Changing Dimensions in Higher Education – An Issue In Context with Changing Environment

(Towards Knowledge-Based Economy: Lessons for India)

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ABSTRACT
India has a huge population of uneducated children and the Constitution provides for free and compulsory education up to the age of 14. The country also has the dubious distinction of one of the highest levels of illiteracy in the world. The system of public education at all levels is in advanced stage of disrepair and disarray. Clearly, governments both at the Center and in the States need to allocate far more resources and attention on ensuring that future generations are equipped sufficiently to operate in a knowledge economy. As one is seeking to provide quality education, the process of accreditation as it exists in the country is assessed. Some indications of the level of public spending on higher education are also provided. Education is a trillion Dollar industry worldwide. Education industry groups are, therefore, attracted by the prospects of liberalization and globalization of this industry. They seek more international deregulation and generally support WTO efforts. As demands for higher education grow the world over, the governments are also finding it difficult to provide adequate budgetary allocation. For a public service such as education GATS at Doha was a stepping stone so that there is no discrimination against foreign corporations entering the service market. Further, after the fizzling of the dot.com bubble, corporations are looking forward to other service sectors for investments, education being one of them. Higher Education provisioning is now globalised and in many ways, a commercialized affair and the way that the State had in the goings on is vastly diminished. According to the International Finance Corporation (IFC), the growth is now soaring: 2 million universities students-approaching 2% of the world's total of around 100 million studying outside their home country in 2013. Since the late 1990s the higher education market is growing by 7 per cent a year. The Economist Survey on higher education further indicates that annual fee income alone is estimated at $ 30 billion. While private profit seeking companies have entered the education business, even government-controlled universities are seeking independence from governmental authority. In this paper, some indications of the level of public spending on higher education are also provided. A case is also made to highlight the need for promoting a knowledgebased economy. International experiences in managing the money that is engaged in funding higher education have been studied to derive lessons for India as a major constraint to private sector provisioning of higher education is the availability of adequate funds.

Key words: Knowledge Economy, Education Industry, Education GATS, International Finance Corporation (IFC), Public Spending

I INTRODUCTION

India has a huge population of uneducated children and the Constitution provides for free and compulsory education up to the age of 14. The country also has the dubious distinction of one of the highest levels of illiteracy in the world. The system of public education at all levels is in advanced stage of disrepair and disarray. Clearly, governments both at the Center and in the States need to allocate far more resources and attention on ensuring that future generations are equipped sufficiently to operate in a knowledge economy. As one is seeking to provide quality education, the process of accreditation as it exists in the country is assessed. Some indications of the level of public spending on higher education are also provided.

Education is a trillion Dollar industry worldwide. Education industry groups are, therefore, attracted by the prospects of liberalization and globalization of this industry. They seek more international deregulation and generally support WTO efforts. As demands for higher education grow the world over, the governments are also finding it difficult to provide adequate budgetary allocation.

International experiences in managing the money that is engaged in funding higher education have been studied to derive lessons for India as a major constraint to private sector provisioning of higher education is the availability of adequate funds. It is imperative that we continue to produce a critical mass of highly skilled manpower at an accelerated pace. An enabling academic and economic setting is a key factor determining the fate of our nation in the wake of the knowledge sector boom.

II INTERNATIONAL SCENARIO

Two parallel developments in the world economy are worth noting, especially for their influence on provisioning of higher education: the growth of the Internet and consequently, e-education and second, the expanding role of World Trade Organization (WTO) in determining the trends in world economics Never before was information so readily available at the press of a button, the Internet has changed the way the world behaves, does business, and thinks. Even school children search the web for study material to support their homework. Today, academicians do not need to spend much time on library research poring over bulky tomes and taking copious notes. They have the facility of faster and surer access to a much wider range of information through the Internet, not just to read but to print or save or forward to others as might suit their purpose.

Internet research has come to be recognized as an essential study tool in all higher education courses in developed countries. On-line Universities, which do not require physical infrastructure, have facilitated greater accessibility to education than ever before.. While popular perception values a degree from a regular college over one from an On-line college, the greatest advantage of an online university or college, that a student need not commute or live on campus tilts much of the debate in its favor. This is especially true for certain kinds of courses designed to cater to the needs of students who do not have financial backup or family support. According to the results of a special survey '*Higher Education: Free degrees to fly*'(see *Economist, February26th-March 4th, 2005, pp63-65),* higher education is already a global business World Trade Organization (WTO) and Higher Education: WTO Secretariat is that higher education is akin to 'private consumption' directly benefiting the consumer by way of higher income. In April 2002, Universities from Latin American countries, Portugal and Spain adopted a Declaration at the III Summit of Iberian and Latin American Universities in Porto Alegre, Brazil in which they declared education as a 'public good' and requested their governments not to make any commitment on this issue within the framework of WTO. However, overtime the perception of higher education as a commercial service is gaining acceptance. The WTO Secretariat in September 1998 has mentioned that with the rapid changes in higher education 'education also exists as a private consumption item with a price determined freely by the providing institutions'. As a result, they have stated that more and more paying students are attracted to these institutions including foreign students. In 1994, over 140 countries approved the GATS (Global Agreement in Trade & Tariffs), the predecessor to the WTO, which was created later in 1995 to expand trade liberalization internationally. Under Article 3 of WTO the definition of Service is laid down. It is felt that these rules apply to any service except those supplied in exercise of governmental authority. Some people feel that this article excludes public universities. However, the rule further defines that it excludes only those services, which are supplied neither on commercial basis nor in competition with one or more suppliers. Amongst the 12 sectors defined by the WTO as service 'education services'' also falls as one. Another important issue of GATS and WTO, which is fundamental to its principles, is the notion of National Treatment. This implies an obligation to treat both foreign and domestic service suppliers in the same manner. It has been contended that this would imply, if implemented rigidly, that a foreign educational institution of, say, distance education, can demand subsidies similar to those received by public universities in an individual country.

(a) Principal goals in educational services

(i) Ensure right of US companies to establish operations in foreign markets including the right to wholly own these investments.

(ii) Ensure that U.S companies get 'national treatment' by getting foreigners same Rights as domestic investors.

(iii) Promote pro-competitive regulatory reform focused on an adequacy of appropriate And consistent rules.

(iv) Remove barriers to generate cross border trade.

(v) Remove obstacles to free movement of people and business information. Academic Community Perception Higher education shall be equally accessible to all on the basis of merit keeping in mind Article 26.1 of the Universal Declaration of Human Rights.

(vi) Higher Education should uphold education's role of service to society.

(vii) Quality of education is a multi-dimensional concept, which should embrace all functions, and activities, that is, teaching, academic programs, research and scholarship, staffing, students, infrastructure, and academic environment.

(viii) Higher education institutions should be committed to transparent internal and external evaluation conducted openly by independent specialists.

(ix) The potential of Information Communication Technology (ICT) should be fully utilized. Equitable access to these should be assured through international cooperation and support to countries that lack capabilities to acquire such tools.

(x) Higher education should be considered a public service.

(xi) While diverse sources of funding are necessary, public support for higher education and research remains essential to ensure balanced achievement of its educational and social missions.

(xii) Partnership should be forged between higher educational institutions and responsible state authorities.

(xiii) The international dimension of higher education is an inherent part of quality. Networking which has emerged as a major means of action should be based on sharing, solidarity, and equality among partners.

Education is a Trillion Dollar industry worldwide. Education industry groups are, therefore, attracted by the prospects of liberalization and globalization of this industry. They seek more international deregulation and generally support WTO efforts. As demands for higher education grow the world over, the governments are also finding it difficult to provide adequate budgetary allocation. GATS cover educational services of all types for all countries whose educational systems are not exclusively provided by public sector or those systems that have a commercial purpose. Hardly any country has education exclusively in the public sector domain and therefore, almost all the world's educational systems come within the purview of GATS.

(b) The Lesson for India: A Road Ahead

Insofar as India is concerned, on-line education, which is very crucial for the Indian population, is heavily dependent on reliable high-speed Internet coverage. As a pre-requisite to expansion of online education services, it is essential that various parts of the country be connected with high speed Internet. As more and more cities in India are coming within the ambit of high speed cybernetwork, the concept of e-education, especially at higher levels should be viewed seriously. Most Indian Universities make little use of the Internet in improving administrative efficiency. Broadband subscribers currently total to just 0.61 million as compared to the target of 3 million set for December 2012 E-learning has clearly percolated even to the school level. India's education policy has largely missed out on taking advantage of this technological revolution in education. E-learning is not only inexpensive, but also convenient. It also does not force the student to relocate or forgo earnings from full time or part time employment that the student may be engaged in.

III KNOWLEDGE ECONOMY THE INDIAN CONTEXT

India's higher education policy of the 1950s, which envisaged schools of excellence, especially in technology and sciences, has finally paid off rich dividends. The creation of IITs, IIMs, Schools of Science, Schools of Law, a large number of advanced training and research institutions have now been well and widely accepted.. Doctors trained in India have been the backbone of the British Medical Service for many decades. Indian scientists have found positions of importance in research laboratories of the US and other developed countries. But it was the IIT engineers who have finally struck gold during the dot.com boom of the 1990s and brought the final recognition and testimony for Indian competence. Of about 140,000 graduates of IIT so far, roughly 40,000 have gone to the US. They have been given the credit of creating 150,000 jobs and $80 billion in market capitalization. It is said that when a new IT company is launched, investors inquire if there is an Indian in it. In the second meeting of IIT Alumni in the US, prominent persons like Jack Welch of GE, Larry Summers, President of Harvard University, and Tom Friedman, the globalization columnist of New York Times were present. The states of Virginia and Maryland declared the month of May 2005 as IIT – Indian American Heritage Month. Further, 55 US Members of the House of Representatives co-sponsored Resolution 227 honoring 'the economic innovation attributable to graduates of the Indian Institute of Technology'. Now in the era of reverse brain drain, the IIT graduates increasingly prefer to returner remain in the country. It is stated by some that Bangalore today has 150,000software engineers compared to 130,000 in Silicon Valley. According to Computer wise, the top 50 global IT service firms alone target raising India's headcount from 173,000 in September 2004 to 500,000 by end of 2005. (See Sheshbalaya, Yale Global online:www.yaleglobal.yale.edu) According to NASSCOM, India had a total of 650,000 IT professionals in 2002 and by February 2005, they were to rise to 813,500. According to Brainbench Inc., India ranked behind the US in the number of certified software professionals (145,517 against 194,211) The Indian figure was 30 times larger than Europe's top country Germany (4802) and one hundred times Chinas (1325). India, therefore, does have an overwhelming lead in software. Further, leading US IT firms have their CMM Level 5 certification in India, rather than in the US. The High Technology leadership of the US is now coming under threat from India. In a paper published by Richard Freeman of Harvard University quoted by Sheshabalaya, the employment at General Electric Company's Global

Research Headquarters in New York is being surpassed by their own facility, the Welch Centre at Bangalore. (See Ashutosh Sheshabalaya, 'Rising Elephant-*the Growing Clash with India over white-collar jobs and its Challenge to America and the World*', Macmillan India, 2005 India, is therefore, not just at the lower end of the software and research business, but is now in a leading position of the scientific and financial research revolution. This is also confirmed by the massive market value of IT firms on US stock markets which indicate that the investment community endorses this view. According to current thinking an estimated $356 billion worth of global financial services will relocate to India in the next 5 years, producing a cost saving of $ 130 billion for top 100 financial service firms. From R&D and scientific research, Indian commercial research market has further widened to financial and economic research. It has been said that Wall Street is also outsourcing white-collar jobs to India as a reaction to the local scandals, which erupted in 2002 and 2003. Already McKinsey & Co. and AT Kearney Inc., have shifted bulk of their research to India. J.P.Morgan, Moran Stanley, Deutsche Bank, etc. are all considering the same. In India both public and private institutions operate simultaneously. In 2000-01, of the 13,072 higher education institutions, 42 per cent were privately owned and run catering to 37 per cent of students enrolled into Higher education, that is, approximately 3.1 million out of total 8.4 million. It is also likely that most of the growth in the rapidly expanding higher education sector took place in private unaided college or in self-financing institutions. Since grant-in-aid to private colleges is becoming difficult, many governments/universities have granted recognition/affiliation to unaided colleges and many universities have authorized new 'self-financing' courses even in government and aided colleges. It is felt that as of now more than 50 per cent of the higher education in India is imparted through private institutions, mostly unaided.

The growth of higher education in India has been phenomenal. Starting with 1950-51, there were only 263,000 students in all disciplines in 750 colleges affiliated to 30 universities. This has grown by 2005 to 11 million students in 17,000 Degree colleges affiliated to 230 universities and nonaffiliated university-level institutions. In addition, there are about 10 million students in over 6500 in vocational institutions. The enrolment is growing at the rate of 5.1 per cent per year. However, of the Degree students only 5 per cent are enrolled into engineering courses, while an overall 20 per cent in sciences. The demand for professional courses is growing rapidly. Government has created 221 Universities of which (6 are central Universities while 156 are state Universities). There is also a concept of Deemed University. This status is given by UGC to colleges of exceptional excellence.

There are 39 Deemed Universities plus seven open universities. There are 9703 colleges in India that provide mostly bachelors or sometime Master's level of education. Of these, only 550 are engineering and technical colleges, 655 medical and 600 management institutions. With India emerging as a global hub for commercial R&D (*India Today International*, 3 Oct 2005), R&D within the scope of Higher Education has gained greater importance. It has been stated that 150 international firms have set up R&D centers in India and in 2004 US patents office granted over 1000 patents to Indian units of US companies. Indian companies have also started to increase their R&D budgets. The demand for high quality researchers will require expansion of postgraduate research and PhDs in Indian institutions of higher learning. According to Saikat Chaudhory, a Management Professor at Wharton, India needs to improve its research atmosphere in its universities. This is perhaps, already happening. If we look at that the CSIR, the number of US patents granted to it has jumped to 196 in 2005 from just 6 in 1990-1. Indian Research Councils should now have the potential to raise research funds through industry and perhaps, capital markets. A mention must be made of SPREAD – Sponsored Research and Development of the ICICI Technology Financing Group which is helping finance commercial R&D. Similarly, Nirma Labs provides up to Rs 20 lakhs as grant. We need to expand such support to R&D activities.

Open University System: India has also developed an Open University system to encourage distance learning. Indira Gandhi National Open University (IGNOU) was the pioneer and now there are seven open universities in India offering over 500 courses. IGNOU has about 11,87,100 students on its rolls. Modern communication technology can be harnessed to effectively provide education through this medium. A distance education Council has been set up and a common pool of programs is available for sharing.

Public Expenditure on Higher Education in India: India has developed one of the largest system of Higher Education in the world with over 230 universities and 6500 vocational colleges catering to about 10 million students. Most of these are publicly funded although some may be privately run.

The financing of higher education, however, is often reprioritized due to competing demands for budgetary funds from primary and secondary education sectors. As a proportion of GNP Higher Education was only about 0.19 per cent in 1950-51. By 1980-81 it went up five fold to 1 per cent but by

mid-1990s it dropped to 0.4 per cent. In the government plan outlay the share of higher education doubled for 9 per cent in the first five year plan to 18 per cent in the second. It increased to 25 per cent in the fourth but has now come down to 15 per cent in the seventh five year plan. In the eight five year plan it was around 8 per cent. It may be stated that the non-plan expenditure in education is huge compared to plan expenditure.

Promoting Knowledge-based Economy: The Need
According to BPO watch newsletter, India has within its reach, an unprecedented opportunity to become the back-bone to global enterprises by delivering 'end solutions'. This is based on a study *'Beyond Cost Reduction: Risks & Rewards of Services Sourcing'*, conducted by H. Wadhwa and Harpreet Khurana at the Columbia Business School. The study provides an idea about the potential of 'Knowledge hubbing' out of India. However, according to the Colombia

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School study, as more high-end processes are outsourced to India, attrition at India centers is becoming an increasing problem. This is a manifestation of the shortage of quality skilled manpower availability in India. Unless India and the Indian Government takes seriously, the issues involved in providing higher education and increasing its accessibility, especially in subjects and areas where it is required most, we will fall behind and lose our lead. The Indian Institute of Technology (IITs) proved that India could produce world class talent in terms of technical professionals. While Indian Doctors and other professionals have already been recognized in developed countries like the UK, USA or developing economies like UAE, Dubai and other Gulf countries, the dot.com boom proved the quality of Indian institutions of higher learning especially the IITs. The US Congress has passed a special resolution giving credit to the role of IIT alumni in USA. The UK and more recently, Singapore and the Gulf have started wooing qualified Indians in a big way for their intellect, efficiency and business-like work culture. The IITs have led the way for the establishment of an Indian meritocracy globally by providing world class technical education to a select 3 per cent of its applicants. The Indian Institute of Management (IIM) graduates in Singapore today are ranked in the same league with products of Yale and Harvard Business Schools in terms of quality.

V RECOMMENDATIONS

The road ahead for India is directly linked to creation of quality Higher Education Institutions in a big way to meet the challenge of the knowledge Hub, which India is fast becoming.

(a) The Government resources for higher education are simply not enough. Government supervision of higher education is dismal, to say the least.
(b) Recourse to quality private higher education, both university and non-university is essential.
(c) India needs to have a proactive demand based policy towards private higher education including foreign institutions/universities desirous of setting up campus in India or entering into jointventures. India could offer tax concessions/fiscal incentives for setting up campuses.
(d) The issue of raising the fees upwards to meet the cost of education is critical if we are to maintain and sustain the quality of our government and aided institutions as private institutions are already using a higher fee structure. In a competitive setting there is no reason why the fees should not meet a reasonable proportion of the cost of education. A figure of 20 per cent of recurring cost is considered reasonable in the international scale, although in some countries (ala South Korea) it could go up to 40 per cent.
(e) The need for financing of higher education for students, especially those coming from low income households needs special attention. Like in the United States, we may also evolve a guarantee system, where students coming from low income households are eligible for a student loan without parental security or guarantee so that there is no discrimination due to the financial background 62 of the student. Subsidization of the interest rate for students should be based on his and his family income. For this innovative financial mechanism needs to be evolved incorporating some of the salient features of the systems existing in UK, USA.
(f) Broad-band services and provision of computers is an essential requirement of higher education.

A Committee for this purpose needs to be constituted to look into providing broad band connectivity to all students along with low priced computer accessibility.
(a) Open Universities need to be encouraged to offer quality programs at the least cost. This becomes the most cost-effective way of providing higher education, including technical and vocation education.
(b) In view of the expanding role of WTO, higher education would soon become an item under it. We should encourage foreign universities to come to India to set up independent operations or collaborate with existing Indian Institutions,

colleges/institutes. There is no need for government approvals in FDI in education.

(c) While a regulatory set up is required to ensure that there is no cheating or hoax, fixation of fees should not be in state control. On the issue of admissions, private player may be given the discretion for admission, but will have to justify merit. Perhaps a Tribunal on Admission Disputes can be set up for those aggrieved by the admission policy of an institution.

(d) It is also important that a lobby or association of non-aided private colleges be organized, which could then articulate the needs and demands of such institutions and provide a platform to counter the tendency of the bureaucracy to dominate its workings. It could create appropriate pressure for the dropping of the bill in private professional education in its present form.

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