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REVIEW OF LITERATURE

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STATEMENT OF THE PROBLEM

OBJECTIVES

HYPOTHESES

RESEARCH METHODOLOGY

RESULTS & DISCUSSION

FINDINGS

RECOMMENDATIONS/SUGGESTIONS

CONCLUSIONS

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CONTRIBUTIONS TO BOOKS

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

JOURNAL AND OTHER ARTICLES

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

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IMPACT OF NEW REFORM ON PRODUCTIVITY OF ETHIOPIAN COTTON TEXTILE INDUSTRY

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ABSTRACT

Although the concept of productivity is a widely used subject by politicians, economists, engineers, and media, it is often vaguely defined and poorly understood. In practice, this lack of knowledge results in productivity being ignored by those who are preaching about it in order to influence production process. Thus, the objective of this study is to discuss the basic meaning of the term "productivity" and its relation to employees' motivation and performance. Moreover, the study attempted to see whether a new reform has brought about any significant change on employees' performance and resulted in higher productivity than ever before. To this effect, the study employed secondary data collected from various sources as may be shown under methodology. The collected data were substantiated using structured interview to officials at different posts. As the study used two matched samples pre- and post- liberalization periods, a paired t-test is used to verify the set hypothesis using Microsoft Office Excel for computations. Finally, the study results indicated that a new economic reform has brought about a significant change on productivity of employees of Ethiopian Cotton Textile Industry.

KEYWORDS
Productivity, Liberalization, Motivation, A paired t-test.

INTRODUCTION

The current global business arena has become highly competitive and competitiveness has become a major focus area of firms and companies across the globe (Porter, 1990; IMD, 2006; WEF, 2007; Pillania, 2007; Pillania, 2008). Business organizations across the world are under increasing pressure than ever to stay dynamic and responsive in all their competitive frontiers because of a new economic reform called 'liberalization'. Organizations have to become efficient and effective in their operations in order to survive, sustain and grow in the dynamic environment. They have to become more productive than their rivalries in the market place. It has to design strategy to maintain a competitive advantage in a competitive market.

According to Rastogi (1988), productivity represents decreasing inefficiency and increasing effectiveness of the organization thereby honing a competitive edge. As added by Rastogi, productive efficiency is of crucial importance for managing inflation by lowering costs of goods, services, and commodities consumed by people. Productivity is the essential prerequisite for increasing exports, achieving export led growth, attaining techno-economic development and generating wealth for investment, consumption and social welfare. This research work is an attempt to study the impact of a new economic reform on productivity with particular reference to Ethiopian Cotton Textile Industry.

REVIEW OF LITERATURE

In this part, the study attempted to discuss related literature review written on productivity by different authors.

The concept of productivity, generally defined as the relation between output and input, has been available for over two centuries and applied in many different circumstances on various levels of aggregation in the economic system. It is argued that productivity is one of the basic variables governing economic production activities, perhaps the most important one (H. Singh et al, 2000).

In fact, productivity is frequently discussed by managers but rarely defined, often misunderstood and confused with similar terms, and seldom measured in an appropriate way, leading to productivity being disregarded or even to that contra productive decisions are taken. According to Koss and Lewis, remarkably many managers who everyday make decisions about improving plant efficiency and effectiveness do not know how to answer the simple question: "*what do we really mean by productivity*?"

Nevertheless, if we do not fully understand what productivity is, how can we decide what productivity measures to use? How can we interpret them correctly? How can we know what action to take to improve productivity? Evidently, the confusion surrounding the subject makes it increasingly necessary to further investigate and emphasize the basic meaning of productivity. Hence, an improper definition of productivity will often result in that action is being misdirected (Forrester 1993).

According to Rastogi (1988), productivity is a multifaceted phenomenon. It denotes an increasingly efficient and effective use of resources of land, labour, capital, and technology. It subsumes a number of diverse aspects like: i) optimum utilization of available and potential resources, assets, and capacity, ii) effective management of projects without time and cost escalations iii) waste avoidance in the use of materials, machines, energy, time and other inputs, iv) labour cost and/or higher quality goods and services, v) modernization of plants, and machinery, vi) development of technology and pursuit of innovation, vii) dedicated managerial leadership and viii) full utilization and exercise of human talents, creativity and skills. All these lead to the creation of national wealth.

According to Rastogi, productivity and innovation are crucial for the socio-economic development of nations. As argued by him, the grim pressures of unemployment, underdevelopment, inflation and poverty, and the resultant unrest and schisms within a society are largely the consequences of its low and/or declining productivity.

When productivity activities are managed intelligently, diligently, and harmoniously, a nation prospers. The reverse is also true. If resources are not managed and utilized properly and efficiently, the cost of using the resources will be high, which is the contradictory performance to productivity. Thus, the poverty of nation is an outcome of weakness in the organization and management of their production resources (V. Mariappan and K.Chidambaram 2003).

Productivity stands for composite efforts of all the factors contributing to production. So productivity indicates the overall efficiency of the organization. The usefulness of productivity indices has been recognized in all industries around the world. Michael Porter (1992) of Harvard University says the only meaningful concept of competitiveness at the national level is productivity.

Further, he states "the principal goal of a nation is to produce a higher and rising standard of living for its citizens. The ability to do so depends on the Productivity with which a nation's labour and capital are employed. A nation's standard of living depends on the capacity of its companies to achieve higher levels of productivity, and to increase productivity over time.

Production, productivity, innovation, organization, management and employment are social processes required to manufacture product. As stated by Rastogi, they involve the participation of social actors, viz, industrialists, businessmen, managers, engineers, technicians, workers, farmers, political leaders, scientists, planners, policy makers, bureaucrats, administrators, accountants, salesmen, clerks and so on. According to him, productivity is strongly related to the *culture of society and motivation of employees*. A motivated employee uses resources economically, efficiently, and effectively with great care for resources and processes. Culture also plays a determinant role in directing workers to work- place and making them to use resources efficiently and effectively. Culture also initiates and motivates society for a higher performance.

"Productivity is the relationship between outputs of goods and services and the inputs of the basic resources- labour, capital and natural resources" (Kendrick, 1980). Change in output per unit of measured inputs is change in productivity (Dension, 1962). Growth in productivity amounts to conservation or saving in the

use of scarce resources per unit of output. It serves to moderate inflation by offsetting rising wage-rates and other input prices; and it increases the international competitiveness of domestic production. Krugman (1990) well captures the importance of productivity and economic growth in determining the long-run fates of nations: "Productivity is not everything, but in the long-run it is almost everything. A country's ability to improve its living standard over time depends almost entirely on its ability to raise output per worker." The danger of absence of productivity growth in the economy is well explained by Brahmananda (1982: 4). As he puts, "in extreme cases, additional capital accumulation can not help at all if the incremental response of gross output to gross inputs has already fallen so low in ratio sense, as to make incremental accumulation non-viable. In such a context without productivity improvements and of the right sort, sustained over a good length of time, the economy will not be able to depend even upon growth of factor quantities as a source of increasing output. Without productivity improvement such an economy will not grow at all." As it was already said, productivity measures the total quantity of output per unit of input. Productivity growth indicates the rate of growth of the level of productivity. Slow productivity may stagnate a country's real income.

In most cases inputs are divided into two, i.e., capital and labour. In some recent studies on Indian manufacturing three inputs approach (capital, labour and materials) is observed. The process that takes the output in relation to each input is named as partial or single factor or average productivity (Tora, 2001).

In a situation where capital-labour ratio is rising over time, the analysis of partial productivity changes would overstate the increase in labour productivity and understate the increase in capital productivity. To examine the existence of such phenomena the analysis should be extended to capital-labour ratio (Ahluwalia, 1991: 50).

As stated by Ahluwalia, any growth in output, which is not attributed to some index of input growth, is regarded as due to change in technology, or productivity. According to Kendrick, productivity may be affected by the change in the ratio of utilization of fixed plant or of overhead labour as output rises and falls in the short-run. But in the long -run total factor productivity rises because of improvements in the technology and organization of production including economies of scale.

The four groups of arguments that relate liberalization to growth of productivity and output are: a) reduction of inefficiency b) better exploitation of scale of economies c) superior technology embodied in imported inputs, and d) faster rates of technological 'catch up' in expanding sectors of comparative advantage (Tora, 2001). According to Tora, partial factor productivity analysis includes labour productivity (Q/L), capital productivity (Q/K), Material productivity (Q/M) and capital intensity (K/L).

According to V. Mariappan and K. Chidambaram, productivity is often confused with increased production, and *profitability* is also mistaken as a measure of productivity. Higher production does not mean higher productivity. Higher productivity can be achieved only by better utilization of resources. Though higher productivity results in cost reduction and thus favors profitability and competitiveness, profitability is not a measure of productivity as some times profit can be achieved while resources are inefficiently and ineffectively utilized. They also added that poor capacity utilization, outdated technology and machinery, poor maintenance and excess manpower are indicators of inefficiency in the organization. Inefficient utilization of resources does not lead to productivity.

As many writers do agree to, productivity is the result of the performance of people. Performance of people depends on how they are motivated to perform that specific type of work. Performance is determined by the amount of effort, ability and role perception of the individual. If an individual is lacking ability and/or has wrong role perception, his performance is found to be unsatisfactory in spite of his putting great efforts (Singh and Chhabra, 1996).

Theories of motivation have indicated that people are motivated by various needs. These various needs are motivated by different satisfiers. If the organization is in a position to know what motivates its workers and provides rewards or incentives based on their needs and wants, it will definitely increase their productivity. However, there is an argument among researchers that since there is no guarantee that giving someone a reward will lead to increased effort or that increased effort means better performance that will lead to higher productivity, because productivity is a function of many elements of which reward is only one of the factors.

In most cases it is assumed that job satisfaction and productivity are always interrelated, but some findings revealed that this thought is not necessarily seen a correct one since relationship between satisfaction and productive efficiency can not be taken for granted. Assumption to increase productivity of the employee might be possible through satisfying their needs. However, findings have shown doubt about the possibility of such an assumption.

The public opinion index of May (1974) for industry in the USA reported that only a modest tendency for job satisfaction to be related to productivity. Of the workers low or medium in satisfaction, only 26 percent were in the lower half of productivity and 81 percent in upper half. As Gadel and Krielt (1952) studied among IBM operators, their study showed that only a modest tendency of job satisfaction to be related to working efficiency or performance.

As it is clearly seen from aforementioned discussions, productivity signifies a continual striving towards the economically most efficient mode of production of goods, commodities and services needed by a society. Hence it constitutes an important requirement for raising the living standard of the people in a nation. The higher levels of per capita incomes of developed countries reflect higher levels of productivity. Low and stagnating per capita incomes in underdeveloped countries analogously reflect low levels of productive capability (P.N. Rastogi, 1988: 17). Productive efficiency is of crucial importance for managing inflation by lowering the costs of goods, services and commodities consumed by people. Productivity is the essential prerequisite for increasing exports, achieving export led growth, attaining techno-economic development and generating wealth for investment, consumption and social welfare (Rastogi, 1988).

Growth in productivity may be achieved in two ways: 1) improvement in efficiency which leads to higher output even with a given state of technological knowledge. Higher output results from superior organizational methods, improved management practices, higher motivation and competence of workers, accumulation of gains from learning and experience, more intelligent mechanisms for adaptive and anticipatory planning, and a better information base for policies and decisions, 2) higher effectiveness of new production technologies resulting from innovation and technical advance. This leads to quantum jumps on output levels, and/or new and better types of output. The given input level in relation to output may even decline in terms of cost and quantity. The two kinds of productivity growth may interact with each other in a mutually supportive manner (Rastogi 1988).

Productivity in general sense represents a close integration of effectiveness and efficiency. Effectiveness relates to achievement of performance results. Efficiency relates to optimal utilization of resources. Productivity thus denotes the relationship between the use of resources and the results of that use. Innovation and technical advance serve to amplify the level of effectiveness in both the use of resources and the results of that use (Rastogi 1988).

Gitlow and Hertz (1983) have given the following guidelines for the top management to improve productivity: 1) create an institution that a constant purpose and a long-term top management commitment, 2) breakdown barriers between departments, 3) create an environment in which people are not afraid to report problems, 4) defuse built-in levels of defects, mistakes, proper materials and so forth, 5) do not blame productivity and quality problems on the workers.

For the growth of the economy it is necessary that industries should be productive. According to A. Vijayakumar and M. Krishnaveni, the study of factor productivity is an important aspect of the analysis of development since it quantifies the contribution of the different factors of production. Higher growth can be attained through better utilization of available resources, i.e., capital and labour.

In Ethiopia major economic reforms have been undertaken after liberalization since 1992 with the objective of increasing productivity and competition among the companies. The new policies have liberalized many government controls on production capacity, imported capital goods and intermediate inputs making them cheaper and more accessible to both domestic and international competition. These reforms have altered the economic environment in which the textile industry operates. In this part, the attempt is made to test the impact of liberalization on employment, productivity and motivation.

According to Vijayakumar and Krishnaveni, the study of the factors of production is important in view of limited availability of the factors of production, particularly capital. According him, depending upon the nature of the product and the process of production, different industries employ different combinations of the factor inputs.

Ethiopian Government designed the policy of Agriculture-led economy to foster poverty reduction and to bring about economic development in the country by increasing the productivity of labour and land that it has relatively in excess capacity. According to the Government of Ethiopia (2002), there is relatively excess labour and land as compared to capital which is in acute scarcity. There is land in excess and labour wage rate is also low as compared to other African countries. Textile industry also follows labour intensive technology to minimize unemployment in the country.

According to Vijayakumar and Krishnaveni, in labour intensive industries using unskilled and/or semi-skilled workers with a relatively low wage rate, the emphasis is on increasing the productivity of capital, which is in the scarcity. On the other hand, in capital intensive industries, where there is labour shortage, the prime concern is to increase labour productivity.

According to Mariappan and Chidambaram (2003), a review of productivity performance of the textile industry presents a disturbing picture of poor capacity utilization, outdated technology and machinery, poor maintenance and excess human power. The situation calls for drastic restructuring to improve the economic viability of the industry.

Productivity stands for composite efforts of all the factors contributing to production. So productivity indicates the overall efficiency of the organization. The usefulness of productivity indices has been recognized in all industries around the world.

Regarding the productivity of the industries, Michael Porter of Harvard University says the only meaningful concept of competitiveness at the national level is productivity. Further, he says, "the principal goal of a nation is to produce a higher and rising standard of living for its citizens. The ability to do so depends on the productivity with which a nation's labour and capital are employed." Moreover, according to him, a nation's standard of living depends on the capacity of its companies to achieve higher levels of productivity.

As stated by Mariappan, productivity is often confused with increased production. Higher production does not necessarily mean higher productivity. Higher productivity can be achieved only by better utilization of resources. He adds, though productivity results in cost reduction and thus favors profitability and competitiveness, sole profitability is not a measure of productivity.

Productivity in textile industry is getting drained mainly due to under –utilization of machines, inefficient working, poor machinery maintenance, over-spinning, lack of modernization, power shortage and unhealthy labour and management relations (Gulrajani 1982). He adds that the liberalization of the economy dramatically and drastically changed the industrial climate as well as government policy with regard to public sector undertakings.

RESEARCH METHODOLOGY

The study used both primary and secondary data. However, the main data that had been used in this study were secondary data from secondary data sources. Secondary data were used to compare the time period: pre- and post-liberalization to see the effect of liberalization on the variables under investigation. To this effect, it used written information that includes the time period between 1981 and 2004.

The data were collected from the following sources: Central Statistical Agency (CSA), Ministry of Trade and Industry, Ethiopian Export Promotion Agency, Cotton Textile Factory Libraries, Annual Government Reports on Industry, National Bank of Ethiopia, Institution of Ethiopian Studies at Addis Ababa University and Ministry of Foreign Affairs. The data that were not sufficient from the secondary sources have been substantiated from the primary sources by conducting structured interview to the pertinent officials at different levels of posts in the industry. Therefore, the focus of study was on secondary data.

This is comparative study which made use of Analytical as well as Empirical research. Analytical research because the study had to use facts or information already available and analyzes it to arrive at sound conclusions. It also used empirical research because, in such a research, the researcher must provide himself with working hypothesis and works to get enough facts (data) to prove or disprove the hypothesis. Such a research is appropriate when proof is sought that certain variables affect other variables in some way (Kothari, 1985).

The study attempted to see whether liberalization as an economic reform has brought about any significant change on productivity of Ethiopian Cotton Textile Industry, taking time period pre- and post-liberalization. To this effect, the study covered the time period between 1981 and 2004. This time period was divided into two equal portions as pre- and post-liberalization periods. In assessing the impact of liberalization, the study followed pre- and post-liberalization comparison, taking time period 12 years before liberalization and 12 years after liberalization. Through empirical analysis on the variables stated in hypothesis part, it is believed that it would be possible to gauge the success or failure of the new economic reform launched since 1992 in Ethiopian Cotton Textile Industry.

Various statistical tools depending on their appropriation for the study were used in the empirical analysis. Hence statistical tools such as ratios, correlation analysis, percentages, measures of central tendencies, graphs and charts are used to evaluate the data as the study is based on time series data in order to test the impact of liberalization on productivity of Ethiopian cotton textile industry. In addition, as the study is employing two matched samples, a paired t-test is used to verify the set hypotheses using Microsoft Office Excel for all computations in the study.

DATA ANALYSIS

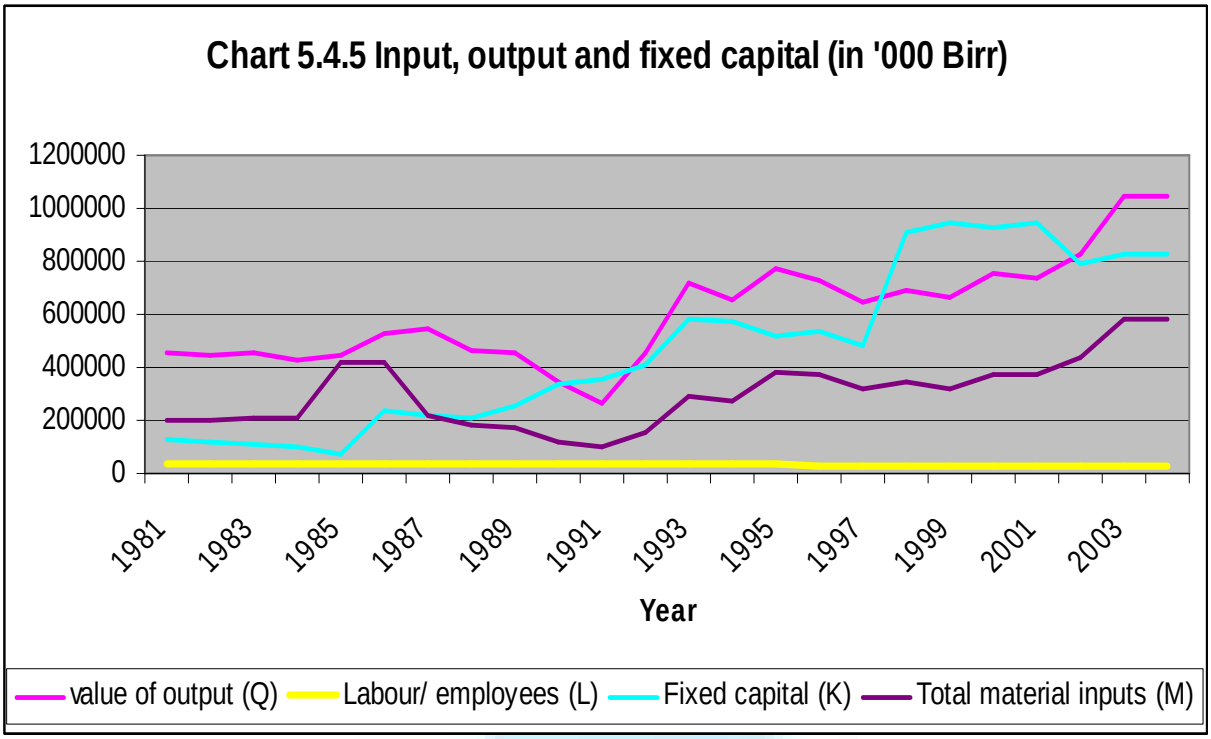
According to the Managing Director of Hwassa Branch of Cotton Textile Industry, "the impact of liberalization on employment is significantly high. Because of economic reform of liberalization, now the industry is profitable. Consequently, it is paying higher remuneration to its employees. Because of compatible payment, moral of each employee is boosted up and raised, and thus each employee is exerting maximum effort to the operation of the organization. This high performance associated with efficiency in operation of resources is believed to have increased productivity and profitability".

TABLE 5.4.6: OUTPUT AND INPUT IN COTTON TEXTILE INDUSTRY [Labour in number and the rest in '000 Birr (1981-2004)]

Year	value of output (Q)	Labour/ employees (L)	Fixed capital (K)	Total material inputs (M)
1981	452014	34063	126094	195815
1982	444904	34793	121175	195815
1983	452892	39528	108133	206264
1984	428138	35770	99805	206264
1985	442059	35782	75554	419141
1986	524870	39449	233382	419141
1987	545473	40863	222431	214695
1988	460638	40455	205926	181058
1989	451925	33073	251049	169245
1990	349055	34708	339243	117204
1991	268067	33974	357782	95821
1992	454095	33497	412167	156930
1993	722131	34449	579834	290538
1994	651181	34903	571113	269977
1995	770969	32441	516680	385248
1996	727477	31797	533834	373847
1997	646987	29283	478109	319876
1998	687798	29504	906097	344700
1999	665991	27499	941666	315928
2000	755636	28004	926328	369033
2001	733012	26054	941887	374434
2002	825018	26216	793203	440561
2003	1042955	26706	829339	581699
2004	1042955	26786	829339	581699

Source: Central Statistical Agency (1981-2004)

CHART 5.4.5 PRESENTS GRAPHICAL EXPRESSION OF INPUT, OUTPUT & FIXED CAPITAL IN ETHIOPIAN COTTON TEXTILE INDUSTRY FROM 1981-2004 (IN '000 BIRR)



Source: Table 5.4.6

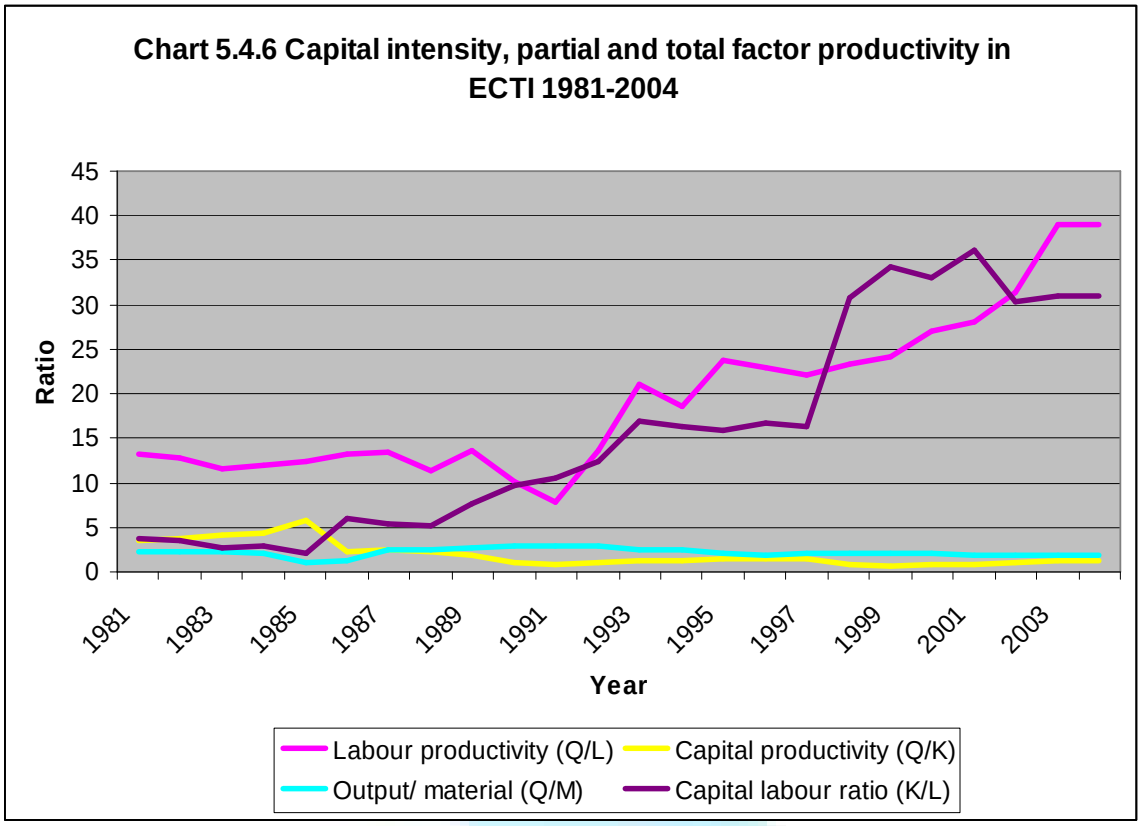
As shown in Chart 5.4.5, value of output is greater than the value of material input and labour input for the entire period of time, which is very normal situation. However, before liberalization the output and inputs were declining up to 1992, except capital input. After 1992 the output and inputs started increasing up to 2004, except labor. Labour was declining after 1989-2004 because of downsizing and privatization effect, which started taking place after 1995/6. Fixed capital has been gradually increasing starting from the beginning up to 2004. On the other hand, the number of employees, as it can be seen from Chart 5.4.5, has been increasing up to 1988 and after 1989 it started declining because of civil war, which took place between ex- government and liberation front up to 1991. Because of that civil war, many private firms quitted their operations by dismissing their employees and closing their firms. Many of public sector textiles were also closed in the city of Asmara, Eritrea. Declining continued also after 1992 because of privatization effect in the public sector.

TABLE 5.4.7: CAPITAL INTENSITY, PARTIAL AND TOTAL FACTOR PRODUCTIVITY IN COTTON TEXTILE INDUSTRY (1981-2004)

Year	Labour productivity (Q/L)	Capital productivity (Q/K)	Output/ material (Q/M)	Capital labour ratio (K/L)
1981	13.26994	3.584738	2.308373	3.701788
1982	12.78717	3.671582	2.272063	3.482741
1983	11.4575	4.188287	2.195691	2.735605
1984	11.96919	4.289745	2.07568	2.790187
1985	12.35423	5.850901	1.054678	2.111509
1986	13.30503	2.248974	1.252252	5.916043
1987	13.34882	2.452325	2.540688	5.443335
1988	11.38643	2.23691	2.544146	5.090248
1989	13.66447	1.800147	2.670241	7.590754
1990	10.0569	1.028923	2.978183	9.774202
1991	7.890357	0.749247	2.797581	10.53105
1992	13.55629	1.101726	2.893615	12.30459
1993	20.96232	1.24541	2.485496	16.83166
1994	18.65688	1.140196	2.411987	16.36286
1995	23.76527	1.49216	2.001228	15.92676
1996	22.87879	1.36274	1.945922	16.78882
1997	22.09429	1.353221	2.022618	16.32719
1998	23.31203	0.759078	1.995352	30.71099
1999	24.21874	0.707248	2.108047	34.24365
2000	26.98315	0.815733	2.047611	33.07842
2001	28.13434	0.778238	1.957653	36.15134
2002	31.47002	1.04011	1.872653	30.25645
2003	39.05321	1.257574	1.792946	31.05441
2004	38.93657	1.257574	1.792946	30.96166

Source: Calculated by present author from Table 5.4.6

Chart 5.4.6 presents graphical expression of capital productivity, labour productivity, material productivity and capital labour ratio or capital intensity from 1981-2004.



Source: Table 5.4.7

For the time period 1981 – 1992 (pre-liberalization period), labour productivity was lower, because of poor capacity utilization, outdated technologies and machineries, poor maintenance and excess manpower. This made the industry oblivious to the inefficient utilization of resources thereby increasing the production cost. Thus, profitability was low. However, after liberalization labour productivity increased in such a way that it had never seen before (Table 5.4.7 and Chart 5.4.6).

This labour productivity was attained by the industry by its ability to raise output per worker. For post-liberalization period, output increased by 75.8 percent whereas labour decreased by 18.88 percent. This clearly shows the saving of labour after liberalization. If it is not possible to raise output per worker, there will not be any productivity in the industry, and therefore it will not contribute to the growth of economy.

According to Tora Abebe (2003), high labour productivity can be achieved, among other things, for the following three reasons: 1) labour can become more skilled over time embodying greater amount of human capital, 2) new capacities can come up using better technologies that increase the quantity of output produced from the same amount of inputs, including labour, 3) the new techniques that substitute capital for labour can also increase output per worker.

Capital labour ratio was low before liberalization, up to 1992. Post-liberalization (1993-2004), however, capital labour ratio in the industry started to increase very fast. The increase has been realized after liberalization because the amount of capital in the industry was increased by 246.58 percent and it became excess. In contrast, the number of employees in the industry was decreased by 18.88 percent through downsizing or restructural adjustment. In other words, capital labour ratio is increasing because the increased capital is being divided by the decreased number of labour.

The miraculous event took place in capital productivity and material productivity. As it has been seen so far with labour productivity and capital labour ratio, they were decreasing before liberalization and increasing tremendously after the reform of liberalization. However, the case of capital productivity and material productivity was completely different after liberalization. Capital productivity, before liberalization, was decreasing because the utilized capital was lower than which has been used after liberalization. When low amount output is divided by low capital, obviously the quotient will be low. But after liberalization, the amount of capital used in the industry increased tremendously (by 246.58 percent) with the hope of yielding wealth in the near future. For example, the capital used for land development and construction purpose will not yield the output until they are completely become operational. Until then, the money used on them is believed to be idle as it is not generating any income in the short-run. Therefore, capital productivity is low after liberalization, because the existing output is being divided by the increased amount of capital. The amount of capital has been increased for capital investment and acquisition.

The other completely unexpected event which was found decreasing after the reform of liberalization was material productivity. As shown on Table 5.4.7 and Chart 5.4.6, material productivity was declining after liberalization. It was declining because of such reasons as obsolete machines, high material cost, low yield of material, low quality product and low demand for it, and substitution effect. Because of these reasons low material input is not yielding high output per used material input. Therefore, material productivity has been decreasing after liberalization (Table 5.4.7 and Chart 5.4.6). The value of output proved that it is decreasing 0.9 times per worker (75.8/80.32). This is because, material input increased by 80.32 percent after liberalization whereas output increased by 75.8 percent.

From this it can be concluded that the impact of liberalization was significant on productivity of Ethiopian Cotton Textile Industry. The impact was in increasing for labour productivity and capital intensity. However, it was in decreasing for capital productivity and material productivity after liberalization.

FINDINGS

- Before liberalization, labour productivity was decreasing up to 1992. After 1992, however, labour productivity started increasing because more output was produced per worker than ever before.
- Capital labour ratio/ Capital intensity/ also increased after liberalization because more capital was employed in expectation of generating or yielding more wealth in the near future.
- Capital productivity was decreasing because more capital was used for capital investment and capital acquisition, which could actually not yield output in the short-run. Capital has been acquired beyond required level and hence used inefficiently. Thus, idle capital is resulted in the decline of capital productivity after liberalization in the short-run. But in the long-run when capital investment starts yielding output, the situation may be reverse and the graph which was running downward can run upward in the long-run. Until that point of time, the conclusion may be, the industry has to arrest further capital acquisition and expand labour and material use.

- Material productivity was also declining after liberalization, showing inefficient utilization of material to produce output. This happened because of poor capacity utilization, outdated technology and machineries, poor maintenance of plants because of the shortage of spare parts, low skill of workers, high cost of material input, low yield of raw materials, low quality of raw material and the like.

CONCLUSION

It has been proved that liberalization has brought about a significant impact on productivity of Ethiopian Cotton Textile Industry and that impact was in increasing for labour productivity and capital intensity. However, a change resulted in decreasing for capital productivity and material productivity for the reasons discussed here above. Therefore, the industry has to arrest further capital acquisition and expand labour and material use. The outdated machineries must be replaced by new ones. Inefficiencies must be eliminated and resources must be used effectively. All bottlenecks resisting productivity must be eliminated by the management of industry. Government should assist the management of the industry in importing new advanced technologies to make the industry productive and profitable.

DIRECTIONS FOR FUTURE RESEARCH

As indicated under methodology, the data were collected mainly from secondary sources. As it was not collected for the research under investigation, and as it might be full of errors and be exposed for prejudice and bias on the part of earlier investigator, the finding achieved through secondary data must be reproved using primary data. This option is open for further investigation.

The data for unorganized sector of the industry is not available at the Ministry of Trade and Industry at all. Thus, the study of this research does not include the data of unorganized sector. This is also left open for the researchers who would like to further investigate the sector.

Moreover, similar studies have to be undertaken in all industrial sectors to see the impact of liberalization on their operation and productivity.

REFERENCES

Abebe, T., Impact of Indian Economic Liberalization on Indian Cotton Textile Industry, Department of Economics, Andhra University, Chinnawaltair, 2001, P.235-237.

Singh, h., A Review and Analysis of the State or the Art Research on Productivity Measurement, Industrial Management and Data System, Vol. 100, 2000, pp. 234-241.

Koss, E. and Lewis,D.A., 0"*Productivity or Efficiency Measuring What We Really Want*", National Productivity Review, Vol. 12, 1993, pp. 273 – 95.

Forrester, J.V., "*Low Productivity: It is a Problem or a Merely Symptom*?" Handbook for Productivity Measurement and Improvement, Cambridge: Productivity Press, 1993.

Rastogi, P. N., *Productivity, Innovation, Management and Development*, Sagi Publications, New Delhi, 1988.

Mariappan, V. and Chidambaram,K., *Public Sector Textile Mills*, Economic and Political Weekly, April 19,2003, p.1551.

Porter, M., Quoted in G S Gokhale, *'Role of productivity in Textile Mill Industry'*, Productivity, Vol. 33, No. 1, April-June, 1992.

Kendrick, W. J., *An Introduction to the Dynamics of Productivity Change*, by the Johns Hopkins University press, Second Printing, 1980.

Dension, E., *The Source of Economic Growth in the United States and the 0Alternatives Before US*, New York, 1962.

Krugman, P., *The Age of Diminished Expectations*, Cambridge Mass, MIT Press, 1990, P. 9.

Brahmanada, P.R.*„ Productivity in Indian Economy Rising Inputs for Falling Outputs*, Himalya Publishing House, November 1982, p.2.

Ahluwalia, I.J., *Productivity and Growth in Indian Manufacturing*, Oxford: Oxford University Press, 1991, (Second Impression in 1992).

Kendrick, W.J. and Beatrice, N.V., New *Development in Productivity Measurement and Analysis*, Chicago: The University of Chicago Press, 1980.

Singh, B.P. and Chhabra, T.N., "Organization Theory and Behavior", J.K. Kapur, Dhanpat Rai and Sons, Delhi, 1997.

Gitlow, H.S., and Hertz, P.T, *Product defects and Productivity*, Harvard Business Review, Sept. –Oct. 1983, No. 5.

Vijayakumar, A., and Krishnaveni, M., *Management and Labour Studies*, Vol. 30, No. 2, May 2005, p. 150-151.

Federal Democratic Republic of Ethiopia, *The Industrial Development Strategy*, August 2002, p.2-3

V. Mariappan and K. Chidambaram, Public Sector Textile Mills, Economic and Political Weekly, April 19, 2003, p. 1551.

Ibid, p. 1551-52.

Porter, M., Quoted in G.S. Gokhale, *Role of Productivity in Cotton Textile Mill Industry*, Productivity, Vol. 33, No. 1, April –June 1992.

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