CHAPTER 7

CONCLUSION AND SUGGESTIONS

Economics of education with its concepts of human capital has revolutionized economic thinking and emerged as an important discipline. The role of human capital and investment in education has been given less attention over a long period. It was recognised only after Theodore W. Schultz demonstrated the role of human capital and investment in education first in the Presidential Address to the American Economic Association in 1960 and secondly in his Noble Lecture in 1979. Human capital is a concept that includes investment made in man through various means such as education, health etc., which increases the productivity and earnings of an individual, ultimately leading to a higher level of economic growth and development of a nation. Without sustained investment in human capital, no country can achieve substantial economic development. Higher education is also an important form of investment in human capital. In fact, it can be regarded as a specialised form of human capital, contribution of which to economic growth and development is very significant.

The importance of higher education is not limited in fostering the economic development of nations and providing opportunities for individuals, but it also extends to promotion of cultural diversity, political democracy and trade. Emphasis is rightly placed on how higher education can better serve society and promote international cooperation. It also forms an essential condition for transforming the society into a knowledge society. In global knowledge economies, higher education institutions are more important than ever as mediums for a wide range of cross-border relationships and continuous global flows of people, information, knowledge, technologies, products and financial capital.

The world of higher education in the 21st century can truly be a border-less world of knowledge and ideas which will yield reciprocal benefits for all nations. The ability of a society to produce, select, adapt, commercialize, and use knowledge is critical for sustained economic growth and improved living standards. ‘Knowledge has become the most important factor in economic development’ (World
Development Report, 1998-99). Through higher education, knowledge is acquired and individual perspectives are sharpened.

In the past two decades, higher education systems, policies and institutions are being transformed by globalization through the widening, deepening and speeding up of worldwide integration. There are new actors, new rationales, new programmes, new regulators and the new context of globalization. Globalization has become a formidable force for change as evidenced by the development of Indian higher education sector. These developments have posed the challenges and opportunities alike.

Globalization is not a new phenomenon; it is at least a few thousand years old. It is defined in a way in which physical boundaries of countries have no relevance or importance and where all the nations join their hand with each other and create a kind of socio-environment to do business or any commercial, cultural and educational activities in which every participant nation should be benefited. It can be said that, the origin of globalization involves economic factors with trade and finance liberalization. Globalization has affected each country in a different way due to a nation’s individual history, traditions, culture and priorities and also affected education particularly higher education sector to a great extent.

Globalization is pushing higher education towards greater international involvement. This process is often known as internationalization of tertiary education. It involves integrating an international, inter-cultural or global dimension into various aspects of tertiary education. A variety of cross-border, cross-culture activities in higher education has taken place continuously. Globalization, a root cause of changes taking place in the higher education and can simply be defined as…”the flow of technology, economy, knowledge, people, value, ideas…across borders”.

Globalization associated with liberalization and privatization of education, has changed the basic character of higher education and made it a market oriented activity attracting foreign capital, inviting competition and producing a profit more than the other sectors. Knowledge has become an international good to be traded and it transcends national boundaries faster than capital and people. It is now no more a public good on domestic level, but a private good on a global scale. Traditionally, education has been treated as a social service and welfare measures, but today, there is
a paradigm shift in education from services to business education. Higher education has long been regarded as a valuable institution for training, development, and research. In recent years, (due to various income generating abilities of some institutions of higher education) it has come to be known as a multi-trillion business (UNESCO, 2000).

Thus, globalization has influenced higher education to a large extent. It has made higher education a commercial commodity, offered at high price at the national level, and a tradable product across borders to those who can afford it. This has resulted in the emergence of new types of education providers, innovative methods of delivery, and new types of partnerships presenting new challenges in framing policies and regulations to monitor and enforce quality standards to the educational process. Thus, the current trend indicates domination by commercial and financial interests (IAU, 2000). In fact, higher education has now become an integral part of the globalization process in many parts of the world. The governments and universities are implementing variety of policies and programs to respond to globalization. These typically include sending students to study abroad, setting up branch campuses overseas or engaging in some type of inter-institutional partnership.

Educational system has undergone a metamorphosis with technological changes. Markets and globalization accompanied by rapid technological transformation are changing the manner in which humans live and work. The death of the sphere, the distance has been on the marked features of globalization in sphere of education. In this context, higher education has a greater significance in the developing countries particularly like India, which has been experiencing services led growth.

The analysis of quantitative growth of higher education in India reveals that, there has been rapid and explosive growth in numbers of institutions (universities + colleges), teachers and students enrolment during post-globalization period comparison to pre-globalization period. This quantitative expansion helped the nation in building the third largest reservoir of scientific and technical manpower in the world. India’s higher education system is one of the largest in the world in terms of institutions and 2nd largest in terms of student enrolment. Due to the efforts made by the government and the University Grants Commission (UGC) over the years,
women’s education in India has also grown both in terms of number of women’s colleges and women’s enrolment. But despite this expansion, there remained dearth of teachers in institutions of higher education.

Though country’s achievements in terms of absolute numbers are impressive, they are quite inadequate in relation to its population. Enrolment in higher education institutions in India was 17.9 per cent in 2011-12 of the eligible age group of (18-23 years) against 20 per cent which is threshold level for a developing country to reach an adequate level of economic development. Further, this GER is lower when compared with the world average of 26.7 per cent as well as average of the developed countries 57.7 per cent. In addition to this, there are wide regional disparities in the access parameter of higher education among states and union territories in India.

The period-wise analysis of annual average growth rate (AAGR) of Indian higher education system exhibits that, during 1980s (AAGR) of universities was 3.6 per cent which came down to 3 per cent in the period of 1990s, but further it increased to 8.3 per cent during 2002-11 periods. The factor which led to this rapid growth rate of universities was the increased demand for higher education and the participation of the private sector particularly in professional disciplines such as engineering and management. The growth rate of colleges and total higher education institutions was lowest in the period of 1980s i.e. 4.5 per cent for both. Thereafter, annual average growth rates of colleges and total higher education institutions saw an increase from the 1990s and registered an upward trend after 2001-02. The growth rate of student enrolment in higher education was 6 per cent during 1981-1991 periods; subsequently it declined to 5.5 per cent in the period of 1992-2001 but during 2002-11 periods, it increased to a relatively faster annual average growth rate of 7.3 per cent. The growth rate of teachers was lowest in the period of 1980s, and thereafter, it has been increasing consistently. Thus, the analysis shows that during post-globalization period, annual average growth rate of higher education system was highest after 2001-02 onwards.

The analysis of stage-wise enrolment data for the period 1980-81 to 2010-2011 reveals that maximum influx of students was at the graduate level and less for post-graduate level. While there is lack of focus on research and diploma/certificate courses. This shows huge disparity in stage-wise enrolments, resulted into mismatch
between the demands of Indian universities and the supply by unemployable graduates by public universities, which is not beneficial for the sustainable development of the economy. While examining the faculty-wise distribution of students during the period 1981 to 2011, it has been found that, student enrolment across various faculties has been very uneven. Thus, an appropriate policy is needed to balance this type of variations in the enrolments of students in the economy.

While reviewing growth, one can see an increasing trend in the number of private higher education institutions as well as enrolments in private higher education institutions in India. The private sector has enthusiastically participated in the growth of higher education system with about 64 per cent of the total higher education institutions being private unaided institutions in 2011-12. It shows that, non-public sector accounts for a higher share than public sector. There has also been a resultant increase in private institutions offering self-financing courses, especially in professional higher education. The number of state private universities and private deemed universities also expanded very fast. For India to achieve its GER target of 30 per cent it is imperative to further involve the private sector by creating a conducive environment for their participation (Ernst & Young/FICCI, 2011). However, private sector should be encouraged to start professional institutions, but it must ensure that privatisation does not lead to commercialisation of education and neglect of certain disciplines, which have no ready employment facilities.

In the last two decades, service sector have become one of the most dynamic segment of international trade and have emerged as the largest and fastest growing sector of the global economy providing more than 71 per cent of gross domestic product. Service sector in India has also played an important role in enabling improved economic performance on the domestic growth as well as external fronts during the post-globalization period. It has also helped in improving the productivity in other sectors of the economy, thus contributing to an improvement in overall competitiveness. The phenomenal growth and export performance witnessed in services like information technology (IT) and business process outsourcing (BPO) have placed India on the global map as a major supplier of knowledge-based services.

The global and national level analysis of compound annual growth rate of service sector imports and exports during the period 1980-2011 reveals that, India’s
services exports grew at a compound annual growth rate (CAGR) of 14.29 per cent, while world exports of services have grown at the rate of 8.53 per cent only. Substantial part of this growth in India has been noticed during post-globalization period i.e., 21.27 per cent. India’s services imports grew at a CAGR of 12.98 per cent and world imports of services have grown at the rate of 7.92 per cent. This shows that India has maintained a good position in the league of service exports and imports of services. However, growing openness and integration has helped India’s services export. In 2011, India was the eighth largest exporter and seventh largest importer of services at the global level.

Education, one of the important components of service sector also provides the bulk of employment and income in many economies worldwide and serves as vital input for producing other goods and services. In the present era of globalization and a regime controlled by the World Trade Organization (WTO), education is a service that can be traded through four modes of supply. Higher education, among all other sectors of education services is the most traded sector because of its lucrative market. In India education is provided both by the government and the private sectors. But largest part of higher education is provided by the government. The private sector is mainly interested in professional, technical and vocational education which has a direct link with the job market. After signing the WTO agreements it is an obligation that India has to liberalise all its sectors except those, which come under public services. The framework of GATS includes only those educations which are provided for a commercial purpose. However, education sector is the least committed services sector under GATS due to its public good nature and high degree of government involvement in its provision.

Over the past few years, there has been spectacular growth in trade in higher education services in many countries across the world. Trade in education services, particularly at the tertiary level, have been growing in importance. Internationally, education industry is worth of a trillion dollar. The global market for international higher education was US$ 27 billion in 1995, and reached to around US$40 billion in 2006 (Bubtana, 2007). This indicates the expansion of higher education sector in terms of economic power. Higher education is therefore identified as a priority sector by many countries for GATS negotiations. Trade in higher education services has
emerged over the last few years as a major economic sector worth several billions of dollars for a member of exporting countries such as USA, UK and Australia etc. The educational market has grown in size with more exporters entering the field to satisfy growing worldwide demand. Such market opening brings gains to all economies, including the developing world, as long as it is done in carefully and considered way. The opening up of education services market is crucial to the success of globalization.

Today education service is truly operating in a global context with institutions, programmes and people supplying services across borders at an unprecedented scale. It is important to note that trade is already taking place under all four modes, though it is not officially under the GATS, as formal commitments are yet to be made by India. The liberalization process of each mode opens up different sets of opportunities and challenges stems from a certain inherent asymmetry in the comparative advantage intrinsic in the education sector of developed and developing countries. It has been observed that, earlier consumption abroad (Mode 2) was essentially to meet the demand of emerging economies but now other modes such as cross-border supply (Mode 1) and Commercial Presence (Mode 3) are gradually taking the lead role in trade in education services, particularly in trade between developed and developing countries.

Trade in education services with respect to mode 1 (cross-border supply) shows that, India is interested in this mode because trade through Business Process Outsourcing (BPO)/ Information Technology Enabled Services (ITES) is undertaken through electronic modes of delivery i.e. Mode 1. BPO/ITES and off-shoring are likely to continue as major thrust areas from India’s point of view. Distance education programmes have also contributed significantly to its economy and made education globalized. Further, in this study it has been found that, the comparative advantage in this mode of supply lies primarily with developed nations because these countries are more advanced in technology and people are more aware of latest technologies which are most suitable for successful implementation of e-courses. However, if India wants to benefit more from this mode it must follow the policy of developed nations.

For many countries, international education is largely of the ‘consumption abroad’. This is a very important mode of operation. Since the advent of free market economy in the early 1990s, the number of students crossing their national borders for
acquiring knowledge and skills has steadily increased. Worldwide, in 1990 there were 1.2 million international students and the number rose to 3.3 million in 2009\textsuperscript{1}. The trend shows that, the demand for international education in the world is on the rise. Student mobility remains one of the main channels of trade in education services and globalization is the most visible aspect of student mobility.

The continent-wise analysis of mode 2 in India during the period 1990-91 to 2008-09 reveals that out of the total number of international students in India, more than half students come from Asian continents i.e. 58.74 per cent which is followed by 31.54 per cent from African countries. However, very negligible presence of students from America, Europe and Australasia is found with 3.38 per cent, 1.52 per cent and 0.40 per cent of students respectively. These figure clearly shows that, mostly foreign students came to India are from the developing countries instead of developed countries.

In the era of globalization (i.e., from 1991-2009), the analysis of mobility of international students in India from different income countries (High Income Countries, Lower Middle Income Countries and Low Income Countries) that consists of 30 countries revealed that ten countries are contributing more than half (i.e., 56 per cent) of the foreign students studying in Indian universities. These countries are Kenya, Nepal, Iran, Ethiopia, UAE, Sudan, Bangladesh, Sri Lanka, USA, and Jordan. Out of these top ten countries, five belongs to Low income countries, three belongs to Lower middle income countries and the remaining two belongs to High income countries. This shows that maximum number of students came from Low income countries which indicate that there is lack of adequate and standard educational facilities in their countries. Thus, efforts must be made to attract students from other parts of the world.

The analysis further found that, majority of foreign students who came to India is from countries falling in Asian and African region that are technologically less developed. Gulf nations also send large number of students to India. India is also attracting international students from developed countries like USA, Canada, & France etc. although the number appear to be very low but an indication has been

\textsuperscript{1} Global Education Digest, Various Issues.
registered at global level that Indian universities have the quality to teach, train and produce manpower for global competitive world. From the data it can be observed that from 2004-05 onwards, international students in Indian universities and institutions have increased from some countries. However, there are several reasons for such increase but some of the major grounds are; India is one of the fastest growing economies of the world, the IT revolution and cheap cost of educational facilities etc. At the same time it has been analysed that, in this globalised era, there are some countries like Bangladesh, Jordan, Kenya, UK, and Sudan have reduced their number of students in India, either due to more educational opportunities in other countries besides India. Though, India currently only hosts a small number of international students, but the country has the potential to host many more. India needs to get its policies and institutions right if it aspires to become a major global player.

The analysis also reveals the factors which influence the mobility of international students in India. These are - quality of higher education or lack of opportunities to specialise in their subject area, low cost of education in comparison to their countries, some countries prefer India for study because of English as a medium of Language (e.g. Sri Lanka) and some country prefer because the time taken to complete particular course is less than in their own country. Another factor which influences students for choosing India as destination was to gain social and cultural experiences and foreign students also came to study in India as part of Study Exchange Programs. While those from the neighbouring countries like Nepal, Bhutan, Bangladesh, Sri Lanka, Pakistan and others have enrolled for full time undergraduate/post-graduate degree courses including research in various subjects ranging from English, B.Com, Fine Arts, Political Science etc. Students from Taiwan, Thailand and Vietnam mostly opted for Buddhist studies. However, these differences in the student choices reflect the various needs in terms of the educational programs offered.

Trade in education through consumption abroad has existed prior to GATS, and continues to account for the biggest share of trade in education between nations, post GATS too. Although it forms the bulk of trade in education in the context of India, yet the scales are tilted in favour of the developed nations because developed
countries like USA, UK, Australia, Canada, New Zealand and Germany etc have succeeded in attracting more international students by aggressively promoting their programs. Conversely, India which was attracting a few thousands students mostly from countries in its immediate neighbourhood, has suffered a severe setback in this respect in the recent past due to their inactive aggressive marketing strategies. It is in this context, UGC has launched a new initiative for the Promotion of Indian Higher Education Abroad (PIHEA), a clear vision for internationalization of higher education.

This study also examined that majority of international students have identified well reputed central, state and deemed universities in India. The most visible are IGNOU, Delhi, University of Pune, Pune, University of Delhi, Delhi, Manipal University, Manipal, University of Mysore, Mysore, Osmania University, Hyderabad and Symbiosis International University, Pune who have registered more than 1000 students. The University which reported highest number of international student in 2008-09 is University of Pune (3507). These universities have always shown better performance in terms of teaching manpower, professional development of students as well as teachers, world class infrastructure, international students friendly environment and quality education at every level as accredited by NAAC also.

The analysis with respect to mode 3, which involves movement of institutions in the form of service providers, reveals that in India, few private and public institutions are already trading education. For example, the Birla Institute of Technology and Sciences, Pilani and Birla Institute of Technology in Ranchi have already established their campuses in Dubai and Oman respectively. Similarly, the Manipal Academy of Higher Education has set up offshore campuses in Nepal and Malaysia, Mumbai’s S.P Jain Management School has set-up branches in Dubai and Singapore to offer MBA courses. Some public institutions like University of Delhi, IGNOU, Shreemati Nathibhai Damodar Thackersey (SNDT) Women’s University, Mumbai, Mysore University, Mysore and Madras University, Chennai are making their presence felt abroad. While the Central Board for Secondary Education (CBSE), has opened several secondary schools in the Gulf and other Central and West Asian countries. Till 2005, there were more than 100 (Indians) CBSE schools in overseas.
With ever increasing Indian Diaspora spreading rapidly all over the world, there would be a great demand for CBSE-like schools in UK, USA, Fiji and many parts of the world. These all shows that, India has great potential in its export of education services.

The study also found that with the advent of globalization, more and more new foreign education providers have started entering higher education market in India offering degree programmes mainly in the professional discipline. Most of the institutions advertising to enrol the Indian students at their home campuses are second grade institutions and no big names have appeared that advertised to enrol the students. So realising the danger posed by such foreign providers to the Indian higher education system many rules and regulations have been drafted for controlling the operation of foreign providers.

The study also reveals that one of the most preferred modes of operation by foreign institutions in India is twinning arrangements because it is relatively cheap and as a part of the programme is undertaken in the host country and it does not require huge additional investments by the foreign providers or by the Indian partner. In contrast, the least important mode chosen so far is setting up of campuses in India by foreign universities, which involves an inflow of FDI in education to India and the establishment of institutions. However, this mode is preferred by the government as it reduces the outflow of students for study abroad and the corresponding outflow of money to other countries in the shape of fees and related expenditure, apart from the inherent attractiveness of FDI in the form of foreign capital. One hundred per cent FDI in higher education in India is now allowed by law under the ‘automatic route’, but this is the least preferred mode, as opening a branch campus requires huge investments in infrastructure. None of the 131 foreign education providers have set any campuses of their own in the country, although some have entered through joint ventures. While some foreign universities have evinced interest in setting up campuses in India, so far there is no case of this kind. In the case of quite a few, it is not clear whether they are offshore campuses of a foreign institution, franchise institutions, operating under twinning arrangements, or independently operated institutions (Tilak, 2011). There is no database relating to Foreign Service providers
operating in India. Hence most of the conclusions arrived at here are from analysis of advertisement.

Trade in educational services under mode 4 reveals that, number of teachers and scholars from the developed world to India is not large. In contrast, about 10,000 secondary school teachers are working outside the country and increasingly there is growing demand for Indian teachers. India demands liberalisation with respect to this mode because it has large comparative advantage over the other member countries with regard to supply of professional services like computer and related services, accountancy services and education services etc. therefore, it would be in the interest to liberalise trade in education services through mode IV.

With respect to four modes of supply it can be concluded that, mode 2 (consumption abroad) remains the most essential mode of supply of educational services, at present it makes the largest proportion of trade in educational services. While, Mode 4 (movement of natural persons) and Mode 3 (commercial presence) is also becoming popular. New information technologies are changing the landscape of world trade in education services. These new technologies are making possible the delivery of content in audio and visual formats inexpensively which has led to a surge in Mode 1 (through internet, e-learning), i.e., cross-border supply in electronic format. Thus, by taking into consideration India’s strengths in the education sector, and the possibilities for extending services in higher education abroad, India can make commitments with respect to all the four modes, namely cross-border supply, consumption abroad, commercial presence and movement of natural persons.

As of today India is not fully prepared for competition with the developed countries in the field of educational services. It is necessary to improve its infrastructure facilities, develop teaching skills and high quality standards of education, adopt a more flexible academic structure, introduce widespread academic reforms, gather market information and create niche markets and adopt aggressive marketing strategies that will make Indian education attractive to others. While making commitments India should insist on phased liberalisation over an adjustment (transition) period of five to six years (Deodhar, 2002).

India in particular has grown into a leading player in the international students markets and is the second most important sending country after China. This has
consequently made India one of the key markets targeted by the leading providers of higher education. Indian student flows are intensely concentrated in English speaking regions. According to Open Door Report, US has always been the prime destination for the majority of Indian students. The US offers Indian students the widest range of choices in terms of institutions, degrees and non-degree programs, academic and social environment. Despite attracting over half of all Indian students, it has lost a sizeable portion of its market share since 2000, as its share reduced from 73.4 per cent on to 53.6 per cent in 2009. The main factors were difficult visa application processes and high cost of tuition fees at American institutions. Meanwhile, countries like UK, Australia, Canada, New Zealand and Germany etc have succeeded in attracting more Indian students by aggressively promoting their programs in India.

As we know that, Indian education sector is not yet fully geared up to actively participate in the export of higher education. It is still not a major exporter of education services, though there are areas to explore the possibilities. On the other hand, India’s imports in higher education are substantial. Thus, it shows that, there is an imbalance in export and import of educational services in India. So, there is an urgent need for the country to take effective steps to internationalise its higher education system. This can be done by providing facilities/incentives to foreign students to come to India for higher education, and by offering academic programmes overseas. However, the role of state is important, to protect its domestic interest and negotiate for a better deal internationally.

It can be concluded that in India, public provisioning of education especially higher education sector are essential for sustained growth and development. Public expenditure on education is an important policy instrument for realising the education goals and for the development of education. Expenditure on education is treated as expenditure on human capital. A country continues to remain underdeveloped as long as its human resources remain underdeveloped (Schultz, 1961). Most of the countries are backward not only due to inadequate supply of physical and financial resources but also due to the lack of knowledge skilled persons and technicians. Therefore, it is very important for the developing country to develop their human resources.

For providing education, government expenditure is very important in all countries of the world. The analysis with respect to public expenditure allocated to
education at national and international reveal that public expenditure on education is higher in developed than in developing countries. Public expenditure on education was much higher (5 to 8 per cent) of gross domestic product (GDP) in developed than in developing countries (e.g., India, 3.2 per cent in 2008). India stands no comparison with the so called developed or even with some developing countries (like Thailand, Jamaica etc) in relation to investment in education. But at the same time it has been found that, some developing countries (like Bangladesh & Pakistan etc) are spending relatively lesser amount on education as compared to India. However, public expenditure on education in India has increased after independence. But still this growth has not been sufficient or satisfactory for overall development of the education system.

The trends in total government expenditure and educational expenditure as percentage of GDP in India depicts that, during pre-globalization period, total government expenditure on education increased by five times, during the same period expenditure on education as a percentage of GDP increased by three times. In mid-1980s, i.e., the era when human resource development was given top-most priority, an increasing trend in educational expenditure as a percentage of GDP has been observed. At current prices, both total government expenditure and government expenditure as per cent of GDP has increased to a large extent during post-globalization period. But government expenditure as per cent of GDP is still less than recommendation of Kothari Commission (1966) and reiterated by the National Education Policy, 1986 and 1992.

The study also shows that in terms of relative priority higher education suffered lot. Despite the clear importance of higher education as an engine of development in the new world economy, this sector is facing severe financial crisis in India. One reason for the set back in funding higher education in India lies in the lower priority accorded to this sector than to primary and secondary education sector. It is pointed out that investment in higher education have lower social rates of return than investment in primary and secondary education. It is also argued that the investment in basic education can have more direct impact on poverty reduction. Recognising this, developing countries are investing more at these levels at the cost of higher education. Further, globalization has given rise to controversies relating to introducing
changes in the intra-sectoral priorities in the allocation of resources leading to the misconceived policy of down-sizing of higher education. It has also advocated privatisation of higher education without realising the dangerous possibility of making the system a commercial enterprise.

Further the analysis with respect to public expenditure on higher education during pre and post-globalization period reveal that, pre-globalization period stands marked by acceleration in the public expenditure on higher education while post-globalization shows deceleration in public expenditure on higher education in India. In addition to this, it has also been noted that, public expenditure on higher education increased from Rs 483.7 crores in 1980-81 to 24186.0 crores in 2009-10 at current prices with compound annual growth rate (CAGR) of 13.2 per cent. However, rising inflation makes this increase an illusion. After adjusting public expenditure on higher education for inflation with whole sale price index (WPI), the CAGR turns out to be just 5.8 percent respectively in the above said period.

The period-wise analysis of compound annual growth rate of plan, non-plan and total expenditure on higher education both at current and constant prices also shows a declining trend during post-globalization period. However, plan expenditure has shown highest rate of deceleration as compared to non-plan expenditure during post-globalization period.

The analysis with respect to intra-sectoral allocation of resources in education sector in Five Year Plans reveals a mixed trend in globalized era. The sector which has accorded more attention and priority are the elementary education while other sectors viz. secondary, higher and technical education suffered a lot. As the process of globalization is technology-driven, and knowledge-driven, the very success of economic reform policies critically depends upon the competence of human capital. But, what is observed is the reverse. The relative priority assigned to higher education has been on decline. It should be noted that higher education institutions play an important role in setting the academic standard for primary and secondary education. Therefore, a policy is needed to allocate more resources in education sectors in general and higher education in particular.

The compound annual growth rate of central and states government expenditure on higher education during pre and post-globalization reveals that, central
and states government total, plan and non-plan expenditure on higher education has also shown a declining trend during post-globalization period at current and constant prices. As compared to states plan and non-plan expenditure on higher education, centre plan and non-plan expenditure shows a high degree of deceleration in the above said period. However, centre’s declining share has been one of the important reasons for deceleration in the public funding of higher education. Constrained by fiscal shortages, the states found it difficult to invest in plan funding to improve the quality of higher education (Bhushan, 2009).

As far as centre and states government shares in plan and non-plan expenditure on higher education during the period 1980s to 2010 is concerned, central government mainly focus on plan expenditure and states on non-plan expenditure. It has been also observed in this study that during 1980-81 to 2009-10, state share the major burden of expenditure on higher education ranges from the level of 65 to 80 per cent while centre share ranges between 20 to 35 per cent. Thus, the analysis shows that, the centre-states relations in financing higher education do not seem to be promoting equitable and efficient educational development.

The analysis of per student expenditure on higher education shows that, in nominal terms per student expenditure increased by several times but in real terms it registered a downward trend. During pre-globalization period per student expenditure grew at CAGR of 8.7 per cent at current prices and 3.25 per cent at constant prices. During post-globalization period, it grew at a rate of 7.2 per cent at current prices but in terms of constant prices the relevant growth rate figure was 0.5 per cent only. For the whole period, per student expenditure at current prices decline to 6.8 per cent while the real rate of growth of per student public expenditure on higher education registered a negative growth rate of -0.9 per cent. This shows that, there is decline in real resources available per student on an average, seriously affecting the quality of higher education. Growth in enrolment and increased in prices pushed down the rate of growth in per student expenditure at constant prices (Tilak, 1987) and (Tilak & Varghese, 1983). One can also note that scholarship makes very less proportion out of total expenditure on higher education (less than 1 per cent). In the absence of suitable grants and loan schemes, higher education is becoming increasingly out of the reach
of the students from poor families, thus, raising concerns about inequity in access to higher education opportunities.

The hypothesis of deceleration in the public expenditure on higher education after the period of globalization is fully supported. The reasons for deceleration are-(i) Underinvestment in education; (ii) Fiscal crisis following structural adjustment policies; (iii) The deleterious impact of inflationary pressures; and (v) The crowding-out of higher education as a result of increased priority given to the financing of elementary and secondary education in India.

Thus, in the era of globalization, important economic rationale for government funding for higher education is neglected. However, each level of education plays equally an important role in economic growth and development of the nation. Hence due importance should be given for the development of all levels of education.

The empirical analysis of the study is to provide econometric evidence of the impact of globalization on total expenditure on higher education as percentage of GDP (at 2004-05 prices) in India which is dependent variable whereas globalization, dummy and interaction variable i.e. (cross product of dummy and globalization are taken as independent variable. We have taken dummy variable for the period 1981-91 (d=0) and for the period 1992 to 2010 (d=1).

The empirical results obtained from Model 1 reveal that, both the differential intercept and differential slope coefficients are statistically significant, which strongly suggests that the regression of total expenditure on higher education on globalization for the two time periods is different. It shows that there is structural break in expenditure during pre and post-1992 period. The result shows that there is slightly an upward shift in the level of expenditure but the rate of expenditure has not increased, in spite of increase it has decreased. Results obtained from the econometric analysis concluded that during pre-1992 period globalization has positive and significant impact on total expenditure on higher education whereas in post-1992 period globalization has had a negative impact on total expenditure on higher education but remains statistically significant. This shows decline in public expenditure on higher education during post-globalization period. Globalization has led to the deprioritization of certain sectors of education, particularly higher education and advocated privatization of higher education. Due to this policy, government feel that
large amount of expenditure should be made to elementary education instead of higher level of education because, private benefits are greater than social benefits in higher level of education. Therefore, the government is reducing its responsibility in funding higher education at optimum level which can maintain the overall quality and standard of education. The study concluded that, globalisation policies led to market mechanism in general and privatisation of education in particular, seriously jeopardizing social justice and equity in education system.

Thus, for Model I we reject the null hypothesis that globalization had no significant impact on total expenditure on higher education during post-1992 period and accept the alternative hypothesis that it has negative and statistically significant impact on total expenditure on higher education in India. The overall findings of our empirical exercise, shows that globalization which is a part of economic reform is adversely affecting expenditure on higher education during post-1992 period. Our result corroborates the findings of Chakrabarti & Joglekar (2006), Rani (2004) and Tilak (2004). The latter documented the declining trend in allocation of resources for higher education in India, particularly post 1991-92 periods.

Thus, from the above studies, one can see that globalization has multi-dimensional impact on the education system in general and higher education in particular, which has both positive and negative aspects. Globalization is attracting considerable attention from higher education institutions and is discussed at national seminars and conferences. For Indian higher education sector globalization process is an exploring stage. The domestic institutions are judging the feasibility of the exporting higher education with creating tie ups, franchisees and alliances either with private or international providers in the global market. We have to realize that globalization is a driving force for national development that attempt to modify institutions and bring them in line with progress. It is essential that India need to embrace aggressive, result oriented approach for being consistent with the global developments in the higher education sector. In sum each country has to decide about the nature and extent of globalization in relation to education keeping in view its own national interests and needs.
Suggestions

Higher education is very important for the building of knowledge-based economies. Human capital is the main asset of India to become the most competitive and dynamic knowledge-based economy of the world. It is through “knowledge intensive” activities we can meet the challenges of globalization and liberalization. Globalization provides unending scope to take opportunities in the global market. If our youths are well-equipped with modern techniques and knowledge, than automatically they can enter quickly into the expanding global market. As globalization is by no means uniform, it always means different things to different people. And hence, there are sufficient grounds to justify or to reject certain choices posed by the globalization. The Indian higher education has to come forward to make strategic decisions in favour of our growing numbers of young population. Therefore, the present study concludes by putting forward some of the suggestions that can make Indian higher education system competitive with other countries of the world and can balance the main functions of higher education and resource needs of the system.

1. The challenges before higher education are many fold. The quality of inputs, physical, as well as human resources has to be enhanced so as to make education more rigorous and effective. In order to meet the challenges of 21st century, higher education system has to transform to make it more socially relevant, information and technology oriented, diversified and of high quality to acquire competitive edge. All this would require a great deal of resources. Therefore, it is recommended that states continue to provide financial assistance to higher education. The present level of investment on higher education that stands less than 1 per cent of the GDP is too meagre and need to be enhanced.

2. The intra-sectoral allocation of resources in education in India indicates an irregular emphasis on not only elementary education, but also on other levels of education. It has been observed that increase in resources to elementary education was possible due to severe cuts in resources for other levels of education i.e., secondary, higher and technical education. However, sequencing of policies i.e., universal primary education first, secondary and higher education later (as and when resources are available or/ and left to
private initiatives) is a very costly strategies in the era of globalization. It is now high time to realize that all the levels of education are complementary and derive and extend support to one another. One particular level of education should not be made to suffer simply because the other is to be promoted. It is self-evident that working of the whole system gets crippled when one level, especially higher education, which is the apex of whole education system, is kept weak. However, each level of education plays equally an important role in economic development and nation building in the long run. Hence, the pattern of intra-sectoral allocation of resources need to be improved and government should increase total expenditure on education as a per cent of its GDP so that each level of education can get equal share and there will be no need to cut the expenditure of one level of education to finance the other level of education.

3. A comprehensive scheme of scholarship and financial assistance should be devised for the disadvantaged group’s viz., OBC, SCs, and STs so as to ensure equitable access to higher education.

4. Financing of education must be made in such a manner so that balance between expansion of higher education system and the quality of good standard of education must exist, so that Indian youth can compete in the era of globalization.

5. It is evident from the study, that the states share a large burden of expenditure on higher education. Hence, it is suggested that to lessen the burden, both centre and states must share equal responsibility of funding on higher education.

6. Plan expenditure is generally meant for development purposes. It is perceived to be more productive as it translates to asset creation through expenditure on (new programmes, new schools, new buildings and new teachers), while non-plan expenditure is designed for the maintenance of the system. Plan expenditure on education particularly on higher education is relatively small in size and a huge proportion of expenditure on education is of non-plan in nature. As experiences show that non-plan expenditure are not conducive for the development or creating new infrastructural facilities, thus to overcome
these problems plan expenditure must be raised in order to increase the quality of higher education system.

7. Though globalization has paved the way towards privatization of higher education which mainly focuses on professional education. It may be argued for privatisation in financing and governance of higher, technical and professional education. Handing over this field totally to the private sector would have disastrous consequences for the country because it will lead to distortions in the development of professional and technical education. Therefore, cautious look, firm determination, inherent zeal, good governance, feeling of social commitment and non-commercial attitude of the owners of these institutions can place professional and technical education in the current perspective.

8. As regards the maintenance of quality and standards of private institutions of higher, technical and professional education, a few measures need to be adopted. Privately run institutions should be given recognition by the concerned bodies such as AICTE in case of Technical and Management Education and NCTE (National Council of Teacher Education) in case of Teachers Education strictly on the basis of norms laid down by these bodies. These institutions should be regularly supervised either by their own officials or by the professionals. The quality and standard of education provided by these institutions should not be compromised at any cost. The government should exercise, some control over the standards of these private professional institutes through a policy of accreditation. The government may also keep a vigil over the private institutes so that they may not indulge in the activities detrimental to the larger interests of education in the country.

9. In India, there is heavy dependence on agriculture and allied sector. In order to raise the productivity and efficiency, efficient workforce is required. Thus, it becomes evident that number of students pursuing agricultural and related courses must be raised. However, from the analysis it comes out that enrolment in such courses are very negligible and almost remain stagnant over the years. Therefore, attention must be required to remove the bottleneck in
agriculture and allied sector by expanding the horizon of agriculture based courses

10. Universities should be allowed to open their campuses abroad or tie up with universities and institutions to offer their programmes for mobilizing funds and providing education in the countries where such education is in demand. The entry of foreign universities should be allowed on the basis of reciprocity. There should be provision for exchange of faculty among the various countries participating in the programme.

11. International students (of American origin) opt for short term courses, hence to gain from globalized higher education, it is suggested that, India must develop internationally relevant short-term courses in Humanities and Social Sciences, Applied Arts and other areas in which we posses expertise.

12. In order to attract a large chunk of students, higher education system in India must be made relevant and excellent. It must be at par with the world class educational institutions. For this, aggressive marketing strategies must be adopted which include education fair in other countries and to endorse ongoing and new courses by Indian universities and institutions.

13. In order to enrol large number of international students in their campuses, there is a need to build up a good infrastructure in the form of adequate library facilities, well-equipped laboratories, good lecture halls, amenities for social and cultural life, recreation facilities and special hostel facilities etc. Further, the admission procedures of international students should be simplified. There should be single window system.

14. In order to avoid trade-off between international students and local students, number of seats must be increased by universities and institutions for foreign students.

15. Government should make the data and information base that is helpful to the prospective foreign students. The information relating to the academic programmes available at different universities, eligible criteria, admission procedures and tuition fees. The data and information can be provided to foreign students through creation of web sites by apex bodies. The Indian
embassies and high commissions need to establish suitable counselling units. Such counselling can be undertaken by the nodal agency within the country through e-mail.

16. Government should simplify the visa-procedures for the international students. There is a need to simplify the existing legal framework, procedures relating to registration, entry-test requirement and issues of ‘No Objection’ certificate, and also issue and extension of visa. Thus, due to the simplification of visa-procedures, more international students can came to India for study.

17. The distribution of international students across different institutions and regions in India is very uneven. It mainly concentrated to Western and Southern India. Thus, attention must be paid to raise the educational and infrastructural facilities in other parts so that flow of foreign students may become equally distributed.