text{-}R')\frac{Xi}{NPL}$$

where R' refers to proportion of interest allowed for the tax purpose .

If the raising cost is supposed to be nil, the formula may be given as iR' (1-t) + (1-R') i . That means , the cost of public deposit worked out to be higher in early '80s due to the partial tax disadvantage, and later on that tax advantage has been at par in all types of loan including public deposit . However, there is still the question of unproductive interest expense on the funds required to be held as liquid assets under rule 3A of the Companies (Acceptance of Deposits) Amendments Rules, 1978 . As a result, the effective cost of public deposit becomes to an extent higher than what is paid actually as interest .

Interest rate of public deposits varies according to the term of deposit ; higher is the rate of interest if longer is the term of deposit . The maximum interest rate that is now offered by the Indian depositee companies is 15% . Thus, the after-tax cost of public deposit is now 15% (1-0.55) i. e. 6.75% to the maximum, subject to the adjustment of unproductive interest expense as referred to above . According to Rule 3A of the Companies (Acceptance of Deposit) Amendment Rules, 1978, 10% of deposit received is to be set aside for repayment of deposits and this is to be invested by April 30 each year in a current or short-term deposit maturing during the year ending March 31 next . Thus the amount held as liquid assets is not fully unproductive and may compensate some of its cost by being invested elsewhere for approximately 11 months each year . If all these factors are considered, the cost of public deposit will come out to be 6.39% (6) instead of 6.75% . Before the Finance Act of 1985, the cost, however, stood at 8.19% (7) because 15% of the interest paid was not allowed then as admissible expense for the tax purpose, and at the same time, the interest receivable from the investment of unproductive portion of public deposit was only 7% at that time . In this connection, it may be recalled that the cost calculated so far relates to the cost of deposit received for 4 or 5 years' term . In case of 1 year or 2 years' term deposit the cost will be relatively low . On the other hand, the raising cost of public deposit has been altogether ignored which in turn may enhance the cost of public deposit to an extent .

4. Cost of Trade Credit :

It goes without saying that there is no explicit cost of trade credit, though this cost may be implicit in the prices of goods. This implicit cost is very difficult to compute, if not an impossible task . However, since this cost remains hidden in the prices of goods, the users of trade credit do not treat this cost as the cost of financing, rather, consider it as direct cost of manufacturing or trading . In that sense, it may not be wrong to presume that trade credit is a cost-free source of finance .

But it is undisputed that there arises a computable cost of trade credit when a cash discount is offered to the users of trade credit for one reason or the another . The cost of non-availability of such cash discount is too high , and this is given by the formula

$$\text{Percentage Cost} = \frac{\text{Discount Percent}}{100 - \text{Discount Percent}} \times \frac{365}{\text{Credit Period Net of Discount Period}} .$$

Nevertheless, it can in no way be denied that a customer does not have to pay for the rejection of cash discount , or in the process he does not have to undertake additional risk . The computation of this cost may influence the customers to settle dues early, even by borrowing the fund from other sources . This action may give some benefit to the customers, but inaction of each discount , or in the process he does not have to undertake additional risk . The computation of this cost may influence the customers to settle dues early, even by borrowing the fund from other sources . This action may give some benefit to the customers, but inac--tion (i.e. foregoing of cash discount) will not impose any tangible burden . In view of this, though the cost of foregone cash discount comes out to be very high, it may not have that impact on the use of trade credit .

Moreover when the cash discount is offered, usually this is accepted . A study on the firms of the United States and Australia reveals that more than 90% companies take the advantage of cash discount 'always' or 'sometimes' (8) . Thus, the cases of complete refusal of cash discount is only 10% , and therefore the cost of trade credit, if any, arises only in a limited case . Personal interview with the Financial Managers/Directors (Finance) of some companies also gives more or less the same trend . According to their version, the suppliers of trade credit normally contact beforehand with their customers when they want to realise the debt promptly by giving some incentive in the form of discount . The rate at which, and the condition under which, the discounts are offered are decided by bilateral agreement . As a result , there is no question of refusal of the cash discount . However, they admit that in a very few cases inability of accepting the cash discount is noticeable . Thus, it may be said that in the majority of cases, there is no measurable cost of trade credit .

5. Working Capital Finance - Corporate Practices :

It is evident from above discussions that the trade credit is virtually a cost-free source of finance, and the bank loan is the costliest among the three sources discussed . But what appears from the corporate practices, as shown in Table - I, is that the bank loan and trade credit run more or less on parallel lines in meeting up the working capital requirement of a firm .

Average percentage of trade credit to current asset for ten years (1981-90) is 30% in public limited companies, whereas the score of bank loan is 25% . This means that trade credit is resorted to as the largest single source of financing current assets and this is followed by financing by bank loan . But on consideration of cost alone, the percentage of trade credit should have been much higher or the percentage of bank loan should have been much lower in the working capital financing of Indian corporate sector . On the contrary, in several years the percentage of bank credit have been higher in many companies in comparison with the percentages of trade credit to current assets .

Let us now consider the relative position of public deposit in corporate sector in comparison with that of bank loan . What we see in sections 2 and 3 is that the bank loan is always

TABLE - I

FINANCING PATTERN OF CURRENT ASSETS (in Percentage)

Year	Long-term Sources	Trade Credit	Bank Borrowing	Public Deposit	Others
1981	22.81	31.00	30.77	—	15.42
1982	27.21	33.00	25.49	—	14.30
1983	26.37	33.00	25.49	10.00	5.12
1984	27.11	31.00	23.08	10.39	8.42
1985	26.63	30.00	22.45	10.16	10.76
1986	27.18	30.00	22.92	8.91	10.99
1987	27.86	28.00	25.00	9.05	10.09
1988	31.58	28.00	25.58	8.61	6.23
1989	31.00	29.00	28.26	7.92	3.82
1990	26.76	28.00	21.06	7.21	10.06
Average	27.45	30.10	25.01	7.23	10.22

Sources : RBI Bulletins, Results Computed .

costlier than public deposit, apart from the rigour of feasibility test and securities that are required for having bank loan . Nevertheless, it appears from the table that the firms depend heavily on bank loan and resort to public deposit very rarely . The share of bank borrowings to current assets is, on an average, 25% in public limited companies whereas that of public deposit to current assets is only 7% . In this context what is worth-mentioning is that the interest rate of public deposit has remained more or less static during the decade of eighty, though in the meantime the bank interest has grown up substantially . As a result, the relative cost of public deposit over that of bank loan has automatically come down over time . Moreover, with the increased rate of bank interest, the unproductive portion of public deposit has been able to fetch higher and higher revenue as interest . Consequently, the net cost of public deposit has come down further .

Besides, in the second half of the decade of eighty the interest payable on public deposit has been totally exempted from tax, though earlier only 85% of the interest payable enjoyed this facility . Consequently, the cost of public deposit has been reduced to a great extent, and the cost curve , if drawn, will naturally show a decreasing trend over time . This suggests that the popularity of public deposit as a source of working capital should have been greater in the later part of 1980's . But what we see from the table is that contrary to expectation the share has fallen down in late '90s .

6. Conclusion :

It appears from the above discussion that the cost factor is not given that importance in selecting various sources of working capital as usually talked about . In practice, the use of trade credit is determined possibly by the capacity of a firm's cash flow to service payment requirement (9) . And, the need for bank loan and public deposit arises for bridging the gap that remains in working capital requirement of a firm after the same has been financed from trade credit . Of the public deposit and bank loan, the public deposit is not easily available. The depositors have neither security nor any guarantee against their deposits and therefore they feel reluctant to invest their savings in public deposit .Besides, a case is often made for doing away with public deposit, for "unregulated flow of public funds directed to the corporate sector is an unhealthy practice, is not conducive to development to a sound capital market, dilutes the effectiveness of the monetary and credit policy of the Government —— ——" (10). For all this, bank loan is becoming day by day popular inspite of its higher cost. But from the profitability point of view, this practice should be discouraged . We should not ignore totally the fact that "the highest rate of interest on public deposit in India is lower than the lowest rate at which cash credit may be obtained from banks "(11). Committees like the Tandon Study Group are being set up to reduce the dependence on bank credit. Attempts should be made side by side to make public deposit popular . Users of finance and others concerned should see that a lion's share is not eaten up by the suppliers of finance .

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6. After-tax cost before adjustment of Rule 3A: $i(1-t) = 6.75\%$. After adjustment of Rule 3A: $[6.75 - (10 \times 11 / 100) \times 11 / 12] \times 100 / 90 \doteq 6.39\%$.

7. After-tax cost before adjustment of Rule 3A : (prior to 1985) = $15\% \times 0.85 \times (1-0.55) + 0.15(1-0.85) = 8.01\%$.After adjustment of Rule 3A : $[8.01 - (10 \times 7 / 100) \times 11 / 12] \times 100 / 90 = 8.19\%$.

8. B. Belt, "Working Capital Management in Practice : A Cross - cultural Comparison of the U.S. and Australia," a paper presented at the 1989 PAN PACIFIC CONFERENCE, Sydney .

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PROFITABILITY IN TRADITIONAL VILLAGE SECTOR : A STUDY

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Profit is the residual income of the proprietor and profitability is the ready index of economic worth of his proprietorship . Profit motive induces an entrepreneur to come in a business, but it is the profitability that stimulates his continuance to remain there . In fact, the attractiveness of a business lies with its profitability, although other factors like work conditions etc. may not be of less importance .

With a scanty investment of capital and traditional technological base, workers in villages participate in traditional industries . Profit motive is not always considered as the dominant factor behind such participation . Their mastery on a traditional pursuit and feeling for perpetuating a hereditary occupation, in such cases, inspire the workers in villages to be engaged in these activities. Besides, motivation of retaining the status of an independent worker and scope for employment of family members particularly the women and the children are the other important factors for inducing the villagers in their traditional pursuits .

Under this background, an attempt has been made in this study to explain the concept of profitability in village - based traditional sector . Endeavour has also been made to bring out a relationship between cost and price where profit is dealt with as a function of cost and is calculated deducting the total cost from the total returns . This is being done following the standard accounting norms at the first instance, whereas it has been dealt with taking into consideration the prevailing notion of the villagers in particular, in the next section . However, for the purpose, a sample survey of 30 mat producing households, forming a part of an essentially village-based traditional industry under the Police Station Of Sabang in the district of Midnapore, West Bengal, was conducted . Data collected from the survey are analysed and presented in various tables as mentioned below .

In Table 1, profitability has been shown as per the standard accounting norms taking into consideration both the outlay cost and the imputed value of unpaid cost . Profit is presented as a percentage to total sales .

Interestingly it is evident from the table that the industry suffers from a loss equal to 19.8 per cent on sales and Rs. 1, 277.0 per unit in absolute term. All types of units (shown as per major product variety) are incurring losses ranging between 3.1 per cent to 46.2 per cent.

Table 1 : Profitability of Mat-making Industry Shown on the Basis of Standard Accounting Principles

Product Variety	No. of Sample Units	Total Sales Rs.	Total Cost Rs.	Total Profit Rs.	Profit per Unit Rs.	Profit as Percentage to Sales
Single Mat	14	82,800	98,440	(-)15,640	(-)1,117.1	(-)18.9
Double Mat	9	65,520	67,530	(-)2,010	(-)223 .3	(-) 3.1
Masland	7	44,760	65,420	(-)20,660	(-)2,951.2	(-)46.2
Total	30	1,93,080	2,31,390	(-)38,310	(-)1,277.0	(-)19.8

Source : Field Survey.

The picture of negative profitability for the industry is for high incidence of wage cost. In fact, even a part of the imputed value of this cost remains unrecovered . Besides, the traditional looms and accessories and the century old technique of production are the other responsible factors for the low productivity, as such negative profitability in the industry .

The concept that has so far been considered is generally the concept used for accounting purposes usually on long term basis . But the villagers engaged in traditional industries, use the concept of cost, generally what is known as 'out-of-pocket cost' . It means that they consider those elements as cost what they are required to pay outsiders in monetary terms . Accepting the cost concept of the villagers, the calculation of profit would be quite different .

The estimate of profitability carried on that basis is presented in Table II .

It is disclosed from the table that among the cost factors, the unpaid cost, mostly the labour cost, is the major one . It accounts for about 67.8 per cent in the total production cost .

Table II : Profitability of Mat-Making Industry on the Basis of 'Out-Of-Pocket Cost'Concept

Product Variety	No. of Sample Units	Total Sales Rs.	Total Cost Rs.	Total Profit Rs.	Profit per Unit Rs.	Profit as Percentage to Sales
Single Mat	14	82,800	34,450	48,350	3,453.6	58.4
Double Mat	9	65,520	21,120	44,400	4,933.3	67.8
Masland	7	44,760	18,760	26,000	3,714.3	58.1
Total	30	1,93,080	74,330	1,18,750	3,958.3	61.5

Source : Sample Survey .

Incidence of labour cost in such proportion speaks of high labour intensive nature of this type of industries . Therefore, it appears that a reduction in wage cost may make these industries profitable . But the share of profit without payment of wage is not also sufficient for the subsistence of the households engaged . Rather efforts to increase profitability be directed towards increase in the productive efficiency of the workers by other means .

Thus, it appears to us that in terms of the standard accounting concept of cost, the traditional industries in village sector, suffer from perpetual loss . Hence, the question may arise as to how the industries have still been surviving. The answer lies in the absolute absence of alternatives in rural sector for gainful employment associated with acute poverty and unemployment . Due to limited opportunities for employment and near stagnation in agriculture, people in rural areas are compelled to live on hand to mouth and are always in search for employment, no matter how less remunerative it might be . The problems become aggravated by the presence of disguised unemployment along with under-employment in agriculture . In such a situation the opportunity cost of rural labours, particularly the women and children, is almost zero . Hence, with a view to supplementing a part of their family income, this workforce may be engaged in less remunerative jobs in small scale household activities like mat weaving etc. where the marginal value of labour is, at least, positive . Besides, the workers in villages do not consider the unpaid cost elements of wages, depreciation on assets as well as interest on capital, in their cost estimation . They consider earnings from their traditional pursuits as sufficiently meaningful and a way of gainful occupation for the members of their family . Thus traditional industries in villages survive as household occupation for centuries .

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REPORTING PRACTICES IN IRDP IN MIDNAPUR DISTRICT

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1

Every good reporting has its objectives to convey information to the users preferably in a standardized form. The author of this title during his visit to Integrated Rural Development Programme (IRDP) beneficiary households on a research proposal finds difficulties in eliciting the fact behind the IRDP projects financed under his study area.The reasons behind such difficulty may be attributed to the absence of the proper published report.

The objectives of the IRDP are —
1.to assist selected families below the poverty line in rural areas to cross this line by providing
a. additional income
b. additional employment,
2.systematic and integrated use of the local resources and skills.

To achieve these objectives it is necessary to keep the records of the following :
1.Income and expenditure arising out of the projects,
2.Assets maintenance records of the project,
3.Employment opportunity record of the family members of the beneficiaries.

It is surprising that a huge amount of our Union Budget was spent (total investment in 7th plan : Rs. 8688.34 crores in IRDP and total outlay for Rural Development in 8th plan : Rs. 35997 crores)[1] for IRDP as well as in rural development but there is no statutory compulsion of record keeping at the project level excepting the "identity -cum -monitoring card, called Vikas Patrika" .[2] Besides this the project officer of District Rural Development Agency (DRDA) and BDOs were required to assign definite responsibility for filling up the monitoring card, along with its updating and inspection .[3] The card is given to each of the beneficiaries and copies are also supplied to lending bank, BDO and DRDA levels. It is also another surprise that in a sample survey conducted by the present author not a single

*The author expresses his deep gratitude to Dr. K.C. Paul, Reader and Head, Department of Commerce with Farm Management, Vidyasagar University , for his help and guidance received in finalising this paper.

1.Eighth Five Year Plan, Govt. of India ,pp. 47-48.
2.Upadhyaya.R.,Integrated Rural Development inIndia,Himalaya Publishing House,Bombay,1989,p.48.
3.Ibid.

case of beneficiary could be identified who maintained this card or there was no other person who maintained this card on behalf of the beneficiary . The samples (not statistical)spread over 6 blocks (selected statistically) in Midnapore District in the year 1995. There is also no inspection schedule of the Vikas Patrika in those Gram Panchayats. However, it has been reported that they (DRDA) could issue the Vikas Patrika to 12.70 % beneficiary only.[4]

With this backdrop the objects of this study are :
1.to identify the types of reporting practices now prevailing in the district and also to identify the concerning reporting authorities;
2.to identify the shortcomings of the present reporting practices;
3.to suggest measures for improvement of the present reporting practices.

2
Present Reporting Practices

a. **Reporting by DRDA** — The DRDAs are the main functionaries of the planning, implementation, monitoring and for evaluating the IRDPs within the district. After sanctioning the IRDP schemes to the pre-identified beneficiary families complying with certain norms, DRDA reports the same in the Annual Action Plan along with certain other information like moneys spent for subsidy, amount of loans sanctioned and the number of families benefited from these schemes. A report of the DRDA, Midnapore, is reproduced below for ready reference.

Table Showing the Target and Achievement of the IRDP [5]

Items	1994-95
1. Physical Target (nos.)	23753
2. Physical Achievement (nos.)	22688
3. % Achievement	95.51%
4. SC/ST coverages (nos.)	8303
5. % of SC/ST coverages	36.59 %
6. Women coverages (nos.)	10229
7. % of Women coverages	45.39 %
8. Financial Target (Rs. in Lakhs)	1157
9. Financial Achievement (Rs. in Lakhs)	888.087
10. % of Financial Achievement	76.76 %
11. Per Capita Investment (Rs.)	9326
12. Family-Scheme ratio	1 : 1.35

4. Annual Action Plan-1995-96, DRDA Midnapore,p.14.
5. Annual Action Plan,op.cit.,p.6.

From the year 1979-80 to 1994-95 total investment in IRDP in Midnapore District was Rs. 206 crores and the amount of subsidy released was Rs.7,489.727lakhs. The credit disbursed upto that year was, however, Rs. 20,583.968 lakhs.[6]

From the above report it is not possible to find out —
1.the income position of each project,
2.continuity or otherwise of the projects earning a positive inflows over a long time,
3.the maintenance position of the assets in the projects i.e., whether the assets could be maintained intact,
4.whether all of the schemes of a particular area were successful in "systematic and integrated use of all local resources and skill " as laid down in the object of the IRDP .

In other words this reporting practice does not provide necessary information on the efficiency or inefficiency of the individual projects. It also remains silent as to whether the incremental capital output ratio could be maintained over the years.

However, a 'Qualitative monitoring' has been started in the district under the DRDA. During the year 1994-95, 9135 IRDP cases have been visited by the DRDA officials out of 22688 cases of financing this year i.e., 40.26% cases only . The respective officer collected necessary information by "physical verification of assets, interviewing the beneficiaries and also by way of verifying the relevant records with the bankers ".[7] These data are collected through a pre-printed prescribed format of "field visit data". For the sake of volume, the format could not be given here.
On the basis of the data collected through field visit, DRDA, Midnapore, presented the performance reports of IRDP for the year 1994-95 as per annexure no.1.

These data are collected through personal interviews of the beneficiaries and from the records of the bank pass books. During our household survey we found that owing to the absence of any formal accounting system it was not possible to find out the actual income of a project. Information that may be derived from bank pass book may not be a substitute of the Accounting and the information collected through personal interviews are also doubtful. Another point appears worth mentioning that even though the fixed assets of the projects can be physically verified, the physical verification of current assets is next to impossible in these tiny cases.

b. Periodical Return by DRDA —Another type of reporting by the DRDA is the 'periodical return' to the State Government in the prescribed formats. This also does not provide any information on the basis of individual projects. In effect, it fails to serve any effective pur-

6. Annual Action Plan,op.cit.,p.18.
7. Annual Action Plan,op.cit.,p12.

pose in judging the success or otherwise of the individual schemes.

c. Reporting by the Gram Panchayat and Panchayat Samity — The present practice of maintaining accounts and the procedure of audit of accounts of the Gram Panchayats and Panchayat Samities of West Bengal are guided by the "West Bengal Gram Panchayat/ Panchayat Samiti Accounts and Audit Rules 1989" and no deviation from the given format of accounts is permitted. The Gram Panchayats and Panchayat Samities on behalf of the state or central government, are executing some of the Rural Development Programmes for which "separate funds are allotted and it also needs a separate set of books of accounting".[8]

In respect of IRDP, the Gram Panchayat members are only involved in selecting the beneficiaries. They have no obligation to report. However, they prepare a list of the IRDP beneficiaries, get the list approved by the DRDA for final disbursement of the loan, and present the list at the Gram Samsad meeting . They do nothing about the individual schemewise record keeping and reporting.

d. Partial Reporting —Partial reporting is done by the National Sample Survey, Banks, Individual Researchers and Non-Government Organisations. They sometimes collect sample information to meet their specific targetted needs. They also face the same problem of accepting the information without recorded accounting base, hence doubtful.

The reports published by them occasionally, therefore, suffer from the defects of reliability. Lack of uniformity in reporting, both in terms of contents and formats, either horizontally or vertically, is also visibly prominent.

From the above we may come to the conclusion that the reporting practices of the DRDA take care only of the manner of spending the moneys and totally ignore the purpose of such spending. Although it is late, the introduction of qualitative monitoring by DRDA is, however, a welcome start for the desired purposive reporting.

3

Shortcomings of the Present Reporting Practices

1. The major shortcomings of the present reporting practices in IRDP are that it can fulfil partial requirement only of the external users like researchers, NGOs, Banks, etc. and the specific purposes of the department (DRDA) only . It is not easily available to the general people.

8.Bhattacharya, U., An Introduction to Local Government Accounting, New Central Book Agency, Calcutta, 1992,p.15.

2. Results (Profit and Loss) arising out of an individual project can not be determined after the lapse of a certain period of time since there is no record of the related information. In the absence of any statutory compulsion to keep records, both the bureaucrats and the beneficiaries are reluctant to present the result in a specified form.

3. Corrective measures, as and when necessary, could not be taken at the point of deviation like diversion of the IRDP funds since it (diversion) is done without going through any recorded formalities.

4. DRDA takes into consideration only the volume and the number of recipients of the project outlay i.e., the amount of fund invested and the number of beneficiaries involved but does not consider the returns from the investment proposals. It (DRDA) is, therefore, interested only in the quantitative achievement. Qualitative achievement is in most of the cases frustrated.

5. Employment potential of the IRDP asset is also not assessed.

6. The financing banks are also too much conservative from the point of view of their loan recovery from the IRDP projects.They insist on diversion (by way of Fixed Deposit with the

SC and ST beneficiaries opening F.D. Account with the financing Bank

Name of the Blocks	Total no. of sample beneficiaries	No. of beneficiaries opening Fixed Deposit Account	Percentage to the total
1. Patashpur - 2	13	6	46
2. Khejuri	6	3	50
3. Egra	11	4	36
4. Dashpur	9	6	67
5. Kharagpur -2	15	6	40
6. Moyna	17	9	53
7. District Total	71	34	48

bank) at the point of disbursement. This may be substantiated by the above data collected by the present author while conducting a sample survey covering six blocks in Midnapore District, as stated earlier. Loan recovery position as reported by the banks does not reflect the actual picture. The banks just play the role of an intermediary for giving the subsidy amount to the beneficiaries.

4

Suggestions for Improvement of the Present Reporting Practice

1. Commercially viable projects are selected for IRDP; so commercial accounting should be introduced. But the problems of introducing commercial accounting like the ignorance about the technicalities involved, should be properly taken care of . Project viability should be determined by comparing benefits of the projects with project cost which must also include cost of Accounting.

Panchayat members and other members of the Gram Samsad may be of help to the beneficiaries for this purpose.

Simple, convenient and an all-purpose format may be framed. The ICAI or IAA or any University may be asked to suggest suitable format.

2. Responsibility of the Government officials (bureaucrats) and Panchayat members should be specifically determined at the implementation and reporting stages of the schemes.

Legislative and / or statutory control along with the social control over the Panchayat members for monitoring and reporting of the IRDP projects are essential.

3. A committee in line with the Public Accounts Committee of the Government, headed by a Chairman from among the opposition members of the Panchayat (at each level) should take the responsibility of auditing the accounts of each project. The report of this committee should be made public so that everybody may have easy access to such reports.

4. It may indirectly assure the involvement of the people in the locality in the process of monitoring of the IRDP projects as well as strengthen the social control to prevent diversion of the fund .

5. For the purpose of IRDP financing 'Dole-Dollar' (investment in rupees) dilemma should be cleared first and then only sanction of the IRDP loan may be made to the persons who have the entrepreneurial ability to handle such projects. The IRDP beneficiaries very often

mistake the 'loan' as 'dole' . The areas for application of dole should be clearly separated from the IRDP areas. A recent report of the RBI supported the same view.[9]

Annexure No. 1

Performance Reports of IRDP by DRDA,Midnapore

1. No. of families monitored, of which		
a. SC	2,840 (31.09%)	
b. ST	881 (09.64%)	
c. Women	3,348 (36.65%)	
d. Minority Community	475 (05.20%)	
2. Distribution of family income before and after IRDP (as%)		
	Pre-investment	**Post-investment**
a. Rs. 0-Rs. 4000/-	77.92	34.30
b. Rs. 4001-Rs.6000/-	17.85	33.65
c. Rs. 6001-Rs. 8500/-	3.94	17.26
d. Rs. 8501-Rs. 11000/-	0.21	7.41
e. Rs. 11000 above	0.80	7.38
3. Status of Assets (as%)		
a. Intact		56.45
b. Partially Intact		22.59
c. Non-existing		20.96
4. Reasons for Non-existence (as%)		
a. Natural Calamity		1.06
b. Lack of Medical Care		1.38
c. Urgent Family Need		11.65
d. Other Reason		6.87
5. Insurance of Assets (as%)		
a. Insured		10.16
b. Not Insured		69.42
c. Insurance not required		20.42
6. Trysem Skill imparted		
a. Skill imparted		1.59

Continued

9.``R.B.I—Trade and Progress of Banking in India",quoted from the Ananda Bazar Patrika dated 20th Feb.1997,p.8.

b.Skill not imparted	55.89
c. Skill not required	26.19
d. Acquired sufficient skill otherwise	16.33
7. Adequacy of project cost (as%)	
a. Adequate	83.89
b. Not adequate	16.11
8. Income augmentation per year (as%)	
a. Nil	15.58
b. Upto Rs. 1000	18.38
c. Rs. 1001-Rs. 3000	32.01
d. Rs. 3001-Rs. 5000	20.96
e. Rs. 5001-Rs. 7000	7.49
f. Rs. 7001-Rs. above	5.58
9. Issuance of Pass Book (as%)	
a. Loan Pass Book issued	87.67
b. Loan Pass Book not issued	12.33
10. Repayment	
Total loan repaid as % of total due for payment (as%)	
a. Nil	23.61
b. Upto 25%	33.02
c.26-50 %	17.02
d. 51-75%	8.37
e. 75% above	17.98
11. Period allowed for repayment (as%)	
a. Less than 3 years	5.13
b. Exactly 3 years	38.25
c. More than 3 years	56.62
12. Reason for non-repayment (as%)	
a. Delay in disbursement	3.34
b. Inadequate repayment schedule	29.25
c. Tight repayment schedule	Nil
d. Wilful default	9.25
e. Urgent family need	26.55
f. Non-existence of assets	16.21

Continued

13. Adequacy of infrastructure (as%)		
a. Input supply :	1.Yes	7.89
	2.No	92.11
b..Market service:	1.Yes	12.51
	2.No	87.49
14. Issuance of Vikash Patrika (as%)		
a. Yes		12.70
b. No		87.30

Source:Annual Action Plan,op.cit.,pp.12-14.

ESTIMATION OF GROWTH RATES: A FRESH LOOK

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1. Introduction :

Measurement of growth rates of different economic indicators over different periods of time by fitting trend lines and interperiod comparison of these estimated growth rates involve a number of statistical and econometric problems relating to model specification including model testing, estimation of parameters and interpretation of the results. For example, one may consider a number of trend equations with different specifications such as linear, exponential, parabolic, etc. Each of these trend equations has certain special characteristics. While, for example, linear trend equation implies constant absolute growth rate, the exponential or log-linear equation implies constant compound growth rates and the parabolic or log-quadratic equation implies acceleration or deceleration in the growth process. In respect of criteria for model testing, i.e. whether the model gives a good fit (in statistical sense) to the sample observations, there are differences of opinion among the researchers. For example, as regards the selection of a particular trend equations out of a number of trend equations, the researchers normally go by the criteria that are applied in the case of model testing. such as R^2 or $\bar{R}^2$ DW, and standard error of the estimated parameters. However, it has been found in the existing studies that the authors do not put so much of importance on DW statistics and other statistics as on R or $\bar{R}^2$.But the tendency to use R^2 or $\bar{R}^2$ as the only criterion for selection of a model may quite often lead to the selection of a mis-specified model as the presence of auto-correlation in the disturbance terms hints at the possibility of mis-specification of the model.

Apart from these problems another problem that is very often encountered in trend fitting exercises relates to the nature of data itself . The time series data, particularly if they relate to agricultural production, contain volatile fluctuations. If trend equations are fitted to these data, without making proper adjustment in the data, the estimates of the parameters may be unbiased, but their variances may not be unbiased. As a result, any inferences regarding the statistical significance of the co-efficient of the trend variable and as such the growth rate of the variable may be subjected to serious error, thus impairing the validity of the inferences. But most of the existing studies do not pay due attention to this problem. In this paper we address these and some other related problems and propose certain methods as answers to these problems. In the following section we describe the methods proposed by us to tackle these problems . The section III presents a case study of West Bengal. In this study we demonstrate the superiority of our proposed methods over the existing exercises. The section IV gives a summary of the work .

II . PROPOSED METHODS OF MEASURING GROWTH RATE

For the estimation of growth rates of different economic indicators one may select the trend equation among five alternatives, namely, linear ($y_t = a + bt$), exponential ($\log_e y_t + a + bt$), parabolic ($y_t = a + bt + ct^2$), log-quadratic ($\log_e y_t = a + bt + ct^2$), and s-type growth curve (whose simplified form is $y_t = e^{a-b/t}$ i.e. $\log_e y_t = a - b.1/t$), by which all major types of growth pattern in the data set can be expressed and all of which can be estimated by applying OLS method. Now in regard to the selection of a particular trend equation (among five alternatives) one may apply the following set of rules :

i) From the behavioural pattern *[1] of point-to-point growth rates of the series$[(y_t-y_{t-1})/y_{t-1}]$ exponential trend can be chosen in that case where this pattern implies constancy overtime.

ii) When this pattern is either increasing or decreasing overtime one should choose a particular form of trend equation from among various other alternatives after ensuring the fulfilment of the criteria as mentioned in the following preferential sequence :

(a) Presence of no-autocorrelation, detected by DW statistic

[where Durbin-Watson statistic = $\dfrac{\sum_{t=2}^{n}(e_t-e_{t-1})^2}{\sum_{t=1}^{n}e_t^2}$, Johnston, (1960)] ;

(b) Presence of random errors, detected by run test ;

(c) Absence of long-term variation in the series, measured by rank test [a non-parametric test of hetroscedasticity, Johnston (1960)]; and

(d) PE test for non-linearity [a variant of Box-cox transformation, Maddala, (1988)] .

In case of non-satisfaction of these criteria, which may rarely occur, one can arbitrarily choose long-quadratic form because of its special characteristics like (a) it takes care of multiplicative error term which is reasonably hypothesised in most cases, (b) it can accommodate varying nature of growth pattern,and (c) it can minimise the short term volatile fluctuations.

In support of this suggested technique for trend selection a few more points need to be jotted down.

i) For trend selection one should give more emphasis first on the nature of the original series to be deciphered from the behavioural pattern of the point-to-point growth rates and then on the fulfilment of econometric criteria for regression rather than on the statistical conditions which throw less light in trend selection even in the presence of white noise in the data set.

ii) As point-to-point growth series is more liable to fluctuations than its original series, a relatively long period moving average is to be taken for smoothing the wide fluctuations and the exact length of moving average period should be determined on the basis of the sample size and on the basis of the nature and magnitude of fluctuations to be known from the graphical exposition.

iii) Linear trend will be also an option only when the behavioural pattern of point-to-point growth rates is declining overtime.

iv) Much importance ought to be given to the value of the DW statistic which, apart from detecting autocorrelation, gives us a guidance in model specification (as argued by the econometric text books).

v) R^2 or $\bar{R}^2$ should be given importance while discarding a trend equation not so much while choosing a trend equation .

To tackle the problem of short-term (determined by the magnitude of the residual variance) and long-term (measured by the statistically significant rank correlation co-efficient between time and absolute values of the residuals) volatile fluctuations in the data set, as mentioned earlier, smoothing is necessary before carrying out trend fitting exercises. Smoothing can be carried out in the following way (S. Makridakis, S.C. Wheelwright and V.E. Megee, 1983, and S. Pindyk and D.L. Rubinfeld, 1981):

After fitting the chosen trend equation, one has to calculate the residuals which are to be smoothed (by applying 3 year centered moving average) and these smoothed residuals are to be added back to the respective predicted values for constructing the new series on which growth rate is to be measured . Due to this smoothing of residuals autocorrelation problem is very likely to arise and in that case autocorrelation is to be corrected by applying "Cochrane-Orcutt procedure"*2 (Cochrane and Orcutt, 1949, JASA, Vol. 44) through either first order or second order auto-regressive scheme.

This adjustment does not distort the underlying trend in the series, and the statistical and econometric criteria will be fulfilled (unlike in the earlier studies). However, if the econometric criteria are not fulfilled, one can either correct only autocorrelation (by the above mentioned procedure) if it is present or carry out smoothing (subsequently followed by the correction of autocorrelation) only that part of the series where volatile fluctuations are more pronounced .

Making these adjustments in the data one should construct the new series on which the chosen trend equation may be fitted to find out the whole period's growth rate and kinked trend equation ++ to estimate sub-period growth rates with trend break. More specifically, in case of linear or parabolic trend (chosen for the whole period), we can use kinked linear trend and in the cases of other three trend equations we can use kinked exponential trend to estimate sub-period growth rates on the realistic assumption that relatively long period's changing growth rate can be sub-grouped into relatively short periods' constant growth rates. Further, due to adjustment in the data set, kinks, arbitrarily placed on the break points, will not lead to distortion in the estimated sub-period growth rates and empirically it has been observed that with this kinked model all the econometric criteria for estimation remain undisturbed. Actually our kinked model is a generalised and improved version of Boyce's kinked model and this kinked model gets support from the general class of econometric models with"Join Points" [Judge et al, 1980].

III . CASE STUDY

To establish the superiority of our proposed approach to the existing approaches for measuring growth we have considered total agricultural production *3 in West Bengal during the period 1957-58 to 1994-95 as a case. On the basis of only statistical criterion of $\bar{R}^2$ we cannot definitely choose a particular form of growth function from among alternatives because, as observed from Table 1, the values of $\bar{R}^2$ are relatively high in all cases except S-type growth curve (which gives poor fit). For this we have proceeded in a different way.

TABLE - 1 : CHOICE OF TREND EQUATION FOR AGRICULTURAL PRODUCTION IN WEST BENGAL, 1957/8 - 1994/5

Trend → Criteria ↓	Linear	Exponential	Parabola	Log-quadratic	S-type growth curve
$\bar{R}^2$ (F Statistic)	.8584* (225.25)	.9045* (351.38)	.9281* (239.68)	.9195* (212.29)	.2958* (16.54)
DW Statistic	-	-	1.245++	1.381++	
Runs (T Statistic)	-	-	14*** (-1.809)	17 (-.822)	

* Significant at 1% level, *** Significant at 10% level, ++implies inconclusive range at 1% level.

Fitting linear trend on the smoothed (9 years' moving average)values of point-to-point growth rate (with correction of autocorrelation),

$$GR_t = \underset{(.0031)}{0.0363^*} + \underset{(.00039)}{0.00115^*t}$$

[DW = 1.958, Standard errors within parentheses, *Significant at 1% level,

We observe that the behavioural pattern of point-to-point growth rates is increasing overtime . This implies that, the chosen trend equation will be either a parabola or log-quadratic. As the values of DW statistic for both of these two trend equations lie within the indecisive range (Table - 1), this criterion also remains inconclusive . But in consideration of run test we can select long-quadratic trend equation in which errors are random, runs being insignificant. Otherwise, we have to proceed in the way as prescribed earlier.

After the choice of trend, we have made necessary adjustments in the data, wherever necessary . It is observed from Table - 2 that trend equation fitted to the unadjusted data suffers from certain serious weeknesses, such as the problem of autocorrelation as well as the problem of long term fluctuations (measured by the significant rank test).

TABLE - 2 : ADJUSTMENTS IN THE DATA AND RESULTS OF VARIOUS TEST STATISTICS (LOG-QUADRATIC TREND EQUATION)

Criterion → Nature of Adjustment ↓	$\bar{R}^2$ (Statistical criterion for goodness of fit)	DW (Measure of Auto-correlation)	Rank (Measure of long term fluctuation)	σ_e (S.D. of errors, measure of short term fluctuation)	Runs (Measure of randomness in error)
Unadjusted Series	.9195 *	1.381	-.3710**	.0908	17
Inclusion of proxy variable (rainfall) in trend	.9229*	1.243	-.3623**	.0723	18
Omission of strong outliers (5% band limit)[a]	.9850*	2.089++	- .0983	.0312	9*
3 Year moving average on the original series	.9580*	0.437	.0530	.0603	17
Proposed Technique[b]	.9894*	1.843++	.1552	.0296	16

a - omitting extreme 10 observations, b - MA (3) of residuals & subsequent application of second order autoregressive scheme.

*Significant at 1% prob. level, ** Significant at 5% level, ++ Non-autocorrelated.

To overcome these problems, rainfall has been included in the trend equation as a proxy for weather in order to minimize the effects of long term fluctuation on the trend growth, as suggested by some researchers. But this adjustment, though increases the value of $\bar{R}^2$ marginally, does not bring about any improvement over the earlier one. The omission of strong outliers from the time series, as suggested by Nadkarnd & Deshpande etc. , and fitting the trend equation has resulted in significant improvement in the value of $\bar{R}^2$, non-auto-correlation in the disturbance term and non-significant presence of both short term and long term fluctuations in the data.

But the errors are not random. Three year moving average of the original series, though is an improvement over the unadjusted original series, also does not ensure non-auto-correlated disturbance term.

On the other hand, if the data are adjusted in the lines proposed by us , none of the problems, which are considered as very serious, such as auto-correlation, presence of short-run and long-run fluctuations and absence of randomness, exist any more. In addition, the value of $\bar{R}^2$ is the highest for the series subjected to the proposed adjustments. Necessity of this type of adjustment in the data set is also evident from figure - 1 .

TABLE - 3 : ESTIMATED GROWTH RATES IN AGRICULTURAL PRODUCTION,WEST BENGAL, 1957/8 - 1994/5

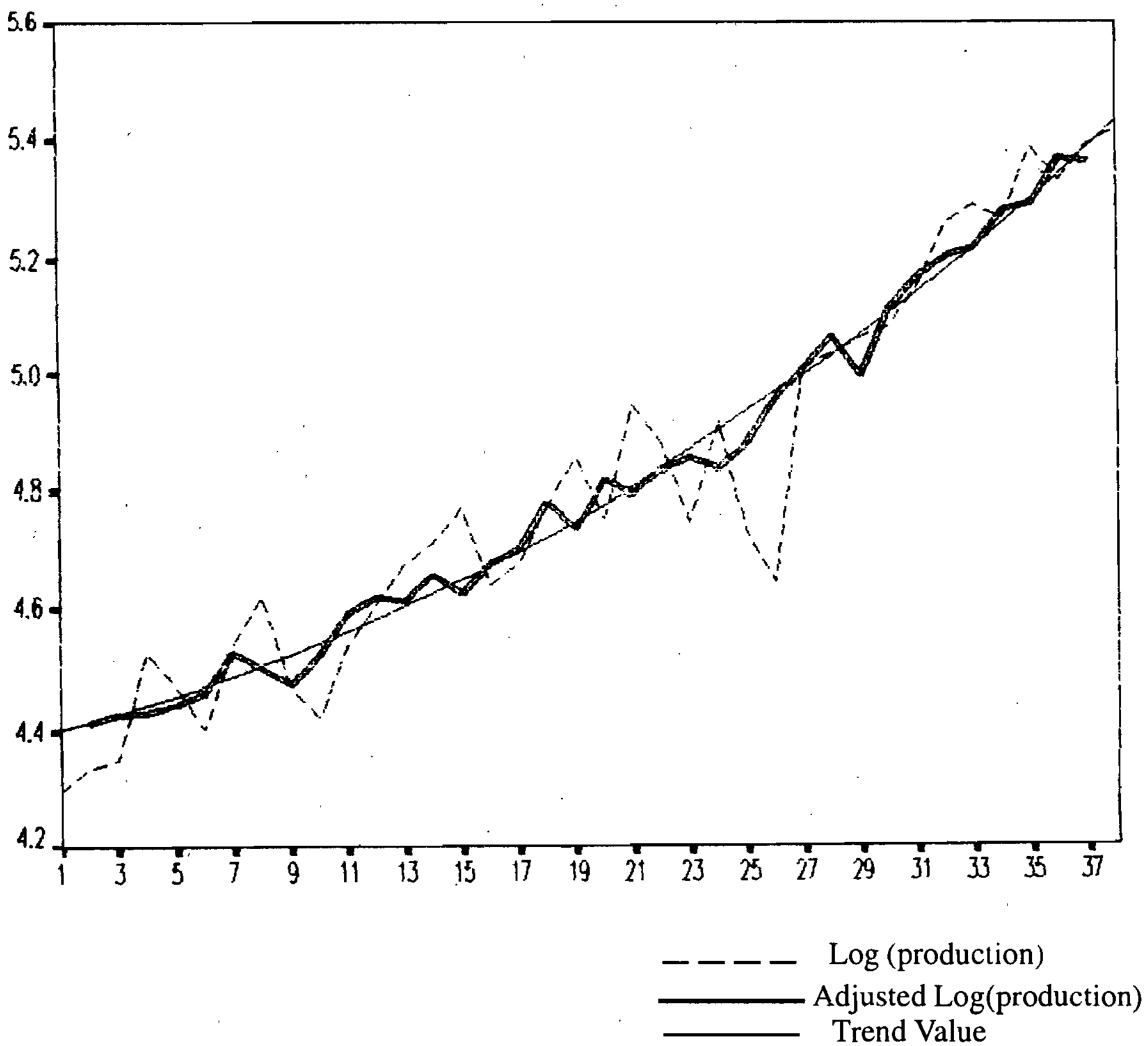
Period/Criterion → / Nature of the series ↓	Whole period's growth rate, 1957/8 - 1994/5	$\bar{R}^2$	DW	First sub-period's growth rate, 1957/8 - 1994/5	Second sub-period's growth rate, 1977/8-1994/5	Trend break
Unadjusted	2.743* (.0014)	.9182*	1.371	2.123* (.0029)	3.635* (.0033)	1.512* (.0043)
Proposed adjustment	2.684* (.0005)	.9882*	++ 1.675	2.031* (.0011)	3.649* (.0012)	1.618* (.0021)

SEs within parentheses.
* Significant 1% probability level, ++ Non-autocorrelated.

The annual growth rate estimated from the unadjusted time series by fitting a long-quadratic trend equation is found to be 2.743 percent while that estimated from the adjusted time series (adjusted by the proposed methods) is 2.684 . But in the case of unadjusted series there is auto-correlation in the disturbance term whereas in the case of adjusted time series the disturbance term is free from autocorrelation and the $\bar{R}^2$ is significantly higher .

To estimate the sub-period growth rates (1957-58 to 1976-77 and 1977 - 78 to 1994-95) we have used kinked exponential trend equation to both adjusted and unadjusted data. The growth rates for the first and second sub-periods obtained from unadjusted time series are 2.123 and 3.635 per cent respectively while those obtained from the adjusted time series are 2.031 and 3.649 per cent respectively. The trend breaks are statistically significant at 1 per cent probability level. This means that the growth rate in the second sub-period (1977-78 to 1994-95) is significantly higher than that in the first sub-period (1956-57 to 1976-77). This improvement in the estimated growth rate of second sub-period over that of first sub-period is established more by our proposed approach (satisfying all the criteria of estimation) than by the existing approach (which is suffering from autocorrelation problem).

FIGURE 1 : TOTAL AGRICULTURAL PRODUCTION, WEST BENGAL: 1957-58 to 1994-95



IV . CONCLUSION

Thus, this paper establishes that the trend equations fitted to the unadjusted data or to the data with improper or partial adjustments may not satisfy all the desirable criteria. Using such trend lines and estimating growth rates from these trend lines will obviously yield misleading results . Therefore, any statistical inferences regarding the performances of the trend variable and other variables, if there be any, drawn on the basis of these results may be misleading. Thus, what is required for an unbiased assessment of the performance of various economic variables is the proper adjustment in the data and application of appropriate criteria for selection of the model.

NOTES :

*1 Linear trend equation has been fitted on the smoothed values (taking 5 or 7 or 9 year moving average) of point-to-point growth rates and the estimated trend parameter exhibits the behavioural pattern.

*2 Residuals (e_t) have been calculated from the estimated trend and then $e_t = ae_{t-1} + u_t$ or $e_t = ae_{t-1} + be_{t-2} + u_t$ has been fitted and these u_ts have been added back to the respective predicted values to construct new adjusted series.

++ The generalised kinked model with m sub-periods and m-1 kinks is :

$$y_t \text{ or } \log_e y_t = a_1 + b_1 \left(D_1 t + \sum_{j=2}^{m} D_j K_1\right) + b_2 \left(D_2 t - \sum_{j=2}^{m} D_j K_1 + \sum_{j=3}^{m} D_j K_2\right) + \ldots$$

$$+ b_i \left(D_i t - \sum_{j=1}^{m} D_j K_{i-1} + \sum_{j=i+1}^{m} D_j K_i\right) + \ldots\ldots\ldots + b_m (D_m t - D_m K_{m-1})$$

where a_1 and b_is are parameters, K_is are kink points and jth period's dummy variable is Dj.

*3 Data have been collected from official publications (different annual issues of Economic Review, Directorate of Agriculture, Govt. of West Bengal) in the form of index numbers with triennium ending crop-year 1969-70 as base year .

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