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Editorial Review Board

Use of Telephone for Participation and Empowerment by Rural and Urban Women in India

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'More than at any other time in history, the world is poised to leverage innovation to improve the lives of poor women and empower them to realize their potential'.
- International Center for Research on Women, 2009

Placing women participation and empowerment on priority is considering them to be the integral thrust in the engines of development. Since the 1990's women have been identified as key agents of sustainable development and women's equality and empowerment are seen as central to a more holistic approach towards establishing new patterns and processes of development that are sustainable. The World Bank has suggested that empowerment of women should be a key aspect of all social development programs (World Bank, 2001). Since the 1980's the Government of India has shown increasing concern for women's issues through a variety of legislation promoting the education and political participation of women (Collier, 1998). This article is an attempt to study why women depend on telephones to use it as their ready-to-use tool of communication. Wilbur Schramm (1964) defines communication as the process of 'sharing'. We live together by sharing our ideas, awareness, and experiences and to a larger extent our culture. The technological innovations have brought a sea change in inter-personal communication media. Telephones are used for socializing, which leads to commonality. Commonality is collective understanding, which is established by communication. It promotes participatory attitude that fosters empowerment which is achieved when laser sharp priorities are identified and implemented collectively. Telephones are potentially an invaluable economic asset to any nation and an important tool for strengthening social ties. They have not only reduced anxieties and improved socializing but increased their participation towards empowerment.

Telephone in India

Supported by recent deregulation and liberalization of telecommunications laws and policies, India has emerged as one of the fastest growing telecom markets in the world; with more than 13 million subscriber additions per month. In terms of the number of subscribers, India is the second largest telecom market in the world, with about 937.7 million subscribers as of September 2012. The sector continued its growth even in the difficult times of the global economic crisis in 2008 and witnessed a continuous subscriber growth in the past years. As of September 2012, India had a teledensity of 77 percent, hinting at the significant market potential yet to be tapped. The next phase of growth in subscriber base is expected to come from rural areas, as the urban teledensity has reached about 161.13 percent as against the rural teledensity of 40 percent.

Table – 1: Highlights on Telecom Subscription Data as on September 2012

Particulars	Wireless	Wire line	Total
Total Subscribers (Millions)	906.62	31.08	937.70
Monthly Growth (%)	-0.19%	-0.40%	-0.20%
Urban Subscribers (Millions)	571.70	23.99	595.69
Monthly Growth (%)	-0.60%	-0.31%	-0.59%
Rural Subscribers (Millions)	334.92	7.10	342.01
Monthly Growth (%)	0.51%	-0.72%	0.48%
Overall Teledensity*	74.49	2.55	77.04
Urban Teledensity*	154.64	6.49	161.13
Rural Teledensity*	39.52	0.84	40.36
Share of Urban Subscribers	63.06%	77.17%	63.53%
Share of Rural Subscribers	36.94%	22.83%	36.47%

Source: TRAI Report 2012.

Women in Indian Society

The place of women in society is one of the fundamental aspects of any civilization because it concerns half the number of human beings constituting any social group. The relationship between society and woman is so vital that it affects almost all other aspects of human activity. Above all, woman is the mother of the race and the liaison between generations. It is the women who sustain the growth of society and mould the future generations. In the emerging social scenario, women are needed to be considered as the source of power and symbol of progress. Indian culture attaches great importance to women, who constitute almost half of its population. Therefore, India has been symbolized as “Mother India”, keeping in view the exemplary qualities of women, viz. patience, love, affection, endurance, sympathy and generosity.

The Indian woman, unlike her western counterpart, has many faces and moods. She can be elitist, bold, assertive, rejected, dejected and exploited. She should be liberated from the shackles of exploitation, subjugation, superstition, degradation, illiteracy and injustice. The three issues of Information, Education and Communication (IEC) are vital for the uplifting women.

The status of women in India had undergone many changes down the ages. In the Vedic times, the women enjoyed a high status in society. According to the ancient Hindu texts and tradition, until about 500 B.C. women in India enjoyed considerable freedom in choosing their mates and taking part in public functions. Especially the upper class women enjoyed equal rights with men in religious matters. They were well educated and married late. Divorce and widow-remarriages were acceptable. But during the next thousand years, the position of women position deteriorated gradually. Educational and religious parity was denied to them and widow-remarriage was forbidden. Depicting the laws of Manu, the famous Hindu philosopher, regarding the role of women, Basham (1959) said, "she should do nothing independently even in her own house. In childhood she should subject to her father, in youth to her husband and when her husband is dead to her sons, she should never enjoy independence". Keeping these observations in mind, Sherry Ortner Beauvoir (1974) suggested, "Women have everywhere been devalued in relation to men and that such devaluation is linked to a universal association of women with inferior nature in contrast to the association of men with superior culture".

Table – 2: Growth of Female Population in India 1901-2011 (in millions)

Year	Total Population	Female population	Females as % of total population	Females Per 1000 males
1901	203	117	49.2	972
1911	252	124	49.2	964
1921	251	123	49.0	955
1931	279	136	48.8	950
1941	319	155	48.6	945
1951	361	175	48.5	946
1961	439	213	48.5	941
1971	548	264	48.2	930
1981	685	331	48.3	933
1991	838	407		927
2001	1027	495	48.2	933
2011	1210.2	586.5	48.6	940

Source: Census of India, 2011

It must be noted that female literacy has made great strides in the twentieth century. From 0.6 per cent in 1901, it came up to 65.46 per cent in 2011 (see Table – 3).

Table – 3: Trends in female literacy in India 1901-2001 (per cent)

Year	Males	Females
1901	9.80	0.62
1911	10.6	1.1
1921	12.2	1.8
1931	15.6	2.9
1941	24.9	7.3
1951	25.0	7.9
1961	34.4	13.0
1971	39.5	18.7
1981	46.9	24.8
1991	64.1	39.3
2001	75.85	54.16
2011	82.14	65.46

Source: Census of India, 2011

Note: The literacy rate is percentage of literates to total population, exclusive of population in the age group 0-4 years. The rate up to 1941 is for undivided India.

Males literacy has also progressed but at a much lesser rate. As a result the percentage of male literates, which was more than 16 times than that of female literates in 1901, is less than twice in 2011.

Table-4: Literates 2001-2011

	2001	2011	Difference	% Growth
Persons	56,07,53,179	77,84,54.120	21,77,00,941	38.82
Males	33,65,71,822	44,42,03,762	10,76,31,940	31.98
Females	22,41,81,357	33,42,50,358	11,00,69,001	49.10

Source: Census of India, 2011

Jawharlal Nehru (1958), the then dynamic and progressive Prime Minister of India highlighted the values of educating woman when he had declared at a conference on community development by saying - “in order to awaken the people, it is the woman who has to be awakened. Once she is on the move, the household moves, the village moves, the country moves and thus we build the India of tomorrow”.

Women and Development

After India gained independence our constitution-makers granted equality of status to women, besides giving them the right to vote. Despite all these efforts, women still do not enjoy full equality of status in the society. Development cannot take place in the absence of the participation of educated and socially conscious woman. Hence, education is essential for all, more so for women, who are the agents of socialization and trainers of the future carriers of culture. History hears testimony to the facts that heights of patriotism, selflessness, fearlessness and determination are imbibed in children only through the persistent efforts of mothers. No socio-political system can ignore their vital contribution in nation building, as they are the nucleus of the most vital social institution called the family.

Finding differences in the status of women from legal, economic, social and political point of view, the United Nations General Assembly had declared 1975-1985 as United Nations Decade for Women. Prior to this, in India also a committee was formed in1970 to report on the status of women. As a result on the eve of International Women’s Year, a document “Towards Equality” was produced on Jan 1, 1975.

The publication of the Report on the Status of Women in India (1980) – the first highly comprehensive and informative report on women in India– stated that women had been left out of the development process and that greater efforts have to be made to move women into the main stream of development. The commission on ‘The Status of Women in India’ - (1970), has expressed its grave concern over continuing discrimination against women and infringement of their rights. Later, the Government of India specially incorporated a chapter titled- “Women and Development at the time of the formulation of the Sixth Five Year Plan(1980-85). Efforts and plans were ever-since initiated for the women's involvement and participation. It was promoted in the desired direction to bring social change, adopt science and technological developments and to foster national development. In the words of Eleanor Roosevelt, "where, after all, 20 universal human rights begin? In small places, close to home – so close and small that they cannot be seen on any maps of the world… such are the places where every man, woman and child seeks equal justice, equal opportunity, equal dignity without discrimination, unless these rights have meaning there, they have little meaning anywhere".

Research Objectives

The paper aims to study the factors for the use of telephone by the women in India for their empowerment and development. It also focuses on the role the telecom sector shall play in implementing policies and initiatives to achieve women empowerment in the country. The other objectives are:

1. To study the factors which are influencing women to use telephone for interpersonal communication.
2. To study telephone as the channel of communication among women.
3. To study the role of telephone as a medium of communication among women.
4. To study the differences in the utilization of telephone among the rural and urban women.
5. To evaluate to what extent telephone has been successful in offering an alternative to other means of communication.
6. To study whether the expectations of the government in implementing communication facilities have become successful.
7. It is to investigate whether the telephone acts as a socializing agent.

Related Literature Review

Kiran Devendra (1974), in her outstanding study *"Changing Status of Women in India"*, attempted to look at the changes brought about in the status of an Indian woman after 1947. She examines the effectiveness of the legal reforms, which were enacted from 1829 to 1992 and she observed that education has made it possible for women to adopt a career and the law has given her protection. And she expressed her deep examination of the society by saying that the changes have failed to penetrate into the layers of the society.

Nirmala Banerjee (1991), edited a book called *"Indian Women in a Changing Industrial Scenario"*, was sponsored under the Indo-Dutch Programme on Alternatives in Development (IDPAD). In this book the author assessed the implications of the progressive liberalization of Indian industrial and trade policies since1980 for women. The findings provide necessary data to enable a comparison of the Indian situation with the recent world wide trends in women's share in influencing social change

The book entitled '*Women and Technology*' edited by **S.C.Jain** (1985), throws light on how the fruits of technological developments have not yet reached to the Indian women effectively. This work opens a discussion on a communication gap between scientists, academicians, social workers and women beneficiaries. Often scientists invent technology without the consideration of its acceptability by women folks. Therefore, the author opines that it is high time to develop ‘Appropriate Technology’ for women to improve their conditions.

The book entitled *“Women & Development: The Indian Experiences”* written by **Mira Seth** (2001), is a comprehensive and analytical account of women’s development programmes since India’s independence. The writer discussed the historical position of women Indian society and points out the key issues, which have affected women’s lives. The abysmal situation with regard to non-participation of women which handicaps them in gaining access to development activities is dealt with.

An interesting study in the field of interpersonal communication, *“The Process of Interpersonal Communication”* has been reported by **Fred E. Jandt** (1976) et al., The study dealt with interpersonal-attraction, socialization, small group communication and socialization among women. The author declares that women do not tend to participate in roles that threaten their important social relationships. It is because; in those relationships they find most of their feelings of esteem and identity.

Methodology

The purpose of the present study is to analyze the factors influencing women to adopt telephone as an interpersonal communication tool, which is bringing them together to participate in activities towards empowerment. For the purpose of this study primary and secondary date are collected and analyzed. In analyzing the data, different statistical techniques are used apart from tabular analysis. To begin with, tabular analysis with averages and percentages are used to explain different variables pertaining to the sample women respondents. Independent variables help to distinguish each woman respondent while the dependent variables are measured based on the independent variables. In analyzing the nature of the difference in the factors, which influenced the women respondents to adopt telephone as their interpersonal communication tool, the Chi square statistic was used. The documentary sources are used as an authentic source of data collection. It includes published and unpublished materials viz. reports, articles, governmental reports, reviews, books and journals on telephone, development, participation and on Indian women. Besides these, survey reports have been used.

The study is purely based on empirical data and the researcher has developed an interview questionnaire for obtaining information regarding the socio-economic background and about the factors that influenced them to adopt telephone. The investigator had taken a sample of 300 women telephone users for the present study, spreading in three mandals in Visakhapatnam District, Andhra Pradesh. They are -Visakhapatnam, Narsipatnam and Paderu. Among these 150 are situated in rural areas whereas the remaining 150 are located in urban areas.

Table – 6: Locality wise (Rural & Urban) analysis of opinions of women and their χ^2 values

Sl. No	Item	Agree	Strongly Agree	Disagree	Strongly Disagree	Chi-square value
1	Anyone can have access to telephone at any time	32(21.33)	84(56.00)	29(19.33)	5(3.33)	37.27**
		11(7.33)	128(85.33)	6(4.00)	5(3.33)	
2	Telephone helps to overcome the barriers of distance	27(18.00)	87(58.00)	35(23.33)	1(0.67)	23.03**
		43(28.67)	95(63.33)	11(7.33)	1(0.67)	
3	Through telephone we can interact with others from where we happen to be	37(24.67)	98(65.33)	12(8.00)	3(2.00)	6.42
		25(16.67)	114(76.00)	8(5.33)	3(2.00)	
4	Telephone is a great help to women, in view of their constricted movement	61(40.67)	78(52.00)	7(4.67)	4(2.67)	29.00**
		33(22.00)	79(52.67)	24(16.00)	14(9.33)	
5	Telephone is needful to speak to people we don't meet/see regularly.	33(22.00)	84(56.00)	27(18.00)	6(4.00)	28.44**
		20(13.33)	118(78.67)	5(3.33)	7(4.67)	
6	Telephone is helpful to obtain advice or to gather support	69(46.00)	73(48.67)	4(2.67)	4(2.67)	16.72**
		36(24.00)	106(70.67)	5(3.33)	3(2.00)	
7	Telephone does give us a great deal of motivation in times of need	24(16.00)	64(42.67)	42(28.00)	20(13.33)	
		42(28.00)	71(47.33)	30(20.00)	7(4.67)	

*Significant at 0.05 level; ** Significant at 0.01 level

Major Findings

Majority of the women have said that telephone is very easy to use and hence- "Anyone can get access to telephone at any time". It is evident that the awareness of the telephone usage is reaching to all categories of women. Most of the women are required to obtain a lot of information on various issues for which they depend on telephone. A majority of women in all categories have agreed that illiterates/uneducated also can use telephone. It is evident that women depend on telephone to interact with others. So, talking on telephone while alone, gives them a sense of security and company. The awareness regarding accessibility through telephone is reaching out to the women in different sections of society. Women have their limitations in meeting people in distant places. For such women telephone is highly dependable. Telephone allows women to interact from where one happens to be. Telephone is the right medium for women pass through a wide spectrum of situations both in the family front and in the society.

Information can be gathered on telephone very immediately. This is another important factor which has been found that women largely depend on telephone. Women in all categories have accepted that "Telephone is useful to gather information immediately". Either because of their work or because of their confinement to home some women do not find time and chance to meet / see people regularly. For such people telephone helps to keep in touch with others. Hence, many women respondents support the statement- "Telephone is needful to be in touch with people we do not meet / see regularly". Majority of the respondents have accepted the fact that they depend on telephone to get up-to-date knowledge on day-to-day happenings. Most of the women depend on telephone to get advice or support from their near and dear, in times of need. In view of this, majority of the respondents strongly agree with the statement- "Telephone is helpful to get advice or support". Communication establishes and enhances mutual understanding. Most of the women from all categories have strongly said they can fill gaps between persons through telephone as it is an effective medium of communication. It acts as a bridge to mediate messages.

Social security is one of the most important needs for many respondents to adopt telephone. It enables them to get a timely help to gather to make decisions and participate in action collectively. Hence, all categories of women have very strongly agreed that telephone connection can give them empowerment and social security. Telephone is used for sharing knowledge. Most of the women from different categories strongly agree that they interact with others to equip themselves with the know-how of doing various things. Especially, in a country like ours where large number of people live in all sorts of backwardness, information passage is possible only through interaction. In view of this, most of the respondents strongly agree with the statement- "Telephone is essential for the achievement of country's social and economic development".

Conclusion

People interact for the purpose of understanding. The need is to be understood and the suitable solution to it also requires to be understood. This develops mutual understanding. Ultimately it makes people become inter-dependent, which increases their interaction to share ideas, beliefs, awareness and knowledge. This strengthens them to stand united to participate in developmental activities and thereby attain empowerment. Communication technologies like telephone acts as an effective instrument to transfer information and thereby yield social cohesion among the groups of people. These communication technologies which ushered in information revolution have virtually demolished the geographic, cultural and social boundaries across the entire globe, shrinking time and distance, resulting in a global village. It is evident that we are passing through this revolution. To have its hands in the pie of this revolution, the Government of India is taking up several measures to enable its people to take part in the process.

The study shows that there is perceptible dependency on telephone by women in rural and urban areas of India. Value added services such as information pertaining to railways, hospitals, municipal services, horoscope, entertainment etc...are provided to the telephone subscribers in the urban areas. The government must extend such a facility in remote areas with rural orientation. The information may be provided in the areas of whether, agriculture, animal husbandry, fisheries, sericulture, handicrafts etc. Especially, participation by women in any developmental project requires support from voluntary agencies, service organizations and research bodies. These should be associated with the beneficiaries both at the level of planning and implementation.

It is shocking to read that of the 1.3 billion people living in poverty around the world, 70% are women (UN Database, 2010). There is a yawning gap in their condition between the women of urban areas to that of rural areas. Since women tend to be excluded from higher education in rural areas, they lack better paid jobs and overall, these poor working women in Indian villages occupy menial positions related to agriculture, construction, domestic service, vending, low-status clerical work, nursing and prostitution. Today, women are proving their mettle in aeronautics, medicine, space, engineering, law, politics, education, business and one can just name the profession and they are there. Twenty-seven laws have been enacted so far to protect women from various crimes. However, women must be cognizant of the dangers lurking if they do not participate collectively to achieve complete empowerment, which can settle the scores of the society for generations to come. Men must not pamper the women and make them hesitant to rise up to the occasion, when it comes to guard their collective goal of empowerment.

The above suggestions postulate that proper planning and implementation of telephone services effectively in a broader framework of a growing economy should be able to alter the present situation most significantly. Planning must have the face of women orientation, as their role in the development of family, society and nation is indispensable.

References

Ahmed, I. (1985), Technology and Rural Women in the Third World. ILO, Geneva.

Amartya Sen, (1990), Employment, Technology and Development Clarendon Press, Oxford.

Ambekar, J.B., (1991), Communication and Rural Development Social Change, Vol. 21, No.3, 1991, P.36.

Amit Kumar Gupte, (1986), Women and Society the Developmental Perspective New Delhi, Criterion Publications.

Anderson James and N Biliou (2007), Serving the world’s poor; innovation at the base of the economic pyramid. *Journal of Business Strategy*, 28 (2).

Arora, Ramesh K, (1979), People’s Participation in Development The HCM State Institute of Public Administration, Jaipur.

Arvind Singhal and Everett M. Rogers, (2001), India’s Communication Revolution from Bullock Carts to Cyber Marts, New Delhi, Sage Publications Pvt,Ltd.

Bhatnagar, G.S., (1978), Channels of Communication in Rural Communities of U.P. Indian J. Extn. Edu., 14 (3,4): 34-38.

Boserup, E, (1970), Women's Role in Economic Development New York, St. Martin's Press.

Brants, K., (1989), The Information Revolution as a Social Construction. European Journal of Communication, 4 (1).

Carolyn A.Lin and Leo W. Jeffres, (1998), Factors Influencing the Adoption of Multimedia Cable Technology J&MC Quarterly Vol. 75 No.3 Summer 1998, 341-352.

Childers, Erskine, B., (1990), The New Age of Information: what kind of participation? Development,2,11-16.

Chowdary, T.H., (1998), Politics and Economics of Telecom Liberalization in India Telecommunications Policy, 22 (1):9-22.

Dak, T.M., et al., (1986), Social and Institutional Framework of Female Participation in Agriculture Indian Journal of Social Work, October 1986, PP-285-91.

Deb, K, (1986), Rural Development in India Since Independence Sterling publishers, New Delhi.

Government of India, (2011), Census Reports 2000-2011.

Government of India, (1966), "Education and National Development", Report of the Education commission (1964-66), Department of Education, Government of India, New Delhi, P. 425.

Gunnar Myrdal, (1970), Asian Drama. An Inequity into Poverty of the Nations New York.

Jean Dreze and Amartya Sen, (2002), India Development and Participation Oxford University Press, New Delhi.

Kanwar B. Mathur, (1994), Communication for Development and Social Change New Delhi, Allied Publishers Ltd.

Kiran Devendra, (1994), Changing Status of Women in India New Delhi, Vikas Publishing House Pvt Ltd.

Lakshmi Narasaiah M., (2004), Information Technology and Development Discovery Publishing House, New Delhi.

Madaswamy, M., (2008), "Rural India Different Meaning to Different People, Changing Face of Rural India," IUP Publication, pp. 4-10.

Menefee, Seldon, C. and Andray, G., Menefee, (1964), Communication in Village India: A Social Experiment Kalpataru college, Mysore.

Ram Wei, (2001), From Luxury to Utility: A Longitudinal Analysis of Cell Phone Laggards J & MC Quarterly, Vol.78, No.4 Winter 2001, 702 to 709.

The Progress of Indian States, (1995), New Delhi: UNICEF. Quoting the National Family Health Survey, pp. 92-93, Delhi.

U.N.O., Commission on the Status of Women, (1984), Report on the 30th Session New York, 1984, P.1.

Ugboajah, F.O., (1986), Communication as Technology in African Rural Development Africa Media Review,1 (1), 1-10.

Visakhapatnam District Gazette, (1979), Ramesan, No, "Andhra Pradesh District Gazetters Visakhapatnam" Gazetter of India, The Government publication Bureau, Andhra Pradesh, Hyderabad, 1979, P.I.

Women in India: Country paper, (1985), New Delhi: Ministry of social and Women's Welfare, 1985.c

World Bank, (2001), *Engendering Development: Through Gender Equality in Rights, Resources, and Voice*, New York: Oxford University Press, 2001

Basel Accords & Their Implications on Indian Banks: An Evaluation

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Abstract: The main objective of Basel Committee on Banking Supervision (BCBS) has been to close gaps in international supervisory coverage in pursuit of two basic classic principals: that no foreign banking establishment should escape banking supervision and that supervision should be adequate. The topic to which most of committees time has been devoted in recent years is capital adequacy .Till date, Basel – I, Basel – II and Basel – III Accords have been released. Most recent accord is Basel – III, which is third in series. This paper especially examines the implications of Basel Accords on Indian Banks, with special reference to Basel – III Accord. It discusses salient features of Basel – III Accords and its expected implication on Indian Banks. The paper depicts that effective implementation of Basel – III will make Indian banks stronger, stable and sound so that they could deliver value to the real sector of economy. By far, the most important reform is that there should be a radical change in banks approach to risk management.

Key Words : Basel – I, Basel – II, Basel – III, BCBS, BIS, LCRI, LCR, Tier – 1, Tier – 2, Capital, RWA, CET1, CRAR, CVA.

Introduction

Banks play their important role in accelerating the pivot of economic growth of any country. Hence it is key for overall economic development. Existence of an effective and efficient banking system is considered as an engine of booster of economic activities of a country. The successful operation of Banking sector further gives momentum to trade and commerce of a country, which ultimately assists in raising investment, savings and employment and improving the standard of living of people at large.

The banking sector in India has been an important booster of economic development. Indian banks have passed through various changes from private banking to public sector banking and today our country has following the path of liberalization, globalization & privatization. Since the introduction of New Economic Policies in 1991. However we have been making our efforts to make the banking sector vibrant and efficient. The transparency in the working of banks were also given top priority. Being a democratic country, India always attempted to make all norms regulations rules open to public. Specially after the nationalization 14 Private sector banks in 1969 in first phase six in second phase in 1980 and now in the era of Liberalization, Globalistion and Privatization , R.B.I. has been making her untired efforts to make our banking system more vibrant and internationally competitive. In this connection India introduced the prudential norms relating to the credit / advances and investment portfolios of banks, efficient management of non-performing assets, capital adequacy : Basel II framework and more recently Basel III framework & Risk management in banks. It is also relevant to mention salient features of Narisimham Committee (Committee on Financial Sector 1991) and Narsimham Committee -II (Committee on Banking 1998). The Narsimham Committee suggested a comprehensive framework for reorganization and reform of the systems. Specially norms related to capital adequacy norms, income recognition asset classification and provisioning norms, Transparency of financial statements. While the Narsimham Committee – II had examined the second generation of reforms in terms of their broad interrelated issues :

1. Action that should be taken to strengthen the foundation of the banking system.
2. Streamlining procedures updating technology and human resource development and
3. Structural change in the system.

Basel Accords – Historical Background

The implementation of the Basel – II framework effective April 2008 has added new dimensions to the prudential management of Bank funds in line with the international best practices. In this direction more recently the Basel Committee on Banking supervision (BCBS) has issued a comprehensive reform package entitled Basel – III Capital Regulation on May 2, 2012. These guidelines shall be implemented in phased manner commencing April 2013 till March 31, 2018 for Indian Scheduled commercial Banks.

This paper primarily examines the implication of Basel Accords on Indian Banks, Specially of Basel – III Accord.

The Basel Committee on banking supervision was established as the committee on Banking Regulations and supervisory practices by the central Bank governors of the group of ten countries at the end of 1974 in the aftermath of serious disturbances in international currency and banking system. The first meeting took place in Feb. 1975 and meetings have been held regularly three or five times a year since. The committee members come from Argentina, Australia, Belgium, Brazil, Canada, China, French, Germany, Hong Kong, SAR, India, Indonesia, Italy, Japan, Korea, Luxembourg, Mexico, The Netherlands, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Turkey, The United Kingdom and The United States. The countries are represented by their central bank and also by the authority with formal responsibility for the prudential supervision of banking business, where this is not the central bank. The committee provides a forum for regular cooperation between it's member countries on banking supervisory matters. It does not possess any formal supranational supervisory authority. Its conclusion do not have and were never intended to have legal force. One important objective of the committees work has been to close gaps in international supervisory coverage in pursuit of two basic classic principles : that no foreign banking establishment should escape banking supervision & that supervision should be adequate.

May 1983, the committee finalized a document principles for supervision of banks foreign establishments which set down the principles of sharing supervisory responsibility for banks foreign branches subsidiaries and joint ventures between host & parent (or home) supervisory authority. In April 1990 a supplement to the 1983 concordat was issued with the intention of improving the flow of prudential information between banking supervisors in different countries.

In June 1992 certain principles of concordat were reformulated as minimum standards were communicated to other banking supervisory authorities who were invited to endorse them and in July 1992 the standards were published.

In April 1995, the committee issued an amendment to the capital accord to take effect at the end 1995, to recognize it's effects of bilateral netting of bank's credit exposure in derivative products and to expend the matrix of add on factors.

In June 1999, the committee issued a proposal for a new capital adequacy framework to replace the 1988 accord and this has been refined in the inventing years culminating in the release of the New capitals framework on 26 June 2004.

The topic to which most of the committee's time has been devoted in recent years is capital adequacy till date, Basel – I, Basel –II and Basel – III Accords have been released most recent accord is Basel – III which is third in series.

Basel – I

The Basel Capital Accord in 1988 proposed by Basel committee of Bank supervision (BCBS) of the Bank for international Settled settlement (BIS) focused on reducing credit risk, prescribing a minimum capital risk adjusted ratio (CRAR) of 8% of risk weighted assets. Although it was originally meant for bank in G-10 countries, claimed to adhere to it and India began implementing the Base-I in April – 1994. It focused primarily on credit risk.

The 1988 accord can be summarized in the following equation:

Total capital = 0.8 x Risk Weighted Assets (RWA)

The accord provided a detailed definition of capital. Tier – 1 or core capital, which includes equity and disclosed reserves and Tier – 2 or supplementary capital which could include undisclosed reserves, asset revaluation reserves, general provisions & loan, loss reserves, hybrid (debt/equity) capital instruments and subordinated debt.

The 1988 Basel – I Accord has very limited risk sensitivity and lacks risk differentiation for measuring credit risk. The strict rule based approach of the 1988 accord has also been criticized for its one size fit's all prescription. In addition, it lacked proper recognition of credit risk mitigates such as credit derivatives, securitization and collaterals. The recent cases of frauds, acts of terrorism , hacking have brought into focuses the operational risk that the banks and financial institutions are exposed to.

Basel – II

In June 1996 BCBS issued a proposal for a New Capital Adequacy framework to replace the 1988 Accord. Basel – II is a more comprehensive framework including the CRAR Computation and provision for supervisory review and market discipline Basel – II stands on following three pillars

Minimum regulatory capital (Pillar-1): This is a revised and comprehensive framework for capital adequacy standards where CRAR is calculated by incorporating credit, market and operational risk.

Supervisory review (Pillar -2): This lays down the key principles for supervisory review risk management guidance and supervisory transparency and accountability

Market discipline (Pillar -3): This pillar instills market discipline through disclosure requirements for market participants to assess key information on risk exposure ,risk assessment process and bank capital adequacy.

The Basel – II makes significant improvement in linking risk and regulatory capital for internationally active banks especially for their corporate loan book.

Following are the salient features of Basel – II

Allows banks to use proprietary in house models for measuring market risks.

Banks using proprietary models must compute VAR (Value at risk) daily, using 99th percentile, one tailed confidence interval with a time horizon of ten trading days using a historical observation period of at least one year.

The capital charge for a bank that uses a proprietary model will be the higher of the previous days VAR and three times the average of the daily VAR of the preceding sixty business days.

Allows banks to issue short-term subordinated debt subject to a lock in clause (Tier – 3 capitals) to meet a part of their market risk.

Alternate standardized approach using the building block approach where general market risk and specific security risk are calculated separately and added up.

Banks to segregate trading book and mark to market all portfolio / position in trading book.

Applicable to both trading activities of banks and non banking securities firms.

The Basel – II guidelines are criticized on following grounds:

Base – II is pro-cyclic, that means that banks governed by Base–II (Capital tied of Risk) will loosen credit in “Good Times” (When risk perception are low) and restricted it when times are bad (When risk rise again)

If most banks act in this fashion, having adopted the accord, they would acculturated the crisis in bad times, jeopardizing stability.

Basel – II implementation is a task of extreme complexity involving the intersection of computer science mathematics and finance.

It’s implementation is too costly. An estimate shows that financial institutes world wide will spend close to US$4 billion over two years on upgrading databases and other system in order to comply with Basel – II.

Basel – II does not resort to full credit risk modeling – it fails to take into account portfolio effects of risk mitigation through diversification.

Basel – III Accord

The Basel Committee on Banking Supervision (BCBS) issued a comprehensive reform package entitled – “Basel – III: A global regulatory framework for more resilient banks and banking system” in December 2010 with following two principal objectives:

To strengthen global capital and liquidity regulations with the goal of promoting a more resilient banking sector.

To improve the banking sectors stability to absorb shocks arising from financial and economic stress, which, in turn would reduce the risk of a spillover from the financial sector to the real economy.

To attain above objective the Basel –III proposals are broken down into three parts on the basis of the main areas they address as mentioned below:

- Increased quality of Capital
- Increased quantity of capital
- Reduced leverage through introduction of backstop leverage ratio
- Increased short term liquidity coverage.
- Increased stable long term balance sheet funding
- Strengthened risk capture notably counters party risk.

Description of Above Key Areas:

I. Better Capital Quality :

Basel – III emphasizes on improving the quality of capital with the ultimate aim to improve loss – absorption capital in both going concern and liquidation scenarios.

II. Increased quality of capital :

Minimum common equity tier – I

§ Increased from 2.0 percentage to 4.5 percent
§ Plus capital conservation buffer of 2.5 percent
§ Bringing total common equity requirement to 7.00 percent
§ To be phased in from 2013 to 2019

Minimum total capital :

§ Increased from 8.00 percentage to 10.5 percent (Including conservation buffer)
§ To be phased in from 2013 to 2019

III. Leverage Ratio :

1. Leverage limit is set as 3% a bank's total assets (including both on and off balance sheet assets) should not be more than 33 times bank capital.

2. The ratio is supplemented the risk based measures of regulatory capital.

3. The leverage ratio is implemented on a gross and un-weighted basis not taking in to account the risks related to the assets.

IV. Increased short term liquidity coverage :

1. The 30 day liquidity Coverage Ratio (LCRI) is intended to promote short-term resilience to potential liquidity disruptions. The LCR will help ensure that global banks have sufficient high-quality liquid assets to withstand a stressed funding scenario specified by supervisors.

2. For the LCR the stock of high quality liquid assets is compared with expected cash outflows over a 30 day stress scenario. The expected cash outflows are to be covered by sufficiently liquid, high quality assets.

V. Net Stable Funding Ratio (NSFR) :

1. The Net Stable Funding Ratio compares available funding sources with funding needs resulting from the assets on the B/S.

2. Required and available funding amounts are determined using weighted factors, reflecting the "stability" of the funding available and the duration of the asset.

3. The weighted factors for assets vary from 0% and 5% for cash and government bonds, respectively to 65% for mortgage, 85% for retail loans and 100% for other assets.

4. For determing stable funding available for liabilities the weighted factors vary from 100% for tier 1 capital to 90% for core retail deposits and 50% for unsecured wholesale funding ECB funding is weighted at 0%.

VI. Strengthed risk capital notably counter party risk :

1. Calibration of counter party credit risk modeling approaches such as Internal Model Methods (IMM) to stressed periods.

2. Increased correlation for certain financial institutions in the IRB for males to reflect experience of the recent crisis, new capital charges for credit/ valuation adjustment and wrong way risk.

3. Improved counter party risk management standards in the areas of collateral management and stress testing.

Basel – Accords & India

India has been a founder signatory of Basel Accord since it's inception in 1974. India has been attempting to follow Basel Global norms for banking supervision, regulations and risk management. Basel – III Accord is the third in series of Basel Accords.

India is also prepared to implement Basel – III capital norms from April 1, 2013 in phased manner. In order to allow banks to prepare and plan themselves and also to minimize any unintended consequences arising out of higher capital requirements, banks have been given a long phase in period during which Basel – III guideline would be implemented. Capital Equity will be fully phased in and implemented as on an March 3, 2018. R.B.I. released on it's website, draft guidelines outlining proposed implementation of Basel – III capital regulation in India.

Following are the salient features of draft guidelines issued by R.B.I. :-

I. Minimum Capital Requirements:

1. Common Equity Tier 1 (CDT 1) Capital must be at least 5.5% of risk- weighted assets (RWA)

2. Tier 1 Capital must be at least 7% of RWAs and

3. Total capital must be at least 9% of RWAs

II. Capital conservation buffer in the form of common equity of 2.5 of RWAs. It means they need to keep 25% extra capital to provide for any calamities during the period of

financial or economic turbulence or disasters.

III. Credit Value Adjustments :

Banks will be required to compute an additional credit value adjustments (CVA) risk capital change.

IV. Leverage Ratio :

The parallel run for the leverage ratio will be from January 1, 2013 to January 1, 2017, during which banks would be expected to strive to operate a minimum Tier 1 Leverage ratio of 5%. The leverage ratio requirement will be finalized talking in to account the final proposal of the Basel Committee.

V. Definition of Regulatory Capital:

1. Banks are required to maintain a minimum Pillar – I capital to Risk-weighted Assets Ratio (CRAR) of 9% on an ongoing basis (other than capital conservation buffer and countercyclical capital buffer). The Reserve Bank will take in to account the relevant risk factors and the internal capital adequacy assessment of each bank to ensure that the capital held by a bank commensurate with the banks overall risk profit.

2. The R.B.I. will consider prescribing a higher level of minimum capital ratio for each bank under the pillar 2 frame on the basis of their respective risk profits and risk management system.

3. Minimum Common Equity Tier 1 capital of 5.5% of RWAs banks are also required to maintain a Capital Conservation Buffer (CCB) of 2.5% of RWA in the form of common equity Tier – 1 capital. The implementation of capital ratios and CCB the capital requirements are summarized as below :

Regulator Capital	A% to RWAs
Minimum Common Equity Tier 1 Ratios	5.5
Capital conservation buffer (Comprised to Common Equity)	2.5
Minimum Common Equity Tier 1 Ratio plus Capital Conservation buffer [(I) +(II)]	8.0
Additional Tier 1 Capital	1.5
Minimum Tier 1 Capital Ratio [(I) +(IV)]	7.0
Tier 2 capital	2.0
Minimum Total Capital Ratio (MTC) [(V)+(VI)]	9.0
Minimum Total Capital Ratio plus capital conservation buffer [(VII)+(VIII)]	11.5

Conclusion & Policy Implications

Basel III is the improvement in Basel II norms. Comparison of capital Requirements under Basel – II and Basel – III is being summarized as below:

Requirements	Under Basel–II	Under Basel–III
Minimum Ratio of Total Capital To RWAs	8%	10.50%
Minimum Ratio of common Equity to RWAs	2%	4.5% to 7.00%
Tier – 1 Capital to RWAs	4%	6%
Capital Conservation Buffers to RWAs	None	2.5%
Core Tier – 1 Capital to RWAs	2%	5%
Leverage Ratio	None	3%
Countercyclical Buffer	None	0% to 2.5%
Minimum Liquidity Coverage Ratio	None	TBD (2015)
Minimum Net Stable Funding Ratio	None	TBD (2018)
Systemically Improvement Financial Institutions Change	None	TBD (2011)

The net impact of implementation of Basel – III Accords norms will be on capital requirements of Indian Banks. Needs additional capital requirements of Rs 5 Lakh Crore, of which non-equity capital will be of the order of Rs. 3.25 Lakh Crore. While equity capital will be Rs. 1.75 Lakh Crore. According to RBI Governor that amount the market would have to provided would depend on how much of the recapitalization burden of Public Sector Banks, the government meet. The amount that market would have to provide would be in the range of Rs 70000 Crore to 1 Lakh Crore depending on how much the government would provide over the last five years banks had revised equity capital to the tune of Rs. 52,000 Crore through primary market. Raising an additional Rs 70,000 Crore to Rs 1 Lakh Crore over the next five years from the market should therefore not be an instrumental trouble. The major challenge the Indian banks face is the deteriorating quality of assets and reduced profitability. Dr. D. Subha Rao, Governor R.B.I. has rightly opined that effective implementation of Basel –III was going to make Indian banks, stronger more stable and sound that they could deliver value to the real sectors of the economy. By far, the most important reform is that there should be a radical change in banks approach to risk management. Banks in India are currently operating on the standardized approaches of Basel – II. Since Basel III is a Universal compulsion, Indian Banks have no choice but to prepare themselves for achieving this Herculean task of capital augmentation. The large scale banks needed to migrate to the advanced approaches especially as the expend their overseas presence. The adoption of advanced approaches to risk management, would enable banks to manage their capital more efficiently and improve their profitability.

References:

S. Srinivasraghvan– Basel–III and it's implications to Indian Banks – Introspection–Banks Quest July–September 2012 Page 11-12

BCBS – Basel – III : A global regulatory framework for more resilient banks and banking systems, December 2010

R.B.I. Master Circular D3OD No. BPBC 11/21-06-2001/ 2011-12, July 1, 2011 on "Prudential Guidelines on capital Adequacy and Market

Discipline – New Capital Adequacy Framework (NCAF) – will remain unchanged under Basel – III Framework.

Basel – III – Issues and implications : K.P.M.G. International USA

Basel and Basel – II Compliance : issues for Banks in India – Sreejata Banarjee – Madras School of Economics – Gandhi Mandapam Road, Chennai – 600025, India, May 2013

BCBS BIS- History of Basel Committee and its membership

Hari Mishra : Basel II framework and India – Compliance v/s opportunity, Indian Bank Association, June 2004

A Note on illustrations of Elasticity

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Abstract*:* The concept of elasticity in economics is taught mostly in secondary education. Students generally mix up slope and elasticity even though many textbooks explain the difference between them. This note is to substantiate explanations by Round and McIver (2006) in view of exploring possible reasons how students might have confused elasticity and slope from initial knowledge of elasticity. This note indicates some misunderstandings that arise from elasticity illustrations, and also provides possible and alternative ways for understanding elasticity. As indicated by Round and McIver (2006), a precise use of terms in textbooks is necessary to understand the difference between the elasticity and slope of a demand curve in third degree price discrimination, given the assumptions in which the theory has been established in relation to elasticity.

Key words: Elasticity, demand, supply, slope, monopoly, price discrimination

Elasticity is an economic concept that is explained in many economics textbooks. There is a slight misconception in distinguishing elasticity of a demand from slope of the demand curve even though textbooks clearly state elasticity is different from slope. Many confuse these terms with geometrical shapes though they know that slope is a determinant of elasticity. This note provides a guideline to understand the difference between elasticity and slope, and some other related aspects in elasticity.

The elasticity of demand is measured as a ratio of percentage change in quantity over percentage change in price of a product. It is well known that the formula of elasticity consists of slope of a straight line. But, understanding slope and elasticity are mostly mixed up when graphical interpretations are given. Round and McIver (2006) identify how students confuse elasticity with slope of a demand curve, when they discuss particularly third-degree price discrimination in a classroom discussion. This endorses the existence of confusion in differentiating elasticity from slope. The purpose of this note is to substantiate their discussion and explore how the misunderstanding between slope and elasticity is misperceived from initiation of knowing elasticity. Though many understand slope and elasticity are different throughout the textbooks, they sometimes fail to accept a fact that any sloped-simple-demand curve consists of five (5) different types of elasticity measures along the line.

The misunderstanding of the difference between slope and elasticity mainly arises when they are illustrated in graphs. In illustrations, it is important which part of the (5 types of) elasticity is mainly focused on a line and these explanations should not be mixed up with slope of the line. If one uses an illustration of elasticity, he/she should explain why such pattern of demand curve becomes specific to that particular type of elasticity, provided that a sloped-simple demand line has all types of elasticity. In this context, this note carries some important explanations in view of providing more insights on elasticity.

The following sections are organised as the basic elasticity formula, misunderstanding in elasticity, remedial steps, and conclusion.

The basic Elasticity Formula

Elasticity (E) is measured as:

$$E = \left(\frac{\textit{Percentage Change in Quantity}}{\textit{Perntage Change in Price}}\right) = \left(\frac{\Delta Q}{Q}\right) \div \left(\frac{\Delta P}{P}\right) = \left(\frac{\Delta Q}{Q}\right) \times \left(\frac{P}{\Delta P}\right)$$

The above measure can be extracted as:

$$E = \left(\frac{\Delta Q}{\Delta P}\right) \times \left(\frac{P}{Q}\right)$$

i.e., slope of a straight line is multiplied by the ratio of price to quantity at a point on the line.

Laudadio (1968) has devised an equivalent alternative way to measure a coefficient of elasticity for a price on a demand curve. Though it is a simple approach, Laudadio (1968) does not directly explain how the same approach can be used to determine the elasticity of supply. Anyhow, Laudadio's (1968) suggestion shows that minimum two measures are sufficient to determine a coefficient of elasticity: (1) the price at which the coefficient of elasticity is required, and (2) the value of Y-intercept.

The price elasticity is related to price – quantity relationship in economics. But, it is notable that the determination of elasticity sometimes goes beyond such a relationship because of different rearranging options of elasticity formula. Therefore, it is important to focus on the primary equation shown above to keep track on the price – quantity relationship from an economic point of view.

Misunderstanding in Elasticity

The definition of the elasticity of demand, for example, is generally expressed in two ways.

(a) Based on the formula, the elasticity is defined as a ratio of percentage change in quantity over percentage change in price; and

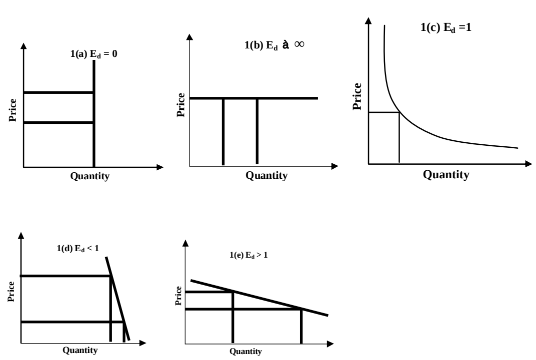
(b) Based on the causal relationship between quantity and price of a product, elasticity measures the extent to which a price change causes a change in quantity demanded.

These definitions imply that elasticity needs to be defined with a price change and its causal effect on quantity demanded. In the above two definitions, the (a) just guides to measure elasticity and (b) explores the causal effect of the price change on quantity. It is notable that both definitions appear to be not capturing the explanation for point elasticity.

Students relate slope of a simple demand curve with elasticity when illustrating elasticity with sloped demand curves in particular. Most of the text books highlight that the elasticity and slope cannot be confused with each other, (e.g., Samuelson and Nordhaus, 2005; Gans *et al*, 2005). This strong suggestion implies an existing possible misunderstanding of the elasticity of demand with its component slope. Even though textbooks have clearly defined and reasoned the difference between elasticity and slope, the illustrations in many of them are not compatible with the view why such confusion arises. Further, they do not explore the commonality of graphical illustrations for both the elasticity of demand and supply. For an easy understanding, the different illustrations in elasticity of supply and demand should be brought down into a general format.

In elasticity illustrations, five (5) different shapes of demand curves are initially illustrated in many textbooks. They are given in Figure 1.

Figure 1: Elasticity of Demand in Formal Illustration



Though the elasticity is explained as a ratio of percentage changes between price and quantity in demand, the different sloped demand curves with elasticity identifications in Figure 1 dilute distinguishing elasticity measures from slopes of the demand curves. In the illustrations in Figure 1, the demand curves 1(d) and 1(e) are in particular subject to constant slopes. As a simple sloped demand curve consists of all 5 different elasticity measures and an elasticity measure takes place on a straight line basis, the shapes of the demand curves in 1(d) and 1(e) are mixed up with the slope of the demand curve. This seems like a denial of existing 5 different elasticity measures on a sloped demand curve.

The elasticity measure highlights the ratio between percentages of change in quantity and change in price. While an economic principle in elasticity underlines the responsive relationship of price as indicated in 1(d) and 1(e), illustration 1(c) is not compatible with 1(d) and 1(e) because 1(c) indicates for unit point elasticity. If price – quantity relationship is highlighted with two points in 1(c), the unit elasticity may not be available at a point of price. For a responding relationship of price with quantity, the unit elasticity (E_d = 1) can possibly be shown with a simple straight line demand curve by pointing out the middle point of the demand line between X and Y axes.

In another way, if the illustrations in Figure 1 refer to point elasticity as shown in 1(c), it is not necessary to show a demand curve with slope in illustrations because the measures of elasticity E_d<1 and E_d>1 are identifiable on any simple sloped straight demand curve. The approach shown in 1(d) and 1(e) may not be compatible with 1(c) to explore price – quantity relationship in point elasticity. Hence, this may possibly cause for confusion in distinguishing elasticity from slope in illustrations.

It is possible to argue that low slope (flattered) refers to high elasticity and vice versa. In elasticity of demand, high price associates with high elasticity and low price does with low elasticity. It is notable whether the demand line is flattered or steeped (formally referred as low elasticity) and that line consists of both low prices and high prices. This implies that any sloped demand curve contains all 5 types of elasticity on it. Hence, the argument low slope refers to high elasticity and vice versa is not true all the time. If, for example, one assesses elasticity on a medium sloped (say at tan 45^o as not steeped or flattered) demand line, he/she cannot conclude that such a medium slope line can represent a unit elasticity measure. The same argument is inappropriate in case of a supply curve. Note that a supply curve with negative intercept on Y-axis and a flattered slope can be an example of low elasticity ($E_S < 1$) because of the negative intercept. In this context, one can observe that low elasticity of supply is resulted in because of the negative intercept, not by the slope of the supply line.

In textbooks, no common illustrative approach is available to identify elastic and inelastic areas of demand and supply curves. Generally in this context, students perceive elasticity of demand curves with slope and elasticity of supply curves with the Y-intercepts. In elasticity of supply (E_S), three (3) illustrations ($E_S < 1$, $E_S = 1$, and $E_S > 1$) of those five (5) types (except 0 and ∞ elasticity) are completely different from the approach adapted to explain the elasticity on a demand curve. For simple recognitions of elasticity of a supply curve, one can asses at which point the supply curve intercepts Y-axis (the price measure for zero quantity). When the Y-intercept of price is positive (> 0), the simple straight line supply curve is elastic (E_S>1). Similarly, when Y-intercept = 0, the supply curve is of a unit elastic ($E_S = 1$) and if Y intercept is negative (< 0), the supply curve is inelastic (E_S<1). While a straight demand curve with a definite slope consists of all (5) elasticity types on it, a simple supply curve cannot have this. This again dilutes understanding illustrative principles in elasticity. But, the illustrations of elasticity for supply curves are good examples to explore the slope as an element of elasticity and the difference between slope and elasticity.

As Laudadio's (1968) approach is simple to determine elasticity of demand at a price, it indirectly explores a possibility of determining the elasticity of supply. Hence, it is wise to find ways for how that approach can be used in an illustration (in geometry) to determine elasticity of supply to establish a consistency with determining elasticity of demand. A graphical illustration may also provide a clear idea to understand Laudodio (1968) approach (refer to Appendix 1).

Overlapping of different measures in elasticity, such as point elasticity and arc (average price) elasticity in particular can also be confused to a certain extent. For instance, assuming a straight line demand curve, consider that a price changes from P_1 to P_2. Based on this, point elasticity at price P_1 and P_2, arc elasticity of P_1 and P_2, and price change elasticity of P_1 towards P_2 can be determined. In this context, it is possible to argue that the point elasticity can be referred to as the elasticity measure at the price of P_1, P_2, or the average of (P_1+P_2). It is clear that the price change elasticity and arc elasticity can also be termed as point elasticity. Hence, it is necessary to explore the possibility in which the differences between elasticity measures are identifiable.

Round and McIver (2006) explore students' misunderstanding of elasticity with slope and emphasise that textbooks should provide précised explanations for why two prices are associated with two different groups in third degree price discrimination. It is noted that using the terms 'elastic' and 'inelastic', when explaining price discrimination, might have caused for further confusion between elasticity and slope, (e.g., Samuelson and Nordhaus, 2005).

Based on the range of elasticity, only three major types of goods are identifiable: (a) elastic goods, (b) unit elastic goods, and (c) inelastic goods. In some text books, the terms 'elastic' and 'inelastic' are used to identify two different market groups in third degree price discrimination. In simple terminology, textbooks refer to the term 'elastic' for the goods of elasticity more than one and 'inelastic' for that of less than one. When the same terms are used to distinguish two different markets in monopoly, it simply accepts that one of two groups (markets) has less than one (E_d<1 = inelastic) and the other has more than one (E_d>1 = elastic) elasticity coefficient. In this context, many textbooks do not focus on the fact that a monopoly market conditionally operates on the situation where its products has elasticity more than one on the demand curve with positive marginal revenue (MR), i.e., on the 'elastic' area ((E_d>1) of the demand curve, (refer to Appendix 2). Using the terms 'elastic' and 'inelastic' is inappropriate for two groups in price discrimination because the monopoly market aims to maximise profit where a firm operates at MR>0 with E_d>1 (elastic) for both groups. Hence, explaining the firm's operation under the conditions of negative marginal revenue (MR<0) and inelastic product (E_d<1) is not theoretically acceptable.

Remedial Steps

Elasticity and Linear Relationship between Price and Quantity

It is noted that the definition of elasticity is generally based on (a) the equation of elasticity, and (b) the price change impact on quantity. Both seem as not incorporating the explanation of point elasticity. If one believes that elasticity measure is a causal effect of price on quantity, he/she may question how a point elasticity measure contains a ratio of change in quantity to change in price though no change in price takes place. Many textbooks have illustrated how point elasticity contains such a ratio of change in quantity to change in price. It is notable that the elasticity measure is based on a straight line, and its slope (b = ΔP/ΔQ) and a point (Q, P) on the line determine the coefficient of elasticity at a particular price P (refer to Appendix 3 for detail).

Overall, a definition of elasticity should be highlighted with a linear relationship of independent (price or income) and dependent variables (quantity) to determine the elasticity of a point on a curve. No matter what type of a curve those variables form, any elasticity coefficient is determined by the linear relationship of variables that give constant value of slope at any point on the line. The changing value is the ratio of price to quantity that needs to satisfy the straight line on which elasticity calculation depends. But, it is not necessary that the point needs to satisfy the price –

quantity relationship curve. Hence, this note addresses that definition of elasticity should incorporate linear relationship of variables. Thus, elasticity for a price can be defined as a point measure on a straight line relationship between price (income) and quantity that indicates a ratio of expected responsive percentage change in quantity to expected percentage price change along the straight line.

Illustration of Elasticity

While illustrating different types of elasticity, it is necessary to accept the fact that any sloped simple demand curve consists of all 5 types of elasticity. If one cannot realise this true nature of elasticity, there is a misunderstanding.

Figure 2 for a simple demand curve shows how this can be understood. The illustration shows, irrespective of slope of a demand curve, which part of the curve really highlights a required range of elasticity, compared to other elasticity measures. In formal illustration, such comparison is lost or cannot be realised and this may cause confusing elasticity with slope of a demand curve. Note that the rectangular hyperbolic demand curve can only represent unit elasticity at every point on it and that cannot be used to indicate price change elasticity.

The formal illustrations reflect which part of a demand curve represents a particular range of elasticity, but they do not indicate unnecessary ranges of elasticity. These illustrations therefore recognise different types of sloped demand curves. Generally from an elasticity point of view, demand curves are categorised as curvy and simple straight line demand curves.

The straight line demand curves can also be further categorised as vertical (for zero elasticity), horizontal (for perfect elasticity), and sloped (to represent the elasticity range as for $0 \leq E_d \leq \infty$) lines. Improper identification of different demand curves for different elasticity might have let to the perception that a sloped demand line consists of a particular elasticity throughout the demand curve between X and Y axes. This perception is a result of the sloped based identification of different types of elasticity in demand. Note that elasticity needs to be categorised, not the different sloped demand curves for different elasticity.

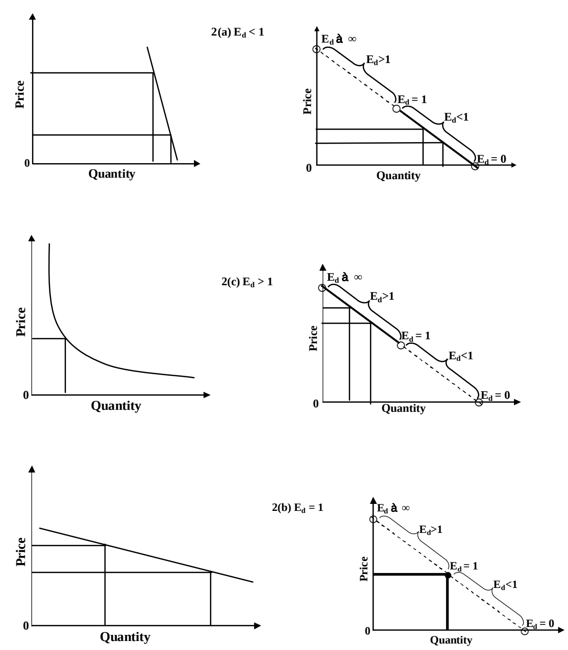
For elasticity of supply, the $E_s<1$, $E_s=1$, and $E_s>1$ are identically differentiated from slope because in simple linear illustration, these types of elasticity are recognised with Y-intercept of supply curve. In this context, it is important to know how the approach used in supply, to differentiate slope and elasticity, can be compromised with demand curves.

Laudadio’s (1968) approach is also applicable to find elasticity of supply. For a general supply equation $P_s = h + kQ_s$, in this approach, the elasticity at a point of price and quantity is determined as $E_s = P_s/(P_s - h)$. For elasticity of demand (assume $P_d = a - bQ_d$) at a price is $E_d = P_d/(a-P_d)$. Both elasticity of demand and supply are based on a particular price at which elasticity is required and the Y-intercept, ‘h’ in supply and ‘a’ in demand equations. This is a common algebraic approach to determine elasticity, irrespective of slope of a curve.

Appendix 1 explains how demand elasticity of a price at $T(q_1, p_1)$ can be determined when it is located between two points (S and R) on X and Y axes respectively. This application is useful to determine point elasticity on a curvy demand line. It is possible to question how the same approach is useful to determine point elasticity on a curvy supply curve. This is identical as similar to determining point elasticity on a curvy demand line.

Figure 2: Alternative ways to show elasticity of $E_d<1$, $E_d=1$, and $E_d>1$

Formal Illustration **Alternative Illustration to**



Consider a curvy supply function Q_s = f(price) to determine elasticity at a point U(q_2, p_2). Because of a negative relationship between quantity demanded and price, it is possible to have a tangent to the curvy demand line at the point where elasticity needs to be determined (as shown in A1.2 of Appendix 1). As the supply curve has a positive relationship between quantity and price, it is essential to have tangent line (BC) to Q_s = f(price) through the point U(q_2, p_2) at which the elasticity is to be determined, (refer to the Figure 3). To implement a similar approach for elasticity determination, irrespective of sign (+ or –), the same sloped demand type straight line to the tangent of supply curve needs to be identified. For this, following steps can be followed (refer to Figure 3).

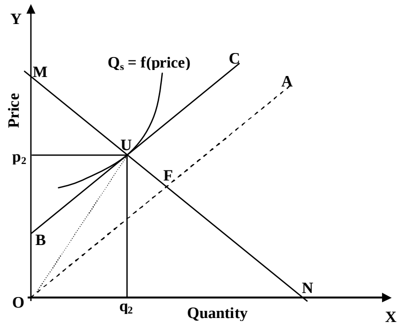
a) Draw a parallel line OA to the tangent line BC, i.e., OA||BC, through the origin.

b) Draw a line MN through point U on condition that MF = FN, (where the points U and F are on MN, and F is the middle point of MN).

As the absolute slope of MN is equal to the tangent slope of supply curve (BC), the price elasticity at point U on the supply curve can be measured as (NU/MU) as shown in Appendix 1.

To conciliate both illustrative approaches in demand and supply in determining elasticity, an intercept (point F) of a supply type (namely OA) and a demand type (namely MN) straight lines become bases to determine elasticity at a point of price. With a transformation of elasticity formula (refer to Appendix 4) , it is possible to show that price elasticity at point U(q_2, p_2) is the ratio of slopes of lines OU and BU as (OU_{slope} /BU_{slope}). This method is also common for both in determining the elasticity of demand and supply.

Figure 3: Compromising elasticity of supply with elasticity of demand



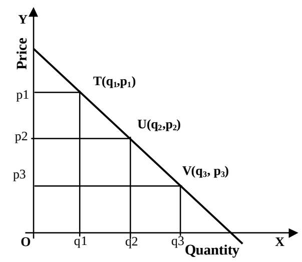
Identifying Different Elasticity Coefficients

An elasticity measure takes place at a point only, irrespective of how that particular point is selected. As this is a general theoretical aspect, one may confuse point elasticity with price change elasticity and arc (average) price elasticity. This note explores the situation in which a price change elasticity and arc elasticity can be termed as point elasticity. This depends on how we consider a demand curve, for example, in determining elasticity at a point of price. Generally, only two types of demand curves are considered for a product in illustrations: (a) Linear relationship of price with quantity – this is a straight line approach for a demand curve; (b) Curvy linear relationship – this is not a straight line approach.

When a demand curve is presumed as a simple straight line, any elasticity measure along the line is point elasticity at any particular price. Consider a straight line demand curve (RS) and three points on it as T(q_1, p_1), U(q_2, p_2), and V(q_3, p_3) where point U is on TV and represents average (midpoint) price and quantity of points T and V (refer to Figure 4).

The elasticity at points T, U, and V are the point elasticity at respective prices. When price changes from p_1 to p_3, the price change elasticity and the point elasticity are measurable at the price of point T and both are same. If the (arc) elasticity for average price [$p_2=(p_1+p_3)/2$] is determined, it can be termed as the point elasticity of p_2 that is measured for the average of new (p_3) and initial (p_1) prices.

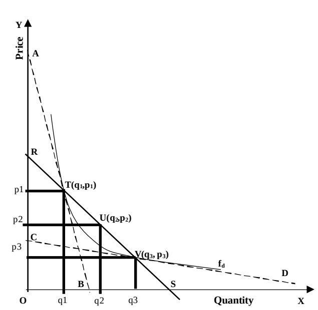
Figure 4: Point elasticity at different prices



Notably, all three points are on a straight line demand curve and any elasticity measure that takes place along the line at a respective price is point elasticity. This is entirely different from determining different elasticity measures when a demand line is a curvy linear.

Consider a curvy linear demand curve (f_d) in application and only points T and V are on it (refer to Figure 5). The price p_1 (at T) on f_d changes to p_3 (at V) and the average of those prices p_1 and p_3 is p_2 (at U). The line TUV represents the price change and meets X and Y axes at S and R respectively.

Figure 5: Different Measures of Elasticity



Because demand is curvy linear, the price change elasticity is measured based on the slope of the line

RS. But, the point elasticity at p_1 (in T) is estimated based on the slope of line AB which is a tangent of f_d at point T. As the slopes of lines AB and RS are not the same, the price changed elasticity at point T with the slope of RS is not the same as the point elasticity at T with the slope of AB. Similarly, the point elasticity at point V (price p_3) is not the same if the price change elasticity is determined at V. The arc elasticity also deviates from point elasticity if demand is represented with the curvy line in application. A price change (p_1 to p_3) does not keep the average price (p_2) on the demand curve (f_d). The arc elasticity is also determined with the slope of RS through which price changing positions take place. But, arc elasticity is different from a view of point elasticity at price p_2 on f_d.

Price discrimination: Does it relate to elastic and inelastic for two groups (markets)?

In a monopoly, no firm entertains negative marginal revenue (MR<0) in a market. This situation is applicable to third degree price discrimination too (refer to Appendix 2). Hence, the price discrimination takes place where MR>0 and this becomes possible when $E_d>1$ only. This implies that the determination of two prices in discrimination takes place only on the area of $E_d>1$, i.e., in the 'elastic' part of the demand curves for both groups (markets). The only difference is that one group (market) has relatively more elasticity than the other. Round and McIver (2006) have strongly emphasised this consistently with the condition that a monopoly operates when $E_d>1$ where MR>0 and spell out the price discrimination as a result of the differing values of elasticity in two groups (market). Hence, this note suggests to use the terms 'more' and/or 'less' in comparison of elasticity for two discriminated prices particularly in monopolistic competition, not the terms 'elastic' (formally means $E_d>1$) and 'inelastic' (formally $E_d<1$).

Conclusion

This note focuses on misunderstanding of elasticity with its slope component. Though it is understood that slope is an element of determining elasticity at a point of price and quantity, elasticity of demand and elasticity of supply are not illustrated in a common illustrative perspective. Particularly, the formal illustrations on both demand and supply in particular dilute clarity in compromising approaches in them. To make a common approach, it is necessary to accept that an elasticity measure takes place along a demand-shaped straight line, which consists of all major five (5) elasticity types on that line. The formal illustrations do not deny this fact. But, they do not provide a common graphical illustration for elasticity of demand and elasticity of supply in comparison. This note emphasises that different illustrations in elasticity of demand and supply should be brought into a general format for an easy understanding of elasticity and to distinguish elasticity from slope of a line

While explanations are extended to show a common illustrative approach applicable to show both elasticity of demand and supply, the overlapping explanations of point elasticity with price-change and arc elasticity are additionally explained in view of showing the difference in them. This note considers a distinguishing terminology of price (or income)-change elasticity from point elasticity and indicates that definition of elasticity should be acceptable to accommodate explanation of point elasticity.

Finally, this note has focused on the terms 'elastic' and 'inelastic' used in textbooks in third degree price discrimination and suggests to avoid those terms because the formal explanations for 'elastic' (E_d>1) and 'inelastic' (E_d<1) have no valid theoretical background in third degree price discrimination, since a monopoly market is always found with the situation MR>0 where E_d>1 and is applicable to third degree price discrimination too. In theory, a monopolistic firm operating with E_d<1 is not critically accepted.

REFERENCES

Gans. J., King. S., Stonecash. R. & Mankiw. N. G., (2005), Principles of economics, 3rd Edition, Thomson, Nelson, Australia Pty Limited.

Gwartney. J. D., Stroup. R. L., Sobel. R. S. & Macpherson. D. A., (2006), Economics: Private and public choice, 11th Edition, Thomson, South-Western, USA.

Laudadio. L., (1968), "A note on elasticity of demand", The Canadian Journal of Economics, Vol.1, Issue-4, pp. 825-828.

Mankiw. N. G., (2007), Principles of Economics, 4th Edition, Thomsom, South-Western, USA.

Oxera Consulting Ltd., (2005). "Price discrimination in craft-user license fees", Report prepared for British waterways, pp. 01-20.

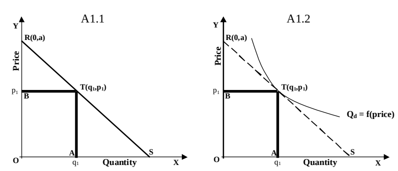
Round. D. K. & McIver. R. P., (2006), "Teaching third-degree price discrimination", Journal of Economic Education, Vol. 37, Issue 2 (Spring), pp. 236-243.

Samuelson. P. A. & Nordhaus. W. D., (2005), Economics, 18th Edition. McGraw-Hill Irwin, New York, USA.

Samuelson. W. F & Marks. S. G., (2003), Managerial Economics, 4th Edition. John Wiley & Sons. Inc. USA

Appendix 1

The appendix illustrates how formal equation of elasticity and Laudodio (1968) are similar. Consider a simple demand equation P = a – bQ for a product and a point $T(q_1, p_1)$ on it. The points R and S are intercepts of axes Y (price) and X (quantity) respectively; and the quantity and price of point T are at A (p1) and B (q1) respectively, (refer to the Fig. A1).



As the point $T(q_1, p_1)$ is on the demand curve P = a – bQ,

$p_1 = a - bq_1 \Rightarrow bq_1 = (a - p_1) = BR$; and $p_1 = BO$

As BT||OS, the point T geometrically divides line RS at the ratio (ST : RT) = (BO/BR)

$$= (ST/RT) = (BO/BR) = p_1/(a - p_1) = \left(\frac{\Delta Q}{Q} \div \frac{\Delta P}{P}\right)$$

This approach is same for determining a point elasticity on a curvy demand curve [Q_d = f(price)] when a tangent of the f(price) goes through the point $T(q_1, p_1)$ as shown in A1.2.

This result is the same as indicated by Laudodio (1968). Hence, the elasticity is a measure that varies from zero (0) to infinity (∞) in accordance with the movement of point T along the straight (demand) line RS. As points S and R are stable, the price (in point T) movement along the line determines the level of elasticity as (ST/RT). Similarly, it is possible to show that an elasticity coefficient on a supply curve (E_S) can also be determined as E_S = P/(P – h), as given general equation of a supply curve $P_S = h + kQ_S$.

Appendix 2

In monopoly or monopolistic competition, the price (P = average revenue AR) and quantity (Q) of a product are interdependent on each other in determining the total revenue (TR).

Therefore, $\boldsymbol{TR = P * Q}$

For a monopolistic firm, marginal revenue (MR) needs to be positive for its realistic operation (for avoiding loss). Differentiating TR with respect to quantity (Q) results in as:

$$\frac{d(TR)}{dQ} = MR = P\left(\frac{dQ}{dQ}\right) + Q\left(\frac{dP}{dQ}\right) = P + Q\left(\frac{dP}{dQ}\right) \quad \text{………….. (eq1)}$$

But $$E_d = -\left(\frac{dQ}{dP} \times \frac{P}{Q}\right) \quad \text{………….. (eq2)}$$

Note that the negative value of E_d is transformed into its absolute term as multiplied by a negative.

From the (eq2), $\frac{dP}{dQ} = \frac{-P}{Q\,E_d}$ and substituting this in (eq1) results in:

$$MR = P + Q\left(\frac{-P}{Q\,E_d}\right) = \left(P - \frac{P}{E_d}\right) = P\left(1 - \frac{1}{E_d}\right)$$

$$MR = P\left(1 - \frac{1}{E_d}\right) \quad \text{………….. (eq3)}$$

The realistic operation of a firm is confirmed with MR>0 because the equilibrium of a firm is confirmed with MR= marginal cost MC. As a firm in monopoly does not reach its equilibrium, the firm always keeps its MR>0. The (eq3) confirms the absolute value of elasticity needs to be greater than 1 (E_d>1) if the firm is away from loss. For any E_d<1, the MR is negative. The firm does not entertain a group that provide negative MR.

The condition in (eq3) cannot be violated in any circumstances and has been accepted in monopolistic competition market, thus applying even for third degree price discrimination.

Appendix 3

Consider demand equation **P = a – bQ**, where **b = (ΔP/ΔQ)**. Appendix 1 confirms that the elasticity of point T(q_1, p_1) is measured based on its location on the line RS, where R and S are the extreme points of the straight line RS on Y and X axes respectively. So that, $\mathbf{E_D = (ST/RT) = p_1/(a - p_1)}$, where $\mathbf{a = (p_1 - bq_1)}$.

Substituting $\mathbf{a = (p_1 - bq_1)}$ in $\mathbf{(ST/RT) = p_1/(a - p_1)}$,

$$\left(\frac{ST}{RT}\right) = \left(\frac{p_1}{(p_1 - bq_1 - p_1)}\right) = \left|\frac{p_1}{bq_1}\right|$$

But, b = (ΔP/ΔQ) and therefore,

$$\left(\frac{ST}{RT}\right) = \left|\frac{p_1}{bq_1}\right| = \left|\frac{1}{b} \times \frac{p_1}{q_1}\right| = \left(\frac{\Delta q}{\Delta P} \times \frac{p_1}{q_1}\right)$$

In general formulation,

$$E_D = \left(\frac{1}{b} \times \frac{P}{Q}\right) = \left(\frac{\Delta Q}{\Delta P} \times \frac{P}{Q}\right) = \left(\frac{\Delta Q}{Q} \times \frac{P}{\Delta P}\right) = \left(\frac{\Delta Q}{Q} \times \frac{P}{\Delta P}\right) = \left(\frac{\Delta Q}{Q} \div \frac{\Delta P}{P}\right)$$

$$E_D = \left(\frac{\text{Percentage Change in Quantity}}{\text{Percentage Change in Price}}\right)$$

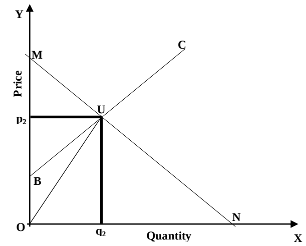
This is the formal equation for coefficient of elasticity that confirms how change in quantity and change in price are inclusive in point elasticity on a line on which elasticity considers linear relationship of price and quantity.

Appendix 4

The elasticity formula is:

$$E_D = \left(\frac{\Delta Q}{Q} \div \frac{\Delta P}{P}\right) = \left(\frac{P}{Q} \times \frac{\Delta Q}{\Delta P}\right) = \left(\frac{P}{Q} \div \frac{\Delta P}{\Delta Q}\right)$$

A3.1



From A3.1, assume MN and BC are demand and supply curves respectively, point U(p_2, q_2) is on them, and slope of any one of them is ($\Delta p/\Delta q$). Referring to the above formula, the demand elasticity at point U is as:

$$E_D = \left(\frac{\Delta Q}{Q} \div \frac{\Delta P}{P}\right) = \left(\frac{P}{Q} \times \frac{\Delta Q}{\Delta P}\right) = \left(\frac{P}{Q} \div \frac{\Delta P}{\Delta Q}\right) = \left(\frac{p_2}{q_2} \div \frac{\Delta p}{\Delta q}\right)$$

As O(0, 0) and U(p_2, q_2), the slope of OU is simply (p_2/q_2). And also the slope of demand (or supply) curve at point U is ($\Delta p/\Delta q$). Therefore,

$$E_{D(or\ S)} = \left(\frac{\Delta Q}{Q} \div \frac{\Delta P}{P}\right) = \left(\frac{P}{Q} \times \frac{\Delta Q}{\Delta P}\right) = \left(\frac{P}{Q} \div \frac{\Delta P}{\Delta Q}\right) = \left(\frac{p_2}{q_2} \div \frac{\Delta p}{\Delta q}\right) = \frac{\text{Slope of } OU}{\text{Slope of } MN \text{ (or } BC)}$$

This implies that there is consistent in identifying elasticity of demand and supply at a point of price.

Perspectives of Labor Policy and Market

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Abstract: In the era globalization there is a demand and exploitation of the labor. In the modern economy labor force has become instrumental and productive to the Nation's economy. One believes that the labor force has to be assured and guaranteed by the framework of the law. This paper describes the legal perspectives of labor policy and market. It also focused on the need of radical reforms of the country's labor law that creates and increases productivity, competitiveness and monitors the social and economic impact of globalization.

Key words: Globalization, Economy, Labor market, Factories Act, Industrial prosperity.

Introduction:

The workers' skill gives rise to the fluctuations of the market. At any point of moment the intersection of the labor and labor supply produce equilibrium, equitable wage and enhance its level of employment would be constant without exploitation. The world labor organizations, commissions and the concerned recommending agencies have sought the labor force under common framework of the law. As American proposals that labor should not be treated as commodity that all workers had a right to a wage sufficient to live on and that women should receive equal pay for equal work. My paper is focused on the need of radical reforms of the country's labor law that creates and increases productivity, competitiveness and monitors the social and economic impact of globalization. An Indian labor perspective converts the individuals into productive people comprising the workforce and also examined the impact of globalization on labor reforms. Further it discussed the labor laws and policies which can be execution able to achieve socialist market economy of the world. The proposal also protecting the freedom of speech, press, assembly and association. Here in fact the economic and social rights cannot be achieved without promoting fundamental rights and freedom of the labor and also the justification for freedom of association and the defense of the economic and social rights. The aim of freedom of labor is to enable workers to choose employment providing them with satisfactory working conditions, economic security and affording them real opportunities for improving their living standards.

Labor Market in India

While India's population rate has declined the labor force is projected to grow by 2%. Majority of the economy and the population are still rooted in traditional activities and structures. The labor market in India is primarily spread across the agriculture sector, the urban informal sector. The percentage of the total labor force in agriculture has witnessed a decline over the last decade; however it still employs the highest percentage of the total labor force. As the workers migrate from the rural agricultural sector to other sectors; it is imperative to devise a strategy to effectively absorb this additional workforce to sustain India's current growth rate moreover in order to fill the gaps the available skilled labor force could be utilized more effectively by providing more enmities and provisions which are directed by the provisions of labor laws causing the industrial economy.

Ensuring reliable labor market and increase the labor force by providing health, safety and welfare provisions to the labor under the Factories Act, 1948 without discriminating and disturbing their legitimate rights. To provide all these country like India need s long standing labor law policy and to maintain labor skills with proportionate wages. The labor law policy provides to broader coordinated frame work to make labor to work in so efficient manner.

India is considered to be highly regulated and consists of most rigid labor law in the world. The chain of rigid labor laws in India have been criticized as the root cause of low employment growth, large unorganized sector, under ground economy use of casual, contract labor and low per capita income. High-quality and accessibility are the fundamental features of a well-functioning and competitive labor market. It can vastly deals and improves both short- and long-term matches of labor supply and demand to ensure that individuals build and renew their skill sets required in the dynamic marketplace. Hence, this framework works out at national, regional and local levels. In this regard labor related Acts and labor policy are to be regulated and reviewed.

Consequently the country's labor market has become a major impediment of the economic growth and arising disparities in the distribution system. Flexible labor laws definitely will help both organized and unorganized sector workers. It is dire need for flexibility in labor market even as there exist regulatory framework. So it creates free labor market.

Methodology

To create congenial atmosphere in the tripartite there should be free and the best labor law practice is to be required. The labor law policy can identify the leaks in the labor practice and also face the challenges especially related to utilization of the labor. The compilation of labor law leading practices is based on multiple avenues. They are i. working environment, ii. Identifying leaks in labor market, iii. Labor force demand and supply, iv .Employment structure in industry and occupation, v. Local unemployment, vi. Demographic, geographic and economic factors

The labor environment is being disturbed in the industry and other working sector due to negligence of labor law practice. The labor force is being exploited due to the fall and rise in labor demand and supply. Majority of Indian labor are working in unorganized sector where they will not be treated as labor but commodity. The unemployment is prevailed in India where the people are ready to work even with risk prediction and where there are no proper labor law practices. This holistic practice can be reduced by the proper implementation of labor laws.

Labor welfare and labor productivity are vital determinants of an industrial prosperity. The wages of the workers and their working conditions could be provided as per labor and industrial law policy. India still needs to improve the labor working conditions, facilities and other safety, health and welfare provisions for enhancing skill of their employment. Labor Management Relations' are an added fundamental feature of preserving safe labor competitive practices. It can improve long term labor demand and supply to ensure the individuals build and create skill and utilization to the industry.

Distribution of rural labor

While Studying the Employment Unemployment Scenario in the country collection of information on household characteristics has also been attempted during the survey. The information is collected from 1, 28,298 sample households spread across 28 states and 7 Union Territories of which 81,430 households from rural sector and 46,868 from urban sector. A total of 6, 29,753 persons have been surveyed out of which 4, 03,271 reside in the rural sector sample households and rest 2,26,482 persons from urban sector sample households covered during the survey

Per 1000 distribution of households in rural areas by household type may be perused from the below table. Per thousand distributions of rural households by type of household. The given table indicates the distribution of labor in Indian context.

Household Type	Per 1000 Distribution of Households
1.Self-employed in agriculture	396
2. Self-employed in non-agriculture	113
3.Agriculture labor	111
4.Regular wage earned	207
5.Other Households	49
6. other laborers	124
Total	1000

Distribution of urban labor

Household Type	Per 1000 Distribution of Households
1.Self-employed	344
2.Regular wage	423
3.Casual Labor	152
4.Other Households	81
Total	1000

Per 1000 distribution of urban households presented in above Table indicates that 344 households belong to the self-employed category, 423 are regular wage households and 152 are casual labor households. Remaining 81 households have income sources other than those specified above as the major source of income. The above given table indicates the urban labor distribution.

Unemployment in India

Unemployment is one of the favorable winds to the industrial management to exploit the labor work force this can be mutilated by the effective implementation of the labor law provisions. The unemployment rate is the ratio of the number of unemployed persons in the labor force per 1000 population. At overall level the unemployment rate is estimated at 94 out of 1000 persons in labor force which implies that 9.4 % of the labor force is unemployed and looking for jobs. In absolute terms it is estimated that about 40 million persons are unemployed at overall level of the State/UTs. For male and female persons the unemployment rate at overall level is 80 and 146 respectively. A majority of the estimated unemployed persons (80 %) is in the rural sector at overall level. While comparing the unemployment rate in the rural and the urban sectors at overall level, it is observed the same is higher in the higher in the former (101) as compared to the latter (73). The spread of the unemployment causes the scatters the integrity of the labor.

Categories of Employment by Industry groups

The proportions of various categories of employment, namely self-employed, regular wage/salaried person and casual labor are distributed into 10 broad industrial groups cited in the preceding table. Within the employed population, self employment is the dominant category. Out of 1000 persons employed, 439 persons are self employed, 168 persons are regular wage/salaried and the rest 393 persons are employed as casual labor at the overall level.

In the self employed person's category, maximum proportion of persons is engaged in agriculture, forestry & fishing group (572 out of 1000 persons) followed by wholesale and retail trade (135 out of 1000 persons) at overall level. In the rural sector, 457 persons and 435 persons out of 1000 persons are in the categories of self employed and casual labor respectively. Rest 108 employed persons belong to regular wage/salaried class in the rural areas. In the second employment category of regular wage/salaried person, maximum proportion of the employed is engaged in the community services (227 persons out of 1000 persons) followed by 153 in manufacturing industry

In the third employment category i.e. casual labor; a majority of the persons are in the agriculture, forestry and fishing industry group (467 persons out of 1000 persons) followed by 148 in the construction sector.

Industrial Classification	Rural (1000)	Urban (1000)
Agriculture, Forestry & Fishing	576	99
Mining & Quarrying	22	15
Manufacturing	67	154
Electricity etc.	13	33
Construction	72	86
Wholesale, Retail etc.	59	173
Transport, Storage etc.	28	78
Financing, Insurance etc.	14	61
Community Services etc.	63	146
Others	86	155
Total	1000	1000

Employment size

The employed population estimated can be further classified into three broad categories based on the strength of the unit/enterprise in which they are working. These four broad categories are :i. Less than 10 workers, ii. 10-19 workers. iii.10-19 workers, iv. Not reported/unknown

At overall level, per thousand employed persons, 658 persons are working in the units employing less than 10workers. About one fourth of the employed persons were not able to report the number of workers employed in the enterprise in which they are working

Per thousand distributions of employed persons among units of different employment size

Employment Size of the Enterprise	Rural + Urban
Less than 10 workers	658

10-19 workers	32
10-19 workers	67
Not reported/unknown	243
All Employment Sizes	1000

Unorganized workforce

India has witnessed increasing in formalization of industrial labor since 1980s. This in formalization has taken the form of i. rising share of unorganized sector in total manufacturing employment, and ii. In formalization of the organized manufacturing sector itself with greater use of subcontracting and increasing employment of contract and temporary workers

The nature of these structural changes in the labor market in India implies that the bulk of the new jobs created in the formal sector of Indian manufacturing in the recent years are of low quality and informal in nature (i.e., not requiring specialized skills and training). Thus, in terms of creation of specialized skilled labor jobs, India's organized manufacturing lags behind. The phenomenon of increasing in formalization of industrial labor is a serious issue of concern because if industrialization does not create many good jobs for people to shift from low productivity occupations, it cannot make a big contribution to economic development and rise in standard of living.

Labor utilization

The skill base of India's work force, in terms of education level and vocational training, is quite abysmal and there is a serious mismatch as regards the existing skill levels of the workers vis-à-vis the requirements in key there is a serious mismatch as regards the existing skill levels of the workers vis-à-vis the requirements in key there is a serious mismatch as regards the existing skill levels of the workers vis-à-vis the requirements in key there is a serious mismatch as regards the existing skill levels of the workers vis-à-vis the requirements in key growth sectors. Also, the profile of skills among workers varies considerably across regions and different sectors of the economy.

The overwhelming majority of the work force, not only in rural areas but also in urban areas, does not possess any identifiable marketable skill. In urban, only about 19.6% of male and 11.2% of female workers possessed marketable skills. Whereas, in rural areas only about 10% of male and 6.3% of female workers possessed marketable skills. Whereas, in rural areas only about 10% of male and 6.3% of female workers possessed marketable skills. Whereas, in rural areas only about 10% of male and 6.3% of female workers possessed marketable skills. Most of the job seekers (about 80%) in employment exchange are without any professional skill.

The basic educational levels across economic activities are alarmingly low and in sectors such as mining and quarrying, agriculture and construction, more than 50 % of the workers are illiterate. As far as employability of trained workers is concerned, a major chunk of activities in India are still managed without any marketable skill. Only around 12.2 % of all workers engaged in different kinds of industrial activities have education beyond high school standard and 2.8 % of workers have some technical skill.

Migratory labor

Migration in India is mostly influenced by socio-economic patterns of development. The development policies by all the governments since independence have accelerated the process of migration. Uneven development is the main cause of labor migration. Added to it, are the disparities, inter regional and amongst different socio-economic classes. The landless poor who mostly belong to lower castes, indigenous communities and economically backward regions constitute the major portion of migrants. In the very large tribal regions (North Eastern region, Bihar, Jharkhand, Orissa etc) of India intrusion of outsiders, settlements by the outsiders displacing the local tribal people and deforestation also played a major role in migration.

The Indian daily Hindustan Times on 14th October 2007, revealed that according to a study by a Government Institute, 77% of the population, i.e. nearly 840 million, Indians live on less than Rs. 20 (40 cents) a day. Indian agriculture became non remunerative, taking the lives of 100,000 peasants during the period from 1996 to 2003, i.e., a suicide of an Indian peasant every 45 minutes. Hence, the rural people from the downtrodden and backward communities and backward regions such as Bihar, Orissa, Uttar Pradesh and Andhra Pradesh travel to far distances seeking employment at the lowest rungs in construction of roads, irrigation projects, commercial and residential complexes, in short, building the "Shining" India.

The labor law and its accurate implementations for the labor who are working in construction is the largest sector in India after agriculture. Most of the employment in construction is migrant labor. The working hours are from sunrise to sunset. The working day of women often stretches from 14 to 16 hours, combining house work and work at site. On the site, women are paid Rs. 60-70 a day while men are paid Rs.100-175. Masons earn up to Rs.175-250 a day. The work place is unsafe. The workers have no social security, compensation to injuries, access to drinking water, and healthcare. India has the world's highest accident rate among construction workers. A recent study by the International Labor Organization shows that 165 out of every 1,000 workers are injured on the job.

There are 20 million domestic workers mostly migrants from rural India. Regular streams of new migrants, leaving behind, scorched fields and emaciated families in the tribal belts of Bihar, Orissa, Chhattisgarh, Jharkhand, Assam, and Mizoram for Mumbai, Delhi and other Metros. Table below illustrates that percentage of employment oriented migrants is quite high for migrants moving from urban areas. More than half of male migrants in the urban to rural streams have moved for work or business purposes. Looking at the interstate streams of migration, nearly 41 % of migrants have stated work or business as their reasons of their move from urban to rural areas. Two-third of males from urban to rural areas have migrated for employment and related reasons.

Percentage of employment oriented migrants by streams of migration

Migration from-to	Total	Male	Female
Rural to Rural	4.9	25.3	1.3
Rural to Urban	10.9	25.9	2.8
Urban to Rural	28.3	55.2	4.1
Urban to Urban	19.5	38.8	3.6

Existing labor laws and policy

Work is a right, duty and source of pride for each citizen. Once work is a right, it attracts legal implications, obligations and duties on part of the

State, employer and employee. The triparties can be protected and accountable to the enacted labor Law. It is the body of laws, administrative rulings and precedents which address the legal rights and restrictions on working people and their organizations. It mediates many aspects of the relationship between trade unions, employers and employees. Broadly speaking labor law is classified into two categories, one is Collective Labor Law and the other is Individual Labor Law. The first deals tripartite relationship (employee, employer and union) later second deals with employees' rights at work through the contract for work.

Labor management is pivotal for socialist market economy and also enacting and protecting labor rights in the 20th century. The labor rights are integral to the social and economic development since the industrial revolution. Providing employment standards and social norms for the minimum socially acceptable conditions under which employees or contract will work. Labor law arose due to the demand for workers to have better conditions , the right to organize, the right to work, participating in a labor union, and simultaneous demand for employers to restrict the powers of workers in many organizations and to engage the labor with low cost. Employers' costs can increase due to workers organizing to achieve higher wages or by law imposing costly requirements, workers' organizations for some time causes industrial disputes and gain political power. The state of labor law has been related to the product and component of struggles between different interests in the society. The labor law related to the interests and priorities of the society and it resolves conflicts of labor management relations.

Review of literature

Since the industrial revolution the labor movement has been concerned about economic globalization that would weaken the bargaining power of workers, as their employers could move to hire workers abroad without the protection of the labor standards at home. World War I and Treaty of Versailles have given progressive direction for the constitution of International Labor Organization founded on the principle that labor is not a commodity and unrest between the labor and management and its legislation and laws established basing on social justice. OLO plays an important role to co-ordinate the principles of International Labor Law by issuing conventions. World Trade Organization has directed the labor law representatives to incorporate global standards of the International Labor Organization. The European union has an extensive system of labor laws excluding matters around direct wage regulation and fairness of dismissals.

The British labor law like The Factories Act (1802 to 1833) and the 1832 Master Servant Act were the first laws regulating labor relation in the United Kingdom. The vast majority of Employment Law before 1960 was based on the Law of Contract. This Employment Law Act was the Equal Pay of Act of 1970. This Act bring about the equality for women at work place.

It takes change according to functioning of the Nation and Government. The Laws of the Nations could change the function of the Government. Canadian Labor Law matters connected with unionized work place while Employment Law deals with non-unionized employees. China's Labor Law is complicated with soaring members of factories and the fast pace of urbanization. Chinese labor law promulgated on July 5th 1994 as Chinese law enacted by the administrative regulations, state councils , the ministerial rules and the judicial pronouncements explaining various aspects of the employment relationship. Labor unions in China controlled by the Government through the All China Federation of Trade Unions which is also the sole legal labor union in China. Strike is formally legal but in France the first labor laws were Waldeck Rousseales laws passed in 1884.

The Fair Labor Standards Act of 1938 deals the maximum standard work week to 44 hours and in1950it was reduced to 40 hours. The fifth and fourteenth Amendments of United States Constitution limits the power of the federal and state Government particularly in the case of The Civil Rights Act of 1964 which limits the ability of the private sector to discriminate against certain classes in employment. The fifth Amendment has explicitly mentioned that federal Government not deprive the individuals of life, liberty or property.

The National Labor Relations Act enacted in 1935 as part of the New Deal Legislation guarantees workers right to form and engaging in collective bargaining. This legislation and its subsequent amendments are also key elements of US labor law and National Minimum Wages Act of 1998. Working patterns under the Employment Rights Act of 1996 workers have the right co-determine how their occupational pensions are managed under Pensions Act of 2004 and health and safety policies in the work place are formulated under The Health and Safety at Work Act of 1974. The Trade Union and Labor Relations Act of 1992 sets out rules for the constitution of trade union.

Labor law is the consequential legal implication. The labor law has existed since people worked. In feudal England the first significant labor laws followed the Black Death. The shortage of workers and consequent price rises the ordinance Factory Act, 1349 and the Statute of laborers 1351 attempted to suppress sources of wage inflation by banning workers organizations creating offences for any able-bodied person that did not work and fixing wages at pre-plague levels.

Ultimately this led to the Peasants' Revolt of 1381. In 1772 slavery was declared to be illegal and the subsequent Slave Trade Act of 1807 and Slavery Abolition Act of 1833 enforced prohibition terrylans the British Empire. The 19th century is the period of massive production. To contract where people were formally free to choose their work. As Adamsmith observed change the workers 'factual dependency on employers. As its height of the business and corporation of Britain Industrial Revolution organized half of the world's production across a third of the globe's surface and quarter of its population

ILO is constituted to deal with labor issues. This is post war constitution and protection of labor unions occupied the attention of many nations during an immediately after World War I. In great Britain the whitely commission, a sub committee of the reconstruction. Commission recommended the industrial councils later IFTU and Woodrowilson have demanded an end to wage labor and establishment of socialism. The league of Nations has showered the responsibility later it will become an act as a guiding force to maintain socialist economy.

The first annual conference on labor with bright hope and it was adopted the proposals to protect the labor rights in the year 1919 that hours of work and working conditions, employment, maternity, protection, night work for women minimum wage etc. The labor law and policy is an instrumental for the development of national economy and aims at to bring social change in the modern world. The law and policy facilitates the manufacturing and distribution of the production and maintain productive relationship among the individuals and the public institution. In India the law relating labor and employment is known as Industrial law. Indian labor law is deeply connected post colonialism. Initially it was intended to protect British employees in our country. The Factories Act in 1883 is the genesis of the Indian labor law and also elevates the dignity of the labor is being protected in our constitution (Chapter III Articles 16,19,23,&24) and chapter IV (Articles 39,41,42,43,43A &54).

Broadly the labor policy in India reads that it has been evolving in response to specific needs of the situation to suit the requirements of planned economic development, social justice. The Indian labor law consists of two fold objectives namely maintaining industrial peace and promoting the welfare of the labor. Indian labor policy has been considered as a prime policy among the world: creative measures to attract public or private investments, creating jobs, social security schemes, social security card for workers, allocating funds to the labor welfare boards and allocating funds to vulnerable workers, long term settlements based on productivity, vital industries and establishments declared as public utilities, allocating funds for the special conciliation mechanisms, forming industrial relations committees, labor law reforms, statutory amendments in the mechanism of labor judiciary, amendments to the Industrial Disputes Act, efficient functioning of labor departments, bringing more labor sectors under the Minimum Wages Act, Child labor is abused, modern medical facilities for workers, rehabilitation packages for displaced workers etc.

Labor market ecosystem in India is mostly associated with productive work especially physical work done for wages. As far as India is concerned labor law is also known as Employment Law and it can be considered as Industrial Law. The prevailing social economic conditions have been largely influential in shaping the Indian labor legislation which regulates various aspects of work, labor demand, labor supply and labor laws.

The importance of Indian labor law was derived and realized by the nationalist leaders during the days of National freedom struggle. The relevancy of the dignity of human labor and the need for protecting and safeguarding the interest of the labor as human beings has been enshrined in the constitution. The constitution of India has been keeping in view with fundamental rights and directive principles of state policy to deal and address the problems of the labor enforcement Acts and law. The labor laws were also influenced by human rights, conventions and standards that have emerged from United Nations. The labor laws become the inclusive law to organize and form Trade Unions, collective bargaining and workers participation in management.

The Indian labor Law is not complicated law but it has been classified mainly into 6 heads i.e Laws related to i. Industrial Relations, ii. Wages, iii. Working Hours, Conditions of Service and Employment, iv. Equality and Empowerment of Women, v. Deprived and disadvantaged Section of the Society, vi. Social Security

Due to ugly and gruesome acts of frequent militancy and violence are negative trigger for existing company laws and labor laws across the world. As also for prospective investors and job seekers, labor reforms in India in the context of economic liberalization and globalization are much desired, but also feared and misinterpreted. If India wishes to shine better it has to boost the marketability of its humanism resources. The labor laws and policies have to work towards drawing in human resources, enterpreneual talent and employees.

Globalization and industrialization have posed a challenge for the proper management and effective and efficient deployment of the resources of labor as major factor when decides the profitability and viability of any organization. Labor is one of the basic human resources of any industry and important bearing on the performance and goals of the organization. In India plethora of laws which deals with issues concerning labor administration, labor welfare, regulation of industrial relations between the management and the workers. After liberalization the rate of growth of the Gross Domestic Product (GDP) of India has increased significantly presently making the country one of the fastest growing economies of the world.

Several economists, industrial associates and others have attributed the declaration in employment growth in India, particularly in the organized industrial sector, to flexibility in the labor market which is believed to have increased the labor costs for enterprises, thereby hindering the investment and growth. Employment protection laws are believed to be inefficient and inequitable, leading to slowdown in growth and dividing workers into protected and unprotected categories. The emerging situation demands for adoptability without compromising on labor rights, decisive participation and social inclusion. The Government has enacted several progressive labor laws since independence and some even before that. But it appears that not all these laws have had the intended good effects that we would have liked to see on the ground.

The past few years have seen major changes in India’s economic policies with the financial crisis and economic slowdown the income groups i.e. The labor class has been affected disproportionately. Examining some of these pressing challenges facing labor in India, one can demand the government to enhance public spending and avoiding socially harmful and economically inefficient policies. Globalization has transformed standards of industrial relations, collective bargaining and labor representation. In the current context we should seek to explore the impact of growing in formalization of labor on social security and occupational health and safety of the workers. One of the chief reasons given for the need for labor reforms is that many of the labor laws are quite irrelevant and do not reflect the requirements of the day.

In spite of Labor laws been widely studied for almost a decade and various recommendations to reinvent or evolve labor laws in the current leg of globalization. The issues pertaining to the welfare of labor and flexibility of the firms to grow in syne with market conditions for better industrial relations persists even today. For past few years it has been argued that labor laws in India are excessively stringent in the organized sector and this has led to serious rigidities that have resulted in adverse consequences in terms of performance of this sector as well as the operation of the labor markets. The changing in labor policy and laws in India by highlighting the need for flexibility in Indian labor laws that would give appropriate flexibility to the industry that is essential to compete in international markets. It has been mainly towards skill enhancement and focus on flexible labor markets rather than assessment of proper enforcement of the laws, assessment of the situation of different categories of employers and coverage of the social protection system.

The employer's view is about the flexibility in labor markets as a Pre-requisite for promoting economic growth and generating jobs where as trade unionists view is above flexibilisation in labor markets as a stragedy for profit maximizing of the firms and reducing their bargaining power without generating sufficient employment opportunities as have been paid. For this insecurity has been the major cause of concern. But in order to introduce reforms in the labor market the Government has to respond to the requirements of the stakeholders (Employers, Workers, Firms and Financial agencies). The urgency for the need to reform labor laws was brought into front. The labor law issues and the facts have become major concern that needs attention before framing labor laws

Conclusion

In the present scenario the labor force has become the great asset to the modern economy of the country. If the labor market would be sensitized the labor productivity can be increased. The spirit of labor policy should be rigid but practicality and implementation could be flexible. The rural and urban labor is to be logically distinguished and the labor law should enforce with equanimity. The industrial managements should always treat labor force as a greater than machine that could be handled and dealt with productive perspective. The enough attention and effective implementation of labor laws results cessation of migration of labor and protects the labor rights in unorganized sector. It is to be often reviewed and changed according to the welfare and productive needs of the country. The same has to reflect in the global standards and norms.

References

Malhotra, O.P., 'The Law of Industrial disputes', Universal Law p. company, Delhi, 1998

Prof. Madhavan Pillai, K., 'A text book on Lbor & Industrial Laws, Allahabad Law Agency,1994

Malik, P.L., 'The Industrial Law', Eastern Book Company, Lucknow, 1974.

Ashok Mathur, P.S. Raikhy., 'Economic Liberalization and its implications for employment', Deep & Deep Publications, New Delhi, 2002

Don Bellante, Mark Jackson., 'Labor Economics Choice in Labor Markets', McGraw-Hill Book Company, New York, 1983.

Gandhi M.K.Economic and Industrial life and Relations'Navajivan P.House, Ahmedabad , 1957.

Suresh Kumar Sharma., 'Right to work', An assessment of constitutional policy and ethos, KUJLS, 1998.

Ernesto Noronta., 'Indian Trade Unions: Today and beyond Tomorrow', IJIR, July, 2003.

Harish Chander., 'Contract of Employment and management prerogatives', JILI, 1994.

Bhatia, K.L., 'Labour laws research from a behavioural perspectives (Move from Doctrinal To Emperical generalization)', JILI, Oct-Dec, 1981.

Mitra, N.L., 'Freedom of association for organised and unorganised workers : International Percept and Practice', JILI, July – Sept, 1993.

Dond – One Kim and Seongses Kim, 'Globalization Financial crisis, and Industrial relations : The case of South Korea', BJIR, March, 2004.

Sudesh, V., 'Vanishing rights of Workmen – A comment on Indian Drugs and Pharmaceuticals Ltd Vs. R.K. Shewarmani', JILI, Vol. 47, No.4, Oct-Dec, 2005.

Factors Influencing Achievement of 10th Class Students in Mathematics – A Study in Vizianagaram District of Andhra Pradesh

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Abisamra, N.,(2000).'The Relationship between Emotional Intelligence And Academic Achievement in Eleventh Graders.'- Dissertation Abstract International, Vol.62.

Agarwal, A., (2002). 'Some Correlates of Academic Achievement'- Indian Journal of Educational Research. Vol.21(2), 75-76.

Agarwal JC (1975). 'Educational Research – An Introduction' - Arya Book Depot New Delhi.

Aggarwal, Y.P., & Sunita Chugh., (2004). 'Learning achievement of slum children in Delhi'. Former Senior Fellow & Head, ORSM Unit, NIEPA. Research and Training Associate, NIEPA.

Al-Garni, Mohammed Misfer., Ph.D (2000). The Ohio State University, 'The impact of family structure and family function factors on the deviant behaviours of high school students in Makkah City, SaudiArabia'.152pp.Adviser: Keith Kilty. Order Number DA9971506.

Azim Premji Foundation., (2004). 'Status of Learning Achievements in India- a Review of Empirical Research'.

Barclay, Janice Alston., (2001). Ed.D.,High-Achieving African-American high Scool StudentsAccont for Their Access to and Success in an Academically Advanced Programme. Harvard University, 2001.156pp.ISBN: 0-493-22129-8. Adviser:Rober S.Peterkin. Order Number DA 3012907.

Best, J.W., Kahn , J.V.(1977) – 'Research in Education', Prentice HallInc, Eagle Wood Cliffs, U.S.A. 31.

Best, J.W., Kahn, J.V.,(2005).Research in Education, Ninth Edition, Butler University, Emerites and University of Illinois, Chicago. Prentice Hall, of India Pvt Ltd., New Delhi-110001.

Bindu, N.N., (March,2007). 'Edutracks'(journal) , 'Teaching strategies for the gifted children', Lecturer in Physics., S.N.D.P.Yogam Training College, Adimali, Kerala.

Buch,M.B.,(1988). Fourth Survey of Research in Education, NCERT Publication,New Delhi.

Buckner, John C., Bassurk, Ellen L., & Weinredb, Linda F., (2001). (Children's Hosp, Dept.of Psychiatry, Boston, MA) Predictors of academic achievement among homeless and low-income housed children. Journal of school psychology, (Jan-Feb), Vol.39 (1), 45-69.

Carter, V.Good., (1959). (Ed) – 'Dictionary of education', University of Cincinnati.

Chandra Sekhar, CH. (2004): "Methods of teaching Mathematics" Kalyani publishers, New Delhi,

Charles A. Register and Paul W Grimes (2007) : Journal article on " Collective bargaining, teachers, and student achievement.

Chaube, S.P.,(2000). Problems of Indian Education; Publishers-Vinod Pustak Mandir, Ravi Mudranalaya-Agra-2, P-37-47.

Christie, Mary Ann Therese., (2001). Portraits of achievement beliefs: 'An exploratory dialogue between urban high school students and the achievement motivation literature.' Ed.D., Harvard University, 2001. 213pp. ISBN: 0-493-22135-2. Adviser: Janine Bempechat. Order Number DA3012913.

Cruz,M.,& Casanova, Pedro,F., Pelegrina,Santiago., Garcia-Linares., (2003). (Department to de Psicologia, Universided de Jaen. Jaen, Spain) Adolescents and their Parents' perceptions about parenting characteristics. Who can better predict the adolescents's academic competence? Journal of adolescence, Vol.26(6), 651-665.

Darlene, R., Fitzpatrick, Kevin M.,(2006). Psychosocial Correlates of Substance. Use Behaviours Among African American Youth. (PsycINFO Database Record (c) 2006 APA. Department of Sociology, Sanford University, Birmingham, AL, US; Source- Adolescence. 39(156), Win 2004.

Das, N.C., (1975). 'A psychometric study of low achievement of school final candidates in general sciences', Ph.D thesis Calcutta University.

Das, S.,(1986). 'Peer influence and educational aspiration of secondary school students, A study in relation to their academic achievement'. Ph.D.Thesis (ed.), in M.B.Buch, Fourth Survey of Research In Education (1991), NCERT Pub., NewDelhi.

Dash, B.N. (2004): "Foundation of Education" Neelkamal publication Pvt., Ltd., Hyderabad,

Dash, J.,(2002). "Trends and Problems of Higher Education of Scheduled Tribes in Orissa", Indian Educational Abstracts , Vol-2, No.2,July, 2002, No.142, pp-.14-16.

Davis, Taft Ho., (2003). EDUCATIONAL PSYCHOLOGY- Dissertation Abstracts – International, Page. No. 4414 – A, Vol – 64, Number – 12, June – 2000. 'The relationship between absenteeism and academic achievement among Freshman Algebra-I and Biology students in Metropolitan, Nashville.

De Bruyn, Eddy,H.., Dekovie, Maja.,& Meijnen,G. wim., (2003). (Department of Educational Sciences; University of Amsterdam, Notherlands) Parenting, goal orientations, classroom behaviour and school success in early adolescence. – Journal of Applied developmental psychology, 2003 (Sep), Vol 24 (4), 393-412.

Del Siegle., Sally .M.Reis., and D.Besty Mc Coach., (2000-2005). An Investigation of Interventions for Promoting the Achievement of Low SES and Culturally Diverse Gifted Middle School Students, University of Connecticut.

Desai., (1979). A study of Classroom Ethos, Pupil's Motivation and Academic Achievement. Ph.D. Thesis (ed.), in M.B. Buch, First Survey of Research In Education, (1979), NCERT Pub., New Delhi.

Desilva, (2007). president of Brazil, Comprehensive Development plan for education, Brazil.

Developmental Review. (2002). Educational psychology International psychological Abstract, September, 2002 Vol.89. No.9, 28488. Williams, Wendy M.; Blythe, Tina; White, Noel; Li, Jin et al. (Eornell U. Department of Human Development, Ithaca, N.Y) practical intelligence for school. Developing metacognitive sources of achievement in adolescence.

Dillihunt, Monica.L., (2004). studied on 'The Effects of Eultiple Intelligence and direct instruction on 3rd and 5th grade student achievement, task engagement, student motivation and teacher efficacy,' Ph.D., Howard University, PP 107, Order Number. DA 3114619.Dissertation Abstracts – International, Page No.4354 –A, Vol - 64, Number-12, June 2004.

Donna, Y. Ford., (1992). 'A study of achievement and underachievement among gifted, potentially gifted, and average African- American students (Research Monograph 95128)'.Storrs,CT: The National Research Centre on the Gifted and Talented, University of Connecticut.

Evanthia, N. Patrikakou., (September 2004). Evanthia N. Patrikakou, University of Illinois, Chicago, and Mid-Atlantic Laboratory for Student Success September 2004 Published by Harvard Family Research Project(2006)

Feiraband, R. and Dufois, P. (1959): "Psychological problems and research methods in Mathematical training" – Washington University, St. Lowis.

Garret, H.E. (1999): "Statistics in psychology and educational International book Burear, Hyderabad,.

Godber, Yvonne Elizabeth., (2002). Ph.D., University of Minnesota, 'School Climate: Understanding student perspectives to strengthen family – school relationships.' 125 pp. ISBN: 0 – 493 – 71214 – 3. Adviser: Sandra L. Christianson.

Goel, S.P.,(2004). (Agra College, Agra)'Effect of Gender, Home and Environment on Educational aspiration'- Journal of Community Guidance and Research, Vol-21,No-1, March-2004, pp-77-81.

Greene, H.A. (1954) : "Measurement and Evaluation in the secondary school, Long mans, Greene and Company, New York,.

Hancox, R.J., Milne, B.J., & Poulton, R., (2005). 'Association of Television Viewing During Childhood with Poor Educational Achievement. Archives of Pediatric and adolescent medecine, 159, 614 – 618.

Heymen and Loxly.,(1983). Secondary data obtained from previous study of Human Resource Development centre of India Tiruvanatapuram (2001).

Jeynes, William H., (2003). (Department of Education, California State University, Long Beach, CA) The Effects of the Religious Commitment of Twelfth Graders living in Non-Intact Families on their Academic Achievement. Marriage & Family Review. Vol.35(1-2) 77-97.

Jiyang, Yimin.,(2004). Ph.D Dissertation Abstracts –International Page No.4414- A, Vol - 64,No.12, June -2004 'Family environment and academic achievement in nanjing secondary school, University of HongKong(Peoples Republic of China),2003.

Joseph Klein.,(2004). Bar Ilan University,Israel .,Who is most responsible for gender differences in scholastic achievements:pupils or teachers?- Educational Research, vol.64, No.2, Summer 2004.

Joshi, Y. G and Verma, D.K., (2002). 'Aspirations and achievements of scheduled castes and scheduled tribes in last five decades of independence a study in Madhya Pradesh : institutional project report.. Madhya Pradesh: Dr. Babasaheb Ambedkar National Institute of Social Sciences.

Kalpana Vengopal., (2004). 'Education for Autonomy of the girl child'. Journal of all India association for educational research. Vol. 16, Nos. 1&2, March and June, 2004, Pg.No.38.

Koolstra,C.M.,Voort,T.H.A.,vander, & Kamp,L.J.T.vander (1997).Television's impact on children's reading comprehension and decoding skills: A 3-year panel study. Reading Research Quarterly, 32,128-152.

Kothari, D.S., (1966). - Report of the Education Commission (1964-66), Government of India, New Delhi.

Kumaran, D.,(2003).'Organaisational Health And Academic prformance; Perspectives in education(Journal) Vol.19, No.4.

Maheswari A.N., (1988). 'Its time for Smart Schools, Computers today'. UNESCO 1996. Learning: The Treasure Within.

Mamata Varma; Upadyaya S.K and Mishra R.C.,(2000). Psychology in India, 'Role of Socio-Economic back ground in the development of perceptual exploration and part-whole perception.- Edited by Vindhya U.Dept. of Psychology, Andhra University, Visakhapatnam.

Marazza, Lawrence L., (2003). (Lighthouse Management Group. Russell, OH) 'The 5 essentials of organizational excellence; Maximizing school wide student achievement and performance.' Corwin Press. Inc: Thousand Oaks, CA, 2003. xxiii, 163pp ISBN 0-7619-3954-7 (hardcover); ISBN 0-7619-3955-5(paperback) (from the cover).

Marsh & Yeung., (1997). Course work selection: Relations to academic self concept and achievement. American educational Research Journal,34,691-720.

Menon., Madhava, N.R., (2002). Role of teachers in the pursuit of academic excellence. University News. 40, 3, 21-27, January.

Merrett., Frank., Wheldall, Kevin.,(2006). 'Knowledge of teacher: How do teachers learn to manage classroom behaviour?' A study of teachers' opinions about their initial training with special reference to classroom behaviour management.' (PsycINFO Database Record (c) 2006 APA). Educational Studies. 19(1), 1993, 91-106. American Psychological Association.

MHRD., (1986). National policy on education, 1986. Govt. Of India, New Delhi.

Mustafa, M. (2005) : "Teaching of mathematics new trends and Innovations" DEEPC DEEP publications private Limited, Delhi.

Naresh Kumar Gupta., (2002). 'Need to Boost Primary Pupil Achievement A Strategy of education for all'- Indian Educational Review (Journal), Volume – 38, Number – 1, January - 2002, Page – 115, , Regional Institute of Education, NCERT, Ajmer.

National Policy on Education., (1986). The policy on Education adopted by Government of India in 1986.

Nolen, Amando Lynn., (2002). A Predictive Model for high school academic expectations. Factors influencing adolescents, their parents, and their teachers. PhD, Baylor university, Volume-63, No-6, December.2002, page.2133a. 2002, 96PP. ISBN: 0-493-71840-0. Mentor: Susan K.Johnsen.

Norris, Theresa Ann.,(2000). 'A longitudinal study of predictors of student achievement related to socio-economic status, race/ethnicity, attendance, and student mobility'. University of Nebraska at Omaha, 2000. 127pp. Advisers: Daniel U. Levine; Martha Bruckner. Order Number DA9975582.

NIEPA.,(2004). Occasional Paper, National Institute of Educational Planning and Administration, New Delhi.

Okagaki, Lynn., (2001). (Purdue U, Dept. of Child Development & Family Studies, West Lafayette, IN) 'Triarchinc model of monitory children's school achievement. Educational Psychologist', 2001, Vol 36(1), 9-20.

Pande (1981) and Puri., (1984). ' The influence of environment as a factors to promote academic achievement among students'.

Pandey R.S., (2003). Development Strategies in Modern Indian Education

Parcel, Toby L. & Dufur, Mikaela J., (2001) Ohai State U,Dept. of Sociology, Columbus, OH) Capital at home and at school: 'Effects on student achievement. Socio Forces, (Mar), Vol.79(3), 881-912.

Parida.S., (2003). 'Effect of Socio Economic Status , School Environment and Medium of Instructions on the Mental Abilities and Academic Achievement of School Children', Ph.D thesis of Utkal University, Bubaneshwar.

Patel, M.R., (1996). Study Habit of Pupil and its Impact upon their Academic Achievement. The Progress of Education, Vol.LXXI (4). P-74-76.

Paul H.Bowman. Education for Affective Achievement., (1973).edited by Robert D. Strom & E. Paul Torrance, University of Georgia.

Peterson, Dean J., (2002) Ed.D.,– 'The impact of school configuration and scholl size on students' self- concept, participation , and performance'. East Carolina University, 135pp. ISBN: 0-493-71868-0. Director: James S. Prassley. Order Number DA3056.

Plank., Spephen B., & Maclver, Douglas J., (2003). (Johns Hopkins U, Baltimore, MD) Educational achievement. (Vol.90:28359) Well-being: Positive development across the life course. Cross currents in contemporary psychology. Bornstein, Marc H; Davidson, Luch; Keyes, Corey L.M. & Moore, Krisstin A. (Eds). Lawrence Erlbaum Associates, 601 pp. ISBN 0-8058-4035-4 (hardcover). Pp.341-354.

Prakasa Rao.D.(2002). Asso.Prof., School of Distance Education, Andhra University, "School Education under Urban Local Governments."

Radha Dua.,(2004). 'Forces Influencing the Girl Child's Schooling' Journal of Indian Education, Feb-2004, NCERT, Vol-XXIX, No-4.

Radhakrishna, S. (Chairman) (1949) Report of the University Education Commission, 1948-49, Government of India, New Delhi.

Rajendra Singh Pathani (2005). Reader, Faculty of education, Kumaun University Almora Uttaranchal, 'Importance of Actual Academic Achievement and Academic Achievement perception of students.' The Educational Review-, Page No-5.Jan, 2005.

Research in Education: "fourth survey (1983-88) Volume-I".

Rupa Das, B.,(2001). 'Influence of Parental Literacy on the Academic Achievement Children belonging to Backward Classes – A Study of Kamarup District- Dissertation Abstracts International, Journal of Indian Education, P.No.59 – May-2001- Volume XXVII Number-1,Lecturer, Cotton College – Gowhati.

Saritha Saini., (2005). 'Family Environment and Academic Achievement, Journal article, Indian Educational Review-July 2005, (page no.87-95)

Sharma, V.P., (1967). :Evaluation of Attainment in Federal Hindi at the Secondary School level in West Maharashtra, Ph.D. Poona University, Poona; Buch, M.B(1979)., Second Survey of Research in Education (1972-1978), Society for Educational Research and Development, Baroda, P-374.

Sharma. R.A (2004) : "Advanced statistics in education and psychology", R.Lall Depot, Meerut.

Sidhu, K.S (1990) : "Methodology of Research in Education" sterling publication private limited, New Delhi.

Singh.,(1979). Non-intellectual correlates of academic achievement, Indian International Publication, Allahabad, 9-11.

Singley, Vicki Diane.,(2000). Ed.D. La Sierra University, 105pp 'A study of the factors related to continuing attendance of ninth-grade students in an urban high school.' Adviser: Norman Powell.

Smith, D.F (1917): "Mathematics in the training for Citizenship".

Sonnen, Arlene Miriam.,(2000). Ed. D. 'School resources and student achievement at Texas/Mexico border elementary schools'. The university of Texas at E1 Paso, 232pp. chair: Gloria M.Rodriquez, Order Number DA9971352.

South wick, Sarah Loreta., (2002). PhD, 'Internet use academic performance and social involvement in middle school age children, Hofstra University, 160 PP.ISBN 0-493-72567-9.Spassor Liora peddhzur, Schmelkin.

Spearman, C. and Jones, W. (1951): "Human Ability" Macmillan & Co., London.

Srivastava.,(1967). an investigation into the Factors related to Educational Underachievement. Ph.D. Psy., Patna University.

Srivatsava A.K., and Ramaswamy.,(1986). A Study on the Effect of Medium of Instruction, Socio-Economic Status and Sex on Academic Achievement, Intelligence and Creativity, CIIL, Mysore.

Stiffler, Margaret Elizabeth, Ph.D.,(2000). 'Parental involvement and adolescent academic achievement'. North Carolina State University, 148pp. ISBN: 0-599- 80061-5. Co-Chairs: Maxine P. Atkinson; Luther B. Otto. Order Number DA9974551.

Subhashini Passi., (2004). Journal of all India Association for Educational Research, Vol-16, Nos.1&2, March& June, 2004, page-1.

Sumerson, Joanne Broder; Farley, Frank H (2007) : Predicators of college student achievement.

Swami Vivekananda., (1973). – 'Youth Arise Awake and Know Your Strength' Indian Philosopher.

Tapola Anna; Buenuvurta, Markku (2008) : Journal article on " The role of achievement goal orientations in students perceptions of and preferences for classroom environment.

Terry Kesraris., Max Lenoy.,(2002).Research Finding: Intelligence, Socio-Economic factors and their influence on achievement Minority group educational success a review of research in the United States and Australia.- Referred paper by Rhodes, Craig., Ph.D., (2002) 'The ethos of a middle school modular technology education classroom'.University of Minnesota. 218pp. ISBN : 0-493-71253-4.

Thompson, F.T & Austin, W.P., (2003). 'Television Viewing and Academic Achievement Revisited'., Education, 124, 194-203.

Usha Devi. P., (2001). studied about 'The influence of intelligence and creativity on the achievement in Mathematics among X class students of Visakhapatnam District: A relational study-2001' Ph.D., Andhra University, Visakhapatnam

Van Matre, Jill C., Valentine, Jeffrey C.,& Cooper, Harris., (2000). Effect of Students' after-school activities on teachers' academic expectancies. Contemporary Educational Psychology, 25, 167-183.

Veena Kumari.B.,(2001). 'The Socio-Economic Status and Educational Aspirations of Secondary School Students in Relation to their Achievement in Social Studies,' Ph.D in Education, Andhra University, Visakhapatnam.

Vineeta Sirohi.,(May-2004). 'A Study of under achievement in relation to study habits and attitudes' –Journal of Indian Education,Vol.30, number-1.

Wheelehan Jacalyn., Ed.D., (2000). 'Factors influencing successful school improvement in selected schools using the Accelerated Schools process.'. Saint Louis University, 105pp. Adviser: Claire H.McCown, Order Number DA9973408.

Whitfield;Tammy Jo, Ed.d., (2000). Duquesne University Academic effectiveness of middle school instructional support teams in Pennsylvania. 143pp. Chair: Bonita Wilcox, Order Number DA9964697.

Williams, Bryan Keith, Ed.D.,(2000). 'The relationship between student achievement and half-day or full-day kindergarten enrolment'. Saint Louis University, 70pp. Adviser: Claire McCown. Order Number DA9973409.

Williams, W.M.., Blythe Tine., White Noel, Li Jin et al., (2002): "Practical Intelligence for School., Developing Metacognitive Sources of Achievement in Adoloscence."

Yadav, Kalika., (2004). Impact of literacy and socio-economic status on population control. *Indian Journal of Population Education*, (25), 29-35.

Zebun Nisa Khan., (2005). Scholastic Achievement of Higher Secondary Students in Science Stream, Department of Education S.S.D.S. College, Iglas 202124, Aligarh, India- Journal of Social Sciences 1 (2): 84-87, 2005, ISSN 1549-3652, sx Science Publications, 2005-84.