CHAPTER I

INTRODUCTION AND DESIGN OF THE STUDY

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CHAPTER I
INTRODUCTION AND DESIGN OF THE STUDY

1.1 INTRODUCTION

Business Information is communicated through the medium of accounting to different groups of persons such as shareholders, lenders, governments, employees, financial institutions and the like who have a vested interest in the business enterprise. Accounting is a man-made art and its principles and procedures have been evolved over a long period of time to aid business in reporting to the Management and the Public.¹

In olden days, accounts was described as “An art of recording, classifying and summarizing in a significant manner and in terms of money, the transactions and events, which are, in part at least, of a financial character and interpreting the results thereof”.² Most of the discipline of accounting is concentrated on the aspect of physical and

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¹ Dr.K.P.Ganesan, (2003), Value Added Accounting, Madurai, K.G.R.Publications, Madurai, p.1

financial resources which are well accounted universally with the accepted standards of preparation and presentation.

Accounting is now regarded as a service activity, a descriptive discipline and a Management Information System. Nowadays, the primary role of accounts is to provide an effective measurement and reporting system to the management for decision making.

The World Bank defines “Accountability” as the obligation of power holders (those who hold political, financial or other forms of power) to take responsibility and answer for their actions.\(^3\)

In recent years, however, there has been an increasing acknowledgment that since finance providers, such as shareholders, bankers, lenders, and creditors, are not the only group affected by the actions of a corporation, there is an obligation to report to a wider audience, which includes employees, trade unions, consumers, government agencies, and the general public. A variety of reasons have contributed to this widespread belief that companies should explicitly disclose information to groups other than finance providers. These include the development and growth of the influence of trade unions and employees in most developed countries. There is some recognition of the view that those who are significantly affected by decisions made by

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\(^3\) The New Indian Express dt.12.06.2010
institutions in general must be given the opportunity to influence those
decisions. Furthermore, there is growing public concern about the impact
of corporations, especially in relation to the so called “externalities”
(pollution, social costs).

These developments, among others, have expanded the
concept of accountability and the desire of various groups in society to
influence the behavior of business corporations. Wider corporate
accountability has thus become an issue of major interest in recent years.
Accountants and accounting are still challenged by social and economic
development and the new needs of accountability. Among European
directives and regulations relevant to corporate accounting and
disclosure, there have appeared regulations concerning employee
information and consultation. This opens a new direction in financial
reporting and accounting research. The response of the accounting world
to this challenge is research in the field of “socio-economic accounting”.
The Social responsibility and accountability of business organizations are
the core of these considerations. The current trends in corporate reporting
practices are the inclusion of the following supplementary accounting
information in India and abroad:

1. Human Resources Accounting
2. Social Accounting
3. Inflation Accounting
4. Segment Accounting
5. Value Added Accounting
6. Environmental Accounting
The supplementary statements enable the stakeholders and public to understand the traditional financial system in a better way.\footnote{Dr.K.P.Ganesan, (2003), Value Added Accounting, K.G.R.Publications, Madurai, p.2}

The distinctive feature of the emerging economy is an increasing emphasis on human capital (the knowledge, skills and experience of people) rather than on physical capital\footnote{Eric.G.Flammholtz, (1989), Human Resource Accounting, Jossey.Bars Publications, San Francisco, preface.ix}.

Very recently the idea of accounting of human resources has been attracting the minds of many scholars. It is well known that human resource is a vital ingredient of the social system. The economies of many nations are increasingly dominated by knowledge or information based sectors driven by highly trained and specialized personnel. Whereas physical capital was of the utmost economic importance in the past, the distinctive feature of the emerging post-industrial economies is an increasing reliance on human and intellectual capital. The growing importance of human capital as a determinant of economic success at both the macroeconomic and microeconomic levels dictates that firms adjust to this new economic reality. Specifically, if human capital is a key determinant for organizational success, then investment in the training and development of employees to improve performance is a critical component of this success. This broad socioeconomic shift underscores a
growing need for measuring and analyzing human capital when making managerial and financial decisions.

The energy of people should be tapped and developed for enhancing the organizational advancement for which a strategy has to be developed entirely. The energy of individuals, groups and the total human organization of an enterprise may be considered human input. The transformation of the process of input into the desired output is identified as acquiring, training, utilizing, evaluating, compensating and proper development of people and their skills in organization.\(^6\)

Human beings constitute an important asset for organizational success.. The physical and financial resources can not be completely effective without human assets. Human assets function in a business organization as a spinal cord in the human bodies.

The past few decades have witnessed a global transition from manufacturing to service based economies. The fundamental difference between the two lies in the very nature of their assets. In the former, the physical assets like plant, machinery, material, etc. are of the utmost importance. In contrast, in the latter, the knowledge and attitudes of the employees assume greater significance. For instance, in the case of IT Firms, the value of their physical assets is negligible when compared to

\(^6\) D.Prabhakara Rao (1986) Human Resource Accounting, New Delhi, p.2
the value of the knowledge and skills of their personnel. Similarly in hospitals, academic institutions, consulting firms, etc., the total worth of the organization depends mainly on the skills of its employees and the services they render. Hence the success of their organizations is contingent on the quality of their human resources (i.e., the knowledge, the skills, the competence, the motivation and understanding of the organizational culture.)\(^7\). The total absence of any information regarding the value of the human capital is a serious handicap to the managers when they have to arrive at quantitative goals and to the investors, to make rational decisions concerning the shares which they hold or propose to buy.

The success of corporate undertakings purely depends upon the quality of human resources. It is emphasized that the human element is the most important input in any corporate enterprise. The investments directed to raise the knowledge, skills and aptitudes of the work force of the organization are the investments in human resource. In this context, it is worthwhile to examine the human resource accounting practices in the corporate sector in India\(^8\).


Obviously, the present accounting system is less dependable with regard to the information on human resources. The areas of resource allocation and utilization are mainly governed by the information furnished by the accounting system. On the other hand, the executives in an organization are familiar with the accounting language and its use in decision making. Similarly, it will be convenient for them to use accounting information on human capital if the accounting system is designed to produce such information also. Human resource accounting is needed in this context to disclose what is happening to the energy of human beings and what its values are for the management. The policy makers of an enterprise will be in a better position to understand and predict the aspects relating to the management of human resource, if a system of human resource accounting is designed suitably and interpreted carefully.

The productivity of a company’s investment is known from the rate of return it gives. So far, these rates of productivity are considered in respect of the physical asset investment only. To find the productivity of the investment on human beings in any organization, human resource accounting is helpful. Human resource accounting is a scaling tool that generates quantitative control information about the contributions of the human resources for promoting industrial productivity.9

Human resources play a crucial role in the development process of the present economy. It is often felt that though the exploitation of natural resources, the availability of physical and financial resources and the international aid play prominent roles in the growth of modern economies, none of these factors is more significant than an efficient and committed manpower. A country with an abundance of physical resources will not benefit itself unless human resources make use of them. Only these resources are responsible for making use of the national resources and for the transformation of traditional economies into modern and industrial economies. In the real sense, the values, attitudes, general orientation and quality of the people of a country determine its economic development. The shift from manufacturing to service and the increasing pace of technological advancement make human resources the crucial ingredient to national well-being and growth.\(^\text{10}\)

1.2. STATEMENT OF THE PROBLEM

Human beings are considered central to the achievement of productivity, well above equipment, technology and money. Human resource accounting (HRA) is an attempt to identify, quantify and report investments made in the human resources of an organization that are not presently accounted for under the conventional accounting practice.

Human resources are not yet recognized as “assets” in the Balance Sheet. The measures of net income which are provided in the conventional financial statement do not accurately reflect the level of business performance. Expenses relating to human resources are charged to current revenue instead of being treated as investments to be amortized over the economic service life, with the result that the magnitude of net income is significantly distorted.11

The reasons for lack of importance given to HRA are:

In the basic nature of our economy, wherein labor is available in plenty, the value of human resources, and the efficiency and productivity disclosures are not seriously considered.

No statutory requirement is made either under the Companies Act or under the Indian Accounting Standards for the Valuation and Disclosure of Human Resource Accounting.

None of the stock exchanges requires the disclosure under the listing agreement. There is no well defined system for valuing and reporting for those companies which follow the HRA system meticulously.

The Indian Corporate Sector has still a long way to go.

11 CA Journal – Developments in Accounting – Chapter 6 – Unit-4, Developments in Accounting, p.6.26
The necessity of HRA arose primarily as a result of the growing concern for human relations management in industry since the sixties of this century. Behavioral scientists (like R. Likert, 1960), concerned with the management of organizations pointed out that the failure of accountants to value human resources was a serious handicap for effective management.

The treatment of human resources as assets is desirable with a view to ensuring the comparability of financial statements and more efficient allocation of funds as well as providing more useful information to the management for decision-making purposes\(^\text{12}\).

Many people have pointed out that it is very difficult to value human resources. Some others have cautioned that people are sensitive to the value others place on them. A machine never reacts to an over or under valuation of its capacity, but an employee certainly reacts to such distortion. Conventionally human resources are treated just as any other services purchased from outside the business unit. As a result conventional balance sheets fail to reflect the value of human assets and hence distort the value of the business.

The problems faced by the automobile Industry in India are given below:

\(^\text{12}\) CA Journal – Developments in Accounting – Chapter 6 – Unit-4, p.6.26
Global economic recession which started from October 2008, affected the growth rate of the automobile Industries in India.

Export orders for automobile components and spare parts (fasteners) were cancelled by foreign companies, which affected the major exporter (Sundaram Fasteners Ltd).

The Automobile Manufacturers face labor problems and short supply of raw materials. Original Equipment Manufacturers (OEM) in automobile field face severe short supply of raw materials and labor crisis.

Export Industries also incurred losses in foreign exchange earnings due to loss in money value. Due to the economic down turn, lending banks restricted the financial assistance to the automobile sector, which affected the production process.

Huge spurious markets across the country (Punjab, Rajasthan, Haryana, Madhya Pradesh, Gujarat, Delhi) are engaged in the risky business of selling fake parts, at 30% less than the prices of the original products. It is estimated by the ACMA (Auto Component and Manufacturers’ Association) that the spurious parts market would more than double to Rs.11,400 crores by 2015. Now they account for 5300 crores of the total Rs.16,500 crores replacement market. The functioning of spurious markets poses problems to the automobile industry.
The unauthorized inflow of automobile products from China much affects the domestic market.\textsuperscript{13}

In this context, it may be noted that the investment on Human Capital and Asset is the key to success.

This situation raises the following issues:

i) What is the concept of Human Resource Accounting?

ii) What will be the trends in Human Capital of the Sample Units?

iii) What will be the factors influencing the level of investment on human capital?

iv) How will the cost of employees be distributed?

v) How the human capital indicates the performance of the sample units?

To answer the above questions, an attempt has been made by the researcher to apply Human Resource Accounting to seven Units (Outlets) of the TVS & Sons Ltd, an Automobile Company situated in Madurai, Tamil Nadu. The economic model advocated by Lev and Schwartz has been applied for arriving at the value of human capital.

In India, though HRA accounting has not been institutionalized, many public and private sector companies have started adopting the concept of HRA. (Examples: BHEL, ACC Cements, Infosys, GTL, MMTC).

\textsuperscript{13} The New Indian Express, \textit{Busin}, dt. 09.01.2010
The US Financial Accounting Standard Board, in the Exposure Draft on Business Combinations and Intangibles, refers to human resource as “broad based intangibles workforce-based assets i.e., intangible assets that relate to the value of the established employees or workforce of a company”. They include:

1. Assembled workforce, trained staff
2. Non-union status, strong labor relations, favorable wage rates
3. Superior management or other key employees
4. Technical expertise
5. Ongoing training programs and recruiting programs

This represents the first formal acknowledgement ever regarding the accounting of human resources by an authoritative body responsible for the promulgation of accounting standards.¹⁴

1.3 REVIEW OF LITERATURE
A. Review of Literature at National Level

Interest in measuring human capital has also been apparent in India.

A study conducted by Mahalingam (2001) reveals that human capital converts the factors of production into the potential factors and energizes the creation of wealth. Mahalingam suggests the method of arriving at human capital by the net present value approach. He has

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pointed out that each person has a set of competencies and a value is assigned to each, with the sum of these values makes up the value of the employee and the value of all the employees makes up the human capital of the organization—which together with the customer and structural capital produces the revenue\textsuperscript{15}.

In a case study conducted by Patra, Khatik and Kolhe (2003) in a profit making heavy engineering public sector company (BHEL), which used the Lev and Schwartz (1971) model to evaluate HRA measures, the authors examined the correlation between the total human resources and the personnel expenses for their fitness and impact on production. They found that HRA valuation was important to decision-making in order to achieve the organization’s objectives and to improve output.\textsuperscript{16}

A study conducted by Bhat (2000, p. 1) provides a definition of human resource accounting as depicting the human resources potential in money terms while casting the organization’s financial statements. The author refers to several measurement models including the Brummet et al. model (1968a, 1968b, 1969) based on the historical cost method with provisions for appropriate depreciation and replacement cost of acquiring, training and developing the entire human resources, and competitive

\textsuperscript{15} Maria L.Bullen, , Clayton State University, Kel-Ann Eyler, Wesleyan College, \textit{Journal of International Business and Cultural Studies}, p.10

\textsuperscript{16} ibid
bidding, proposing the capitalizing of the additional earning potential of each human resource in the organization.\textsuperscript{17}

The author also mentions the Jaggi and Lau (1974) model estimating the human resources worth on a human resource groups basis with the groups accounting for productivity and performance. In Hermanson’s (1964, 1986) unpurchased goodwill method, the marginal higher earning potential of human resources in comparison with similar industries is capitalized. Bhat points out that with global trade and foreign exchange transactions becoming more complex with innovations in derivatives, more uniformity in accounting practices and transparency would emerge. The author suggests that accounting and financial management issues will soon be integrated in accounting statements facilitating more meaningful use of accounts, as opposed to history and book keeping.\textsuperscript{18}

B. Review of Literature at International Level
Human capital has long been recognized as a vital asset and value creator to companies. In Roslender and Dyson (1992), value was seen in a broad sense as “enhancing the performance of an organization”. More recently, Swart (2006) refers to “core competence,

\textsuperscript{17} Maria L. Bullen, Clayton State University, Kel-Ann Eyler, Wesleyan College, Journal of International Business and Cultural Studies, p.10

\textsuperscript{18} ibid
knowledge creation and innovation … creating value over and above physical and financial resources”

A study by Graham, Harvey and Rajgopal shows that managers often delay or forego investment in sound projects (projects in which there was a positive net present value) in order to “manage” quarterly earnings and meet market expectations. This behaviour occurs for both tangible and intangible investments. It could, however, be postulated that intangible investments, and human resource investments in particular, may be prone to being viewed as discretionary since they are traditionally viewed as costs.

**Scandinavia**

The Scandinavian countries have taken a particularly strong interest in the area of HRA. For example, the Value Driving Talks (VDT) model was developed by Arne Sandervang (2000) and tested in an empirical study in a Norwegian business firm in the electrical sector. The model, which calculates financial returns on an organization’s investments in competence development, focuses on employee training or competence development as its strategic focus, and

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19 Article –“ Human Capital Disclosures in Developing Countries: Figureheads and Value Creators” - by Ching Choo Huang, Universiti Teknologi Mara, Malaysia, p-3

20 Graham, Harvey and Rajgopal (2005), The Economic Implications of Corporate Financial Reporting
aligns investment in competency development to the overall business strategy to help organizations with their strategic human resource management goals. The participants assess the benefits of the competency program through a benefit description statement that shows a comparison of the potential benefits and experienced improvements. A calculation is made of the benefits to the company and compared to the costs of training in order to arrive at the Return on Investment of training and development.21

Roy (1999) reports on a case study on the Skandia Group—one of the first companies known for its work on intellectual capital, and provides an interesting example for organizations desirous of managing their intellectual capital. The study is the process of development of the Skandia Navigator and the Dolphin Navigator under the guidance of Leif Edvinsson, one of the first persons to be documented as a knowledge manager. The Skandia Navigator successfully introduced new business ratios that emphasized an organization’s intangible assets rather than tangible ones. The Dolphin Navigator developed an IT infrastructure that helped to distribute information regarding Skandia Navigator business planning world wide in a cost effective manner.22

21 Maria L. Bullen, Clayton State University, Kel-Anneyler, Wesleyan College, Journal of International Business and Cultural Studies, p.10

22 ibid
Grojer (1997) gives an interesting perspective on why HRA has taken roots in Scandinavia especially Sweden, as compared to other parts of Europe, suggesting that human resource accounting measures can be successfully introduced only when they suit the social order in organizations—and Scandinavian management and the Swedish organizational social order suit Human resource cost accounting.\(^{23}\)

A possible conclusion from this perspective is that human resource measures may be introduced smoothly in organizations when these measures would conform to the organizational social order.

Factor Olsson (1999) studied the measurement of personnel through human resource accounting reports as a procedure for the management of learning in the hospital sector Northwest of Stockholm. He reported that learning in smaller groups is an effective means to make organizational communication regarding intellectual capital within the organization, helping organizations learn better on how to report human resources value. Olsson (2001) provided information on annual reporting practices related to human resources in corporate annual reports of major Swedish companies.\(^{24}\)

\(^{23}\) ibid

\(^{24}\) Maria L.Bullen, Clayton State University, Kel-AnnEyler, Wesleyan College, *Journal of International Business and Cultural Studies*, p.9
United Kingdom

Morrow (1996 & 1997) investigated the concept of football players in the United Kingdom as human assets and the importance of measurement as the critical factor in asset recognition.25

Another publication by Wagner (2007), suggested that human capital (people and teams) is one of the intangible assets that investors look for in valuing a company, along with structural capital (processes, information systems, patents) and relational capital (links with customers, suppliers, and other stakeholders).26

A study conducted by Shraddha Verma and Philip Dewe (2004) indicates that although valuing human resources appears to be important to UK organizations, most organizations do not value their human resources. The plans to implement the valuation of human resources are at a very early stage. The survey concludes with the view that despite the interest in valuation, there will be little or only moderate progress in the area by 2009. It has also been found by researchers that there is a lot of scope for HRA but other demands prevent it from progressing significantly. Lack of time and staff resources causes further delay in the implementation of HRA. The Survey concludes that in order

25 ibid
26 ibid
to show greater progress, more needs to be done taking into consideration the theoretical and practical models for valuation. Further, it requires the engagement of both human resources and accounting professionals in the debate on HRA valuation and its practice.²⁷

China

Tang (2005) focused on a measurement of human resource cost in developing a heuristic frame addressing the link between human resource replacement cost and decision-making, in a human resource replacement cost (HRRC) system. The system measures the direct and indirect cost of human resources, which is then applied to a company within the metro industry in China. The author includes a suggested measure of learning cost, cost of lost productivity, and cost of job vacancy and discusses the usefulness of the HRRC model in decision-making in such areas as employee turnover, separation indemnity, duration of labor contracts, and personnel budgets in monetary terms. Tang (p.2) points out that an increased focus on human resource management and improved information technology have led to the saying “what you cannot measure, you cannot manage.” The author adds that since the time when China espoused an open policy of reform there have been many brave attempts to seek new ways for handling organization and management. Tang (p.14) also suggests that HRA information can aid in the budgeting

of human resources recruitment and development. The hard costs in human resource replacement cost are the actual investments in human resources which reflect the historical direct costs of recruiting, orientating, and training people. Combining these hard costs with human resource demand can help a company budget its personnel activities more reliably. Tang (p.15) points out that the system of accounting for the replacement cost in people is an attempt to improve the quality of the information available for facilitating effective human resource management, providing the information necessary for a cost and benefit analysis and decision making. Care should be taken to recognize that high human resource costs should not be viewed as negative and low costs as positive in that, for example, higher costs could indicate higher-quality training. Although the HRRC system developed is based on a pilot study and still requires refinement and extensions, it does represent a meaningful contribution to the practice of HRA, and an expected result is a new awareness of the management of the high costs of turnover. Tang further comments on the benefits of HRA related information and notes that measuring and managing human capital is not a rocket science, but is (p.26) “simply a defined framework to maximise the only real competitive advantage, companies have in the knowledge economy— their human capital assets.” Tag pointed out that to derive and quantify value from this human asset requires human capital analytics—an entirely new class of systems that
aggregates HR data, financial, customer and supplier information for exploration, analysis and presentation. According to the author, human capital analytics supports rapid decision backed by quantifiable, accurate information and defensible forecasts, and in addition helps identify essential insights that allow organizations to proactively apply strategic human capital initiatives to meet corporate objective.28

Portugal

Bras and Rodrigues (2008) analyzed two competing approaches to accounting for a firm’s investment in staff-training activities: the accounting and labor economics approach which argues that no asset should be recognized from training activity, and the other the resources management approach, espoused by HRA, that advocates the recognition of an asset. The authors used document analysis and interviews in their attempt to understand the training phenomenon from the company’s point of view. The paper provides a case-based empirical analysis of accounting and human capital and asset recognition arguments, and clarifies the situation in which assets should be recognized as generated by training expenditures.29

28 ibid

29 Maria L.Bullen, ,Clayton State University, Kel-AnnEyler, Wesleyan College, Journal of International Business and Cultural Studies, p.11
Germany

Schmidt and Minssen (2007) explored to what extent human resource practitioners value and account for international assignments, and to relate these findings to the human resources cost accounting context. The authors drew on data from a quantitative survey among 415 German chemical companies and expert interviews with human resource managers from eight chemical companies. They found that human resource managers appreciate the positive effect of overseas assignments on personal development, but often underestimate the long-term benefits of an international assignment for the company.30

Canada

Jones (2000, p.9) writes that “Financial reporting systems need to account for people”.

The author indicates that the issue of providing the bottom line worth for training, wellness programs or employee satisfaction surveys remains an ongoing struggle with HR executives in Canada. The author refers to the standard recently published by the International Accounting Standards Committee (IASC) on Intangible Assets (IAS 38) and

30 Maria L.Bullen, Clayton State University, Kel-AnnEyler, Wesleyan College, Journal of International Business and Cultural Studies, p.12
comments on reports that investment and awareness of the importance of intangible assets have increased significantly in the last two decades. Furthermore, the author notes that while the standard is expected to have no direct impact on how Canadian chartered accountancy firms report and file returns (unless the firm is multi-national with offices in countries required to comply with IASC standards), it does give a global definition to intangibles. Jones (p.2) called upon researchers to team up with practitioners to create the knowledge base required for the development of a whole new measurement system for value creation that would operate parallel with the existing value realization measurement system. The author noted how the Canadian Performance Reporting Initiative Board is established to advance knowledge in the intellectual capital management and other areas critical to performance measurement, providing a golden opportunity for HR leaders to work together to ensure that people count.

Greece

Andrikopoulos (2005) attempted to bridge the gap between traditional financial theory and intellectual capital (IC) reporting by proposing a model where organizational priorities were set as the solution to a portfolio selection problem. The solution to this problem provides priorities for organizational change. The author notes that the quantitative approach in the paper requires extensive use of data on organizational
performance found in Intellectual capital statements, and that when it comes to human capital, Intellectual capital reporting works on results from HRA, which have been extensively applied in the academic and business communities. Andrikopoulos found that the model helps discover corporate strengths and uses them to set organizational priorities for IC value creation.\textsuperscript{31}

International contributions made to the field of HRA have resulted in the growth of both the field HRA and the wider study of human capital, human resource metrics, intellectual capital, and organizational management. Along with advances in the HRA theory, it is encouraging to note that some studies have been based on empirical research, case and field studies. Both the process and inclusion of HRA measures in human resource decisions are expected to have implications from the standpoint of providing measures that can compete with other investment proposals for the firm’s resources, and demonstrate that the long-term benefits from such investments can be positive. The movement toward fair value accounting seen in recent years, for both U.S. GAAP and for international standards indicates a more sophisticated approach to the measurement of assets, tangible as well as intangible. This might suggest a willingness to recognize the need for, and consider the measurement and use of HRA in future external financial reporting.

\textsuperscript{31} ibid
“Employees are the greatest asset”. Rensis Likert, a Social psychologist and pioneer of human resource accounting, advocated its inclusion in the formal accounting system.

As a minimum measure, it was suggested by Rensis Likert that the outlay on recruiting and training managers should be capitalized and amortized over the expected useful lives of the employees.\textsuperscript{32}

William Paton expressed the opinion that people are important assets of the organization. Pyle advanced a strong case for treating human beings as assets, when an enterprise invests heavily in creating human capabilities.

Adam Smith opined that wage rate would vary with variations in education, training and skill of workers. He included the skills and useful abilities of human beings in his concept of fixed capital.\textsuperscript{33}

\textbf{1.4 SCOPE OF THE STUDY}

Human Resource Accounting helps to incorporate the value of a firm’s human resources and its changes over time in accounting. Consequently, the net income (as conventionally defined) might be adjusted to reflect the changes in the value of human resources so as to

\textsuperscript{32} Santanu Ray, (2006), Human Capital Accounting and Valuation, ICFAI University, Hyderabad.

\textsuperscript{33} D.Prabhakara Rao (1986) \textit{Human Resource Accounting}, New Delhi, p4
avoid the illusion of profits. Changes in the value of human resources indicate the cost of the turnover of the employees. The trends in the human asset investment ratio (Investment in human asset/Total assets) illuminate the future profit performance.

HRA can be helpful in estimating and allocating resources to Training and Development, measuring the expected rate of return on the proposed investment and assigning people to various organizational roles and tasks. HRA can be of great assistance to the Management in the area of the conservation of human resources. Conservation means the process of maintaining the capabilities of people as individuals and the effectiveness of the human system developed by an organization. The efficiency of the Personnel and Administration can also be assessed through HR accounting. Variance analysis (difference between standard cost and actual cost for recruiting and training people) helps the management to identify the possible lapses in the personnel management functions.

The most important argument for disclosing changes in human asset value on the balance sheet is that it is the managerial, scientific and commercial personnel who determine the company’s future success. That is why investors and the public also have a vested interest in human resources accounting. Such a system has many applications (HRA software) in improving, planning and decision making in an organization.
HRA Research can help organizations to identify needs for changing policies, procedures, etc.

1.5 OBJECTIVES OF THE STUDY

Human Resource Accounting describes the process of measuring the cost or the value of an organization’s personnel and recognizing those amounts as capital investments\(^\text{34}\).

The following are the objectives of the study:
1. To study the concept of Human Resource Accounting.
2. To study the trends in Human Capital and Sales of sample Units.
3. To analyze the factors influencing the investment of Human Capital of sample units.
4. To collect the opinion of the managers regarding the concept of human resource accounting.
5. To offer suggestions to improve the human resource position of the sample units

1.6 METHODOLOGY

The study is an empirical research based on secondary data. It covers the automobile industry in Tamil Nadu. It deals with the level of investment on Human Capital of the sample units. The Lev and Schwartz Model has been considered for preparing the statement on

Human Capital. The time series data cover a period of 5 years starting from 2005-06 to 2009-10.

The Absolute Efficiency Indicator method, the Least square method, the Percentage analysis, the Ratio analysis, the Relative Efficiency Indicator method and the One Way ANOVA Technique have been applied. Besides a survey has been conducted through a well structured questionnaire in order to collect the opinion from the accounting experts for and against the HRA concept and its implementation.

1.7 SAMPLING DESIGN

The study is confined to the level of human resource accounting in the Automobile industries in Tamil Nadu. Seven Automobile units of the TVS & Sons Ltd, functioning in Tamil Nadu have been considered in this study. Stratified sampling (Random), being an internationally accepted sampling technique is adopted as the sampling technique. The Sample Units are described as under:

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<thead>
<tr>
<th>Name of Automobie company</th>
<th>Description</th>
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<tbody>
<tr>
<td>1. COIMBATORE</td>
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<td>2. MADURAI</td>
<td>- AC2</td>
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<td>3. NAMAKKAL</td>
<td>- AC3</td>
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<td>4. PUDUKKOTTAI</td>
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<td>5. SALEM</td>
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<td>6. TRICHY</td>
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<td>7. TIRUNELVELI</td>
<td>- AC7</td>
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</tbody>
</table>
1.8 GEOGRAPHICAL COVERAGE

Tamil Nadu is one of the major industrialized States in India. It contributes over 30% to India's automotive and auto component sectors. Tamil Nadu is one of the favourable destinations for IT Parks. The International Machine Tools and Auto Components Exhibition (ACMEE) was held in Chennai (from 18.06.2010 to 20.06.2010). Over 420 exhibitors displayed their latest products. These products included special purpose machines, hydraulics, instrumentation, low cost automation, cutting tools, welding equipment, auto components, etc. 21 countries participated in the exhibition including Austria, Australia, China, the US, Spain, Taiwan, the UK and South Korea. This Programme gave value addition to Tamil Nadu in the Automobile Sector. Hence, Tamil Nadu has been selected for this study.

1.9 PERIOD OF COVERAGE

The study covers a period of five Years starting from the Financial Year 2005-2006 to 2009-2010. Data relating to this period have been collected from the annual reports of the sample automobile industrial units taken for the study.

1.10 MEASUREMENT OF VARIABLES AND FRAME WORK OF ANALYSIS

The present study is an empirical research primarily based on Secondary Data. It has covered the automobile industries of TVS & Sons Ltd., functioning in Tamil Nadu. The present study has dealt with Human Capital trends of selected automobile units of the TVS & Sons Ltd., in Tamil Nadu. Accounting Data have been collected directly from the sample units. In the present study, The Lev and Schwartz Model has been used to determine the Human Capital.

The time series data in respect of the Human Capital of the sample units cover a period of five years from 2005-2006 to 2009-2010. They have been examined through the Recovery Ratio (RR) and the Human Capital Control Ratio (HCCR).

1.11. DATA COLLECTION AND PROCESSING

The accounting data collected from the study units are produced with the help of the proforma designed by the researcher. The proforma is used to prepare the Human Resource Accounting Statement for each Automobile Unit taken for the study.

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1.12. LIMITATIONS OF THE STUDY

The following are the limitations of the study:

i) The present study is confined to Automobile Industry situated in Tamil Nadu only.

ii) The time series data are only for five years starting from 2005-2006 to 2009-10.

iii) For arriving at human capital, payments relating to direct benefits such as salaries, bonus, exgratia, incentives to staff and wages, bonus, exgratia to workmen and indirect benefits such as contribution to statutory funds have alone been considered in this study.

iv) Future revision in direct and indirect benefits and the probability of promotional chances of employees have not been considered in this study.

1.13 SCHEME OF REPORT

The report of the study is presented in Seven Chapters.

The first chapter deals with the design of the study. It covers the introduction, a precise statement of the problem, review of literature and the scope and objectives of the study. Besides, it includes the hypothesis, methodology and tool, sampling design, geographical coverage, period of coverage, filed work and collection of data, data processing, measurement of variables and the construction of the frame work of analysis, limitations and scheme of reports.

The second chapter traces the origin, evolution and growth of the Automobile Industry.

The third chapter deals with human resource accounting, meaning, benefits, scope, various approaches and methods of accounting human resources, the treatment and different views at the national and international
levels regarding the reporting of human resource values, benefits and limitations.

The fourth chapter deals with Trends in Human Capital and Sales calculated with the help of the Absolute Efficiency Indicator Method and the Least Square Method.

The fifth Chapter covers the distribution of total expenses, and percentage analysis with regard to staff cost and workmen cost, application of Recovery Ratio (RR) and Human Capital Control Ratio (HCCR), application of the Relative Efficiency Indicator method and analysis of the impact of skill levels of employees on human capital by using the ONE WAY ANOVA Tool.

The sixth chapter covers the survey method for getting the opinion of accounting experts and employees on Human Resource accounting, uniformity in the calculation of Human capital and implementation of HR accounting and views about HR Accounting.

Chapter seven presents the summary and findings of the study and offers suggestions for improving the performance of the study units.

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