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Re-imagining Indian Higher Education: A Social Ecology of Higher Education Institutions

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Abstract

Developing countries desire to have institutions ranked as 'world class,' and also want to increase post-secondary participation. The availability of limited public monies necessitates decisions that usually augment the welfare of one objective at the expense of another. An additional conundrum concerns the need for quality assurances. Research needs to be rigorous; students need to be well-trained. The authors suggest that both private and public higher education have a crucial role to play in India. The challenge is to decide whether to accommodate rapid expansion, to identify ways of improving the overall quality of the system, and to invest in a research infrastructure. The authors first offer a definition of what has been traditionally meant by public good and then analyse India's higher education system. They rethink the various forms of institutions in India's higher education system and suggest that the 'alphabet soup' of institutional forms that currently exists does not serve the country well; the taxonomy tends to obscure, rather than to clarify roles and responsibilities. They argue for a new social ecology of higher education that streamlines relationships, clarifies roles and regulations, improves data analysis, and focuses on quality rather than quantity. They suggest that rather than propose greater expansion of a system that lacks quality control, the emphasis should be on increasing the overall performance of the system and on promoting equal access to quality education.

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Introduction

In much of the world those concerned with developing policies for higher education in a country are on the horns of a dilemma. On the one hand, the politicians and people of a country increasingly desire the establishment of institutions ranked among 'world class' institutions (Altbach, 2003; Salmi, 2009; Tierney, 2014), but on the other hand, most, though not all, countries believe that they need to significantly increase participation in the post-secondary sector in order to meet the needs of the workforce (Varghese and Panigrahi, 2015; Varghese, 2015). The goals of enhancing the research output of an institution and creating policies geared toward massification are frequently, but not always, in conflict with one another (Tierney and Lanford, Forthcoming). Insofar as the resources available for spending are limited, federal and state monies entail the need for decisions that usually augment the welfare of one objective at the expense of another.

An additional challenge pertains to the degree that public monies support the infrastructure for research universities to stimulate economic development and/or enable more students to attend a post-secondary institution to acquire jobs (Tierney, 2012). Such a goal highlights the need for quality assurances. Research needs to be of a kind that assumes rigour and excellence. Students need to be educated in a manner that enables them to be well trained for the workforce and citizenship. The point, of course, is not simply to do research of questionable quality or to have students attend an institution where they learn nothing. Indeed, such an issue has been a concern for over a generation. As J.P. Naik has rightly observed, "The simultaneous pursuit of equality of opportunity and improvement of standards in the face of scarce resources confronts Indian education with a dilemma common to many countries" (Naik, 1979, p. 167).

As we shall elaborate, until late in the twentieth century, education through most of the world was seen as what we shall define as a 'public good'. The assumption was that education benefited the nation; hence, funding for education should be borne by the citizenry rather than the individual. At the same time, private colleges and universities also have co-existed in many countries such as the United States. Other countries such as Brazil, Korea, Japan and the Philippines have had a private higher education system that may account for as much as 80 per cent of the student population. Nevertheless, public higher education has been more the norm than the exception throughout the world.

The implications for how to think about public goods are two fold. On the one hand, the assumption seems to be shifting toward the idea that a private entity can provide a public good. On the other hand, some argue that higher education is essentially a private, rather than a public good and that its cost should be borne by the consumer, that is, the student.

In this paper, we shall argue that an obsession over whether private higher education is good or bad is flawed. Rather than assume that private post-secondary institutions are inevitably better than their public counterparts or that to ensure access and equity, the public system must be the sole provider neither benefits country nor consumer/student. Instead, we shall suggest that both private and public higher education have a crucial role to play in India. We entirely acknowledge the desire to have "world-class" universities, and at the same time enable millions of new entrants to come into the system in order to improve the economic prospects of the individual and society. At present, no Indian institution are listed in league tables that list the world's top 100 world class universities. There are also constant calls for India's post-secondary system to enroll millions of more students and to improve the quality of the system. Thus, the challenge for India is whether to accommodate rapid expansion, how to improve the overall quality of the system, and simultaneously invest in a research infrastructure that enables some institutions to be listed in the top 100 institutions in league tables. The conversation, however, all too frequently turns on the notion that the private sector is the answer, or that the public sector must re-assert itself after a generation of dormancy.

In what follows we first offer a traditional definition of what has been meant by the 'public good'. We then turn to a consideration of the system of higher education. We first attempt to rethink the various forms of institutions in India's higher education system and suggest that the 'alphabet soup' of institutional forms that currently exists does not serve the country well insofar as the taxonomy tends to obscure, rather than clarify, roles and responsibilities. We shall argue that a new social ecology of higher education needs to be put forward that streamlines relationships, clarifies roles and regulations, improves data analysis, and focuses on quality rather than quantity. In doing so, we shall suggest that rather than propose even more expansion – either private or public institutions — to a system that lacks quality controls, for the next decade the emphasis should be on increasing the overall quality of the system.

We conclude by acknowledging that private higher education, rightly regulated and not overly bureaucratic, certainly has a place in the social ecology of a country as large as India. However, if world class universities and preparation for the workforce

are primary goals, then the public sector needs to remain as a central agent. Of consequence, a re-invigorated notion of the public good needs to be developed and employed.

Higher Education as a Public Good

A robust literature about the nature of public goods has existed for well over a century (for example, Hansmann, 1987; Pusser, 2002). Initially, a public good was merely something that the citizenry held in common, and lost if they did not collectively maintain it (Calhoun, 2009). A public park, a clean marketplace, and roads were common examples. Over time, however, a theory of public goods has developed. A public good is something a nation-state provides to all citizens and is of benefit to the country. Everyone will be able to utilise the public good and the cost of providing the public good does not rise or fall based on the individual. The defence of a country's borders is the clearest example of a public good. All citizens enjoy the defence of the country, the cost does not change because of additional individuals and different individuals do not pay different costs to be protected (Tierney, 2006). Sanitary conditions in a country constitute another example of a public good. There is a public benefit in containing malaria and other diseases so that they do not spread; the cost of containing the disease varies little in relation to the population, and if a concerted effort is made to contain the disease, then everyone benefits, not merely a chosen few.

Traditionally, public goods have been characterised by three key terms: *non-rivalry*, *non-excludability,* and *externalities* (Samuelson, 1954; Vaknin, 2005). The idea of *non-rivalry* is that extending the service or providing the good to an additional individual or group is insignificant. As opposed to a private good that is enjoyed only by those who own it, a public good is available to anyone who partakes of it. A private good is a personal car; the owner decides who rides in the car and where it goes; in contrast, the subway is, in part, a public good because it is subsidised. Everyone is able to ride on the subway and even though a passenger usually pays a price, the real cost is borne by the citizenry through public monies. *Non-excludability* means what it suggests: no one can be excluded from a public good, or from participating in the cost. The citizenry pays for the construction of the subway; no one is barred from travelling on it. Individuals also do not have the option to opt out of the cost for the creation and maintenance of the public good. According to Sam Vaknin (2005), public goods "impose costs and benefits on others—individuals or firms—outside the marketplace and their effects are only partially reflected in prices and market transactions" (p. 1). Such a comment underscores the idea of *externalities*: public goods defy market

classification because they are worth more than they cost though often their actual cost cannot be determined.

The decision about whether something is a public good or not shifts over time, and is defined differently in different nations. In the nineteenth century, for example, in the United States, offering protection from a fire was the responsibility of private companies to which individuals paid for protecting their homes. If a fire started in someone's house, then the private company arrived to put out the fire. If the fire spread to a neighbour's house, but the neighbour did not have fire insurance from that specific company, then the private company let the house burn. Eventually, such a strategy seemed ill-advised and fire protection became a public good. Fire companies, supported through public monies, existed in local communities and raced to put out fires irrespective of whose house had caught fire.

Conversely, the police force represents a public good that is becoming privatised in industrialised countries. A generation ago, security in a city meant that the police patrolled the streets as a public good. Over the last generation, however, the upper class in urban centres has felt unsafe and the result is the rise of private security firms and gated communities. Although a causal relationship cannot be established, surely there is a linkage between those who lobby for lower taxes, which results in fewer public services, and an increase in private services that once fell within the domain of the public, such as a police force.

How one defines a 'private non-profit' university may also differ from country to country. In the United States, for example, a clear distinction exists between for-profit and not-for-profit private universities (Tierney and Hentschke, 2007). A for-profit college or university may be publicly traded and the Board generates revenue for the shareholders, or the institution is privately owned and the owners seek to generate a profit for themselves. A non-profit organisation generates no external revenue for Board members or senior staff. In India, for-profit post-secondary institutions are not allowed. However, many post-secondary observers in India view private universities as profit-making entities. A family, for example, may provide the funds to start the institution, but the senior administrators may pay themselves significant salaries and also pay consultants. While this practice may be criticised by some in India, the same sort of salaries are being paid to senior administrators (though not Board members) in the United States. The salaries of senior administrators in private (and to a certain extent, public) universities are beginning to generate criticism in the United States because of the high administrative remuneration involved. Further, the sort of land deals that are frequently done to start a private university in India that could generate

significant revenue or savings for a founder and his/her family are relatively unheard of in the United States with regard to private non-profit (and for-profit) institutions.

One final point pertains to who controls the public good. The idea of a 'public' good suggests that a government exists and that the government is the entity that controls the services provided. Private militias signify a potent example of the breakdown of civic order; a country's national defence is incapable of defending individuals so private militias arise that do not have to respond to any public entity. A public good, then, is not merely controlled by a government that, in some manner, represents the citizenry, but the public good is also under the regulation of that government. The government holds the monopoly by way of funding.

In the nineteenth century in the United States, primary education became a public good, and then secondary education also became a part of public welfare. The form that the good takes has been a point of debate over the last several years. Primary and secondary schooling, in particular, has been seen as a benefit accruing to the general public and a good that should be extended to everyone. As Rizvi and Lingard (2006) point out, "Education has come to be seen as being central to human capital formation for the health of national economies in the face of international competition and global pressures" (p. 252). The result is that the cost of going to school has been borne by the state rather than by the individual, unless a decision is made by the individual (or the parents on their behalf) to attend a private school. The assumption about who should bear the cost of private schooling has followed the traditional line of thinking that individuals may spend their money in a manner that they see fit. Thus, if a couple wishes to send their children to denominational schools, they are free to do so, but it is a private good. Those costs should be borne by the individual, whereas general services—whether they are for fire and police protection or schooling—are to be paid by the general public.

Over the last generation, however, a great deal of discussion has taken place about whether the support of a public good should go to an institution—a public school, for example—or the individual, that is, the student. If public monies go to the student, then the individual is free to attend the form of education that he or she desires. Nevertheless, many will suggest that the commitment to the public good from this perspective remains similar to what we have always had; others will argue that a public good entails that the same goods and services be provided to all individuals.

Higher education has been seen as a public good in many countries and as a quasi-public good in others. The interpretation of how to provide that public good has varied

from country to country. In the United States, as a decentralised system where State funding and support for higher education are critical, the concept and implications of a public good vary from state by state. A general proposition, however, is that the costs of a post-secondary degree, especially a bachelor's degree, should at least be shared by the individual and the State. In other countries such as Mexico or Saudi Arabia, the State assumes virtually the entire cost of higher education because it is seen as a public good. In many respects, higher education is neither strictly public (such as national defence) nor strictly private (such as a private business). Universities produce private and public goods; the manner in which they are funded, however, has seen shifts from the public sector to the private.

Higher education is not a 'pure' public good but may instead be thought of as an 'impure' public good. For instance, universities are able to exclude individuals form their ambit, though some systems have open access for all via community colleges or a national university. Not everyone has access to universal higher education. Private research universities have received significant public funding to conduct basic and applied research because the outcome has been viewed as benefiting the public. Nevertheless, we agree with Kaul, Grunberg, and Stern (1999) when they state, "Because impure goods are more common than the pure type, we use the term 'public good' to encompass both pure and impure public goods. … Many of the implications of publicness remain salient even when a good is only partly non-rival or partly non-excludable" (p. 4).

Further, higher education is a site characterised by externalities such that the user neither bears all the costs nor derives all the benefits. Therefore, externalities certainly occur where a student will reap benefits not only for himself or herself, but also for society by inculcating values and job skills. Research and knowledge generation becomes another externality if that knowledge is freely shared and made available to everyone regardless of who had a hand in producing it.

Joseph Stiglitz (2006) has argued that "knowledge is a public good and that restricting knowledge leads to inefficiency—a slower pace of innovation" (p. 123). Stiglitz goes on to assert that because of globalisation, countries need to be more innovative; one role of post-secondary education is to generate knowledge that is useful for the common good. Similarly, Manuel Castells (1994) has observed, "Universities … become fundamental tools of development" (p. 15) through mechanisms such as technology transfer and economic development. The result is that higher education is seen as a key public good, especially in a global economy, but in a slightly different manner from primary public goods such as national defence or

purified drinking water. Whereas in a simple economy in a simpler time, one could readily understand how a standing army that defended the nation's borders from attack was of benefit to everyone, in a globalised economy, the argument now exists that a country and its citizens need knowledge producers and innovation incubators such as universities to remain competitive and prosperous.

We now turn to a consideration of how India creates and maintains its post-secondary system. Although, as noted above, the country has forbidden for-profit higher education, there has been a tradition of private higher education.[1] More recently, the private system of higher education has experienced enormous growth largely by investors or privately held-companies. Some have argued that the country is not well served by a private system of providers even if they are ostensibly non-profit (Kapur and Mehta, 2007; Kapur, 2010). The proponents of private higher education would argue that the real problem pertains to the red tape and regulations of the government that strangulates innovation (Kumar, 2013; 2015). The result is that few individuals are proponents of the current system and virtually no one would suggest that India's post-secondary institutions – private or public — are close to being ranked in the top 200 universities in the world at a time when a competitor — China — has had seven ranked in the last decade. Further, even though there are no formal projections about specific workforce needs, many argue the system needs to expand dramatically in order for students to be able to learn the skills required to be effective in a job. Virtually everyone bemoans the quality of private and public institutions. Many will ask of what utility is expansion if the product is poor and the outcomes for students are negligible?

The result is that the way forward to meeting the needs of current and future students remains unclear and controversial. Of consequence, what role the private and public sectors should play is uncertain and much debated. After offering a new way to think of the social ecology of India's post-secondary system we shall suggest that private and public providers have a crucial role to play, that better data is essential in order to accurately forecast workforce needs, and that for the immediate future quality over quantity should be the goal. Such an analysis is framed by a re-invigorated notion of the public good that should shape the social ecology of higher education.

[1] India has had a tradition of private higher education that was largely philanthropic before Independence.

The State and Higher Education: The Case of India

India, like virtually all other countries in the world, has seen a dramatic increase in the number of students attending a post-secondary institution and the number of institutions that have been established (Agarwal, 2007). However, the massification occurred when India's per capita income and gross domestic product (GDP) were found to be far below those of other countries with similar enrolment ratios (Kapur, 2016). As discussed below, the nomenclature used to define a post-secondary institution in India can be confusing, and even counter-productive. However, by comparison, in 1950, the country had 605 post-secondary institutions (MHRD, 2007) and in 2013, it had 35,357[2] (MHRD, 2015). During the same time horizon, approximately 0.4 million (MHRD, 2007) students enrolled in those 605 institutions whereas in 2013, the corresponding figure was 32.3 million (Table 1; MHRD, 2015). The greatest increase in the number of institutions and students has occurred in the twenty-first century. In 2002-03, for example, there were 12,080 institutions and approximately 10.7 million students (MHRD, 2007). The result is that India currently has the second largest post-secondary sector in the world, following China, and is set to have the most students attending post-secondary institutions within a decade (Kapur, 2010).

Such an increase, both over a 65-year period and since the turn of the century, is not particularly surprising. As has been suggested elsewhere (Tierney, 2015), education has long been seen as a route out of poverty and as a primary means for economic development in a country. The result is that massification has become of critical importance, particularly in the developing world. The challenge for India has been that its increase has come at a time when the resources were not available in a manner similar to its counterparts (Kapur, 2016). For example, India's GDP per capita is around $5000 when its Gross Enrolment Ratio (GER) is 25 per cent,[3] whereas the GDP per capita of the UK was more than $15,000 and China's was $10,000 when their respective GERs was 25 per cent (Kapur, 2016). Nevertheless, globalisation has only increased the perception that more individuals need some sort of post-secondary education as the world moves from an economy based on goods and services to one increasingly described as a "knowledge economy" (Tierney, 2009). However, the increase in the number of students in India is not based on projections of needs of the workforce; rather, the push for an increase turns on the numbers of students who graduate from

[2] This number has been arrived at by adding the total number of colleges (36,634) and number of universities (723), which comes to 37,357 (MHRD, 2015). This number does not include stand-alone institutions.

[3] According the All India Survey of Higher Education (2015), MHRD, the gross enrolment in higher education is 23.0 (p iv).

high school. In many respects, such an assumption seems warranted for a country concerned about equity. If the middle and upper classes gain a post-secondary education, why should the system not expand in order to enable more people access to a higher education? The challenge turns on the dilution of quality as the system expands and the lack of jobs when students graduate.

This increase in the number of institutions and student enrolment reflects the earlier point raised in this paper about globalisation and tertiary education. As Muhammad, *et al*. (2006, p. 4) have noted, "like many developing countries across the globe, education, particularly at [the] tertiary level, is seen as an instrument of social mobility." India's assumption is that a high school degree is no longer sufficient for gainful employment for a significant percentage of a country's population even though there is no data to suggest that the needs of the workforce requires the current number of graduates much less an increase in graduation rates. Successive Indian governments also decided that the demand for tertiary education exceeded their capacity to provide public higher education solely through the traditional mechanisms of taxation and appropriations (Altbach, 2003).

Table 1: Number of Institutions and Enrolment over Time

Year	No. of Institutions	Enrolment
1950	605	0.4 million
2002	12,080	10.7 million
2013	35,357	32.3 million

Sources: MHRD, 2007; 2015.

Although the surge in enrolment deserves a great deal of critical analysis on multiple levels, six key points, as delineated below, warrant discussion before considering a new social ecology of higher education.

Appreciating the Rise in Private Institutions

Private higher education has experienced massive growth over the last quarter century. As noted above, though some countries such as the United States, Chile, Japan and Brazil have had an established private non-profit post-secondary sector, India did not have a particularly significant number of private universities until the twenty-first century (Tierney, 2010). For India, Varghese (2016) observes, "the policy towards private institutions has played an important role in the expansion, diversification and persisting inequalities in higher education enrolment in India. From the 1980s onwards, privatization of public institutions and promotion of private higher

education institutions became common in India (p. 9)." The government has outlawed private for-profit institutions, but beginning in 2005, there has been a dramatic increase in the number of institutions defined as private colleges or universities. One additional important point here is that "there has been an increase in the number of private institutions in the post-independence era but a decrease in private investment in education in general. It is because private institutions depend on tuition fees rather than donations. Private philanthropy contributed 24.3% of the total expenditure in India in the beginning of the 20th century, at the time of independence it was 14% and in the 1990s it was 3.5%" (Azad, 2008, p. 116).

In 1950, for example, there were 578 colleges; many of these were private colleges, (MHRD, 2007; Agarwal 2009, p. 71) and there were no private universities. Roughly 70 per cent of them were general colleges and the remainder were for professional education. In 2006, there were 10 private universities and 13,400 private colleges (Agarwal, 2009, pp. 3, 91). By 2013, there were 153 private universities and around 22,100 private colleges (Table 2; MHRD, 2015). Recently, the Government of India has decided to open world-class universities. As an initial step, the government has decided to set up 20 world class universities, including 10 public and 10 private universities (Press Information Bureau, 2016). As discussed below, how one defines 'private' is not particularly clear; however, the number of institutions that are now thought of as private colleges or universities has grown exponentially. Indeed, the fastest growing post-secondary sector in India is that of its private universities and colleges.

Table 2: The Increase in Private Colleges and Universities

Year	Private University	Private College
1950	0	Not Known
2006	10 (university)+ 63 (Deemed university)	5750 (aided) + 7650 (unaided colleges)
2013	153 (university) + 80 (Deemed university)	4379 (aided) + 17721 (unaided colleges)

Sources: Agarwal, 2009; Choudhary, 2015, p. 17; MHRD, 2015.

Understanding Where Students Attend

Private institutions are experiencing significant growth. The vast majority of India's 37,357 institutions[4] are private colleges, numbering approximately 22,100

[4] As indicated earlier, this number has been arrived at by adding the total number of colleges (36,634) and number of universities (723), which comes to 37,357. However, based on MHRD's survey, an exact count on private colleges is impossible because approximately 20 per cent of the institutions offered unclear responses. *Source*: MHRD, 2015, p. iii.

(MHRD, 2015). The size of these institutions, however, covers a dramatic range. Some private institutions such as the Patel College of Education in Bhopal, Madhya Pradesh, and Nalanda College of Education, Uttarakhand, have only 98 and 94 students, respectively (Patel College of Education, 2015; Nalanda College of Education, 2010). At the other extreme, the CMR College of Engineering & Technology, Andhra Pradesh, and Thapar Institute of Engineering and Technology University, Patiala, have 1266 and 6226 students, respectively (CMR College of Engineering & Technology, 2014; Thapar Institute of Engineering and Technology University, 2015).

In India, the ratio of absolute number of public institutions to private colleges and universities is 1: 3 (see Table 3) and there has also been a shift in college-going attendance. The private sector currently accounts for approximately 59 per cent of all post-secondary enrolment (Varghese, Malik, and Gautam, 2015). In 2001, and then again in 2006, the share of enrolment of private unaided post-secondary institutions increased from 32.90 per cent to 51.53 per cent (PC, 2008, p. 23). Many observers assume that private higher education will continue to grow while the public sector atrophies (Kumar, 2008; Kapur and Mehta, 2007).

It is also useful to note who attends public and private institutions, that is, India has had a history of having students who study abroad, usually in the United Kingdom, the United States or Australia. The most recent data points out that in 2012, there were 189,472 students studying abroad (MHRD, 2014). Except for the few exceptional students who warranted either governmental or institution-specific grants, these are students who largely come from the middle and upper classes wherein the parents can afford not only the costs incurred in sending a child abroad, but also the costs of tuition and fees. Further, private institutions contributed to disciplinary distortions (Varghese, 2016) as most of these were established in the subject areas of engineering, medicine, and management (Agarwal, 2007). Varghese (2016) argues that this adds to "widening inequalities in access to education and employment as students from well-to-do families opted for the courses leaving the courses in arts and humanities mostly to students from the disadvantaged households" (p. 9).

Table 3: Delineating Private and Public Colleges and Universities, 2013-14

Year 2013-14		
Type of Universities/Institutes/Colleges		**Numbers**
1.	Institute of National Importance	68
2.	Central Universities (including Open)	43
3.	Public Deemed University	36
4.	State Public Universities (including Open)	322 (309+13)
5.	Institute Under State Legislature Act	5
6.	Government Colleges	7230
7.	Private University	153
8.	State Private Open University	1
9.	Private Deemed Universities	80
10.	Private (Govt. Aided) Colleges	4379
11.	Private Unaided Colleges	17721
12.	Government Aided Deemed Universities	11
13.	Others	4

Source: MHRD, 2015.

The result is that as in every country, a divide exists across economic classes with regard to where students attend college. The reasons for the divide are not that very different from those observed in other countries. Low-income students are more likely to live at home because they do not have the funding to pay for lodging. Middle and upper class students have the ability to attend institutions far from the home because they can afford travel costs and lodging. Family responsibilities are often greater for the poor wherein students may need to take up a job in order to help pay for the costs of the family. And, of course, the fees associated with attending a private institution may be too burdensome for low-income students. The upshot is that low-income students are more likely to attend a public institution where the fees and related costs are lower than those in a private institution. In 2007, for example, a division of the students into the low-middle and upper-class categories shows that 56 per cent of the students denoted as 'poor' attended public institutions, whereas 45 per cent of the middle-class and 57 per cent of the upper-class students attended private higher education institutions (Table 4a).

The figures for the excluded social groups such as the Scheduled Tribes (STs), and Scheduled Castes (SCs) which experience high incidences of poverty,[5] are quite

[5] For example in rural areas, the STs recorded the highest level of poverty (47.4 per cent), followed by the SCs (42.3 per cent) and the OBCs (32 per cent), as compared to 33.8 per cent for all the classes (Planning Commission, 2013).

different from those of the forward castes. For example, in 2014 (Table 4b), 59% of the ST students, 49 per cent of the SC students, and 38% of the OBC students attended public institutions whereas 59 per cent of the students from the higher castes ('Others') attended private higher education institutions (NSSO, 2014).

Table 4a: Public/Private by Class: 2007

	0-20	20-40	40-60	60-80	80-100	Total
Government	56.04	50.36	56.34	55.05	43.34	48.46
Private Aided	31.55	29.25	27.38	27.21	30.16	29.20
Private Unaided	12.41	20.39	16.28	17.74	26.50	22.34
Total	100.00	100.00	100.00	100.00	100.00	100.00

Source: NSSO, 2007, Class Categories= Quintile Consumption Expenditure Class

Table 4b: Public/Private by Social Group: 2014

Type of Institution	STs	SCs	OBCs	Others	Total
Government	58.80	48.56	37.35	38.83	41.42
Private Aided	21.96	22.32	25	26.15	25.34
Private Unaided	19.06	28.66	37.07	34.43	32.69

Source: NSSO, 2014.

Considering How Public Monies Are Spent

In the previous section, it was pointed out how public goods have largely been defined as public funds used to support a public institution. Only in the last generation has there been a shift where individuals have argued persuasively that public funds might go to a private organisation that supports a public good. The result in the United States, for example, is that public funding in some cities and states are utilized by private charter schools that educate elementary and secondary schools.

In India, however, this has been the course that has been pursued with increasing aggressiveness over the last half century. The government became heavily involved in the financing of private institutions beginning in the 1960s (Agarwal, 2009, p. 71). By 2013, 4,379 private post-secondary institutions had received formal public support from the respective state governments (MHRD, 2015). The states of Haryana and Maharashtra, for example, have publicly supported private colleges such as the DAV College of Education, Punjab, and the Ramanada Arya DAV College, Mumbai (DAV College of Education, Punjab, 2013; Ramanada Arya DAV College, Mumbai, 2015).

Table 5: Fee Structure: Public and Private

University/Institute	UG (Annual)	PG (Annual)
Central (Jawaharlal Nehru University, New Delhi)	Rs. 370 (BA)	Rs. 370 (MA)
State (University of Lucknow, UP)	Rs. 4719 (BA)	Rs. 3377 (MA)
Government College (Zakir Husain College, New Delhi)	Rs. 7810 (BA)	Rs. 9544 (MA)
Private University* (Shiv Nadar, Uttar Pradesh) Private University (O.P. Jindal, Haryana)	Rs. 2,64,500 (BA) Rs. 3,49,500 (B Tech) Rs.7,65, 000 (BA)	Rs. 4,66,000 (MSc) Rs. 4,65,000 (MA)
Private Aided College (Jai Hind College, Maharashtra)	Rs. 3,742 (BA)	Rs. 10,792 (MSc)
Private Unaided College (KITM, Kurukshetra, Haryana)	Rs. 76,200 (BTech)	Rs. 76,200 (MTech)

Source: Compiled from various fee structures of the respective universities and colleges.
***** In case of private universities the fees includes hostel, dining and laundry charges.

Examining the Fees Related to Attending an Institution

Related to where students gain a post-secondary education and what public monies support, is the question of how much an institution costs. Although calculating costs can be confusing and contradictory, it does provide a baseline on which consumer choice often revolves and could highlight how a government spends its monies. Poor students in the United States, for example, often eschew consideration of a private college or university because they believe the costs will be exorbitant even though federal and state support may make the institution less costly than attendance at a comparable public institution. Similarly, public funds that go to the student/consumer rather than the institution ostensibly provide the individual with public monies to attain a public good. The government, from this perspective, is providing the citizenry with choice on where to gain a public good instead of assuming the good must be spent at a public entity.

Prices vary according to the institution where one attends. And some private institutions provide grants for students who are unable to pay the costs of attending the institution. However, average costs across institutions vary according to institutional type and form. In 2013, for example, the average fees at a public central (federal) university for one year of attendance was around Rs. 370 (Table 5; JNU, 2016),[6] and attendance at a state university ranged from Rs. 4719 in the University of Lucknow, Uttar Pradesh (University, of Lucknow, 2015) to Rs. 5113 in Kurukshetra University, Haryana, for acquiring a Bachelors' degree (Kurukshetra University, 2016). The fees associated with attendance at private universities at the under-graduate level such as at Shiv Nadar University, Uttar Pradesh, is Rs. 2,64,500 (Shiv Nadar University,

[6] This does not include monthly hostel/rooming charges (Rs. 1620, part of which is refunded after completion of the course) and room rent of Rs. 240 per month.

2015), and for O.P. Jindal University, it is Rs. 7,65,000 per year (O.P. Jindal University, 2014, p. 30). The cost of attending a private aided college was Rs. 3,742 (Jai Hind College, 2013), and private unaided costs were Rs. 76,200 (excludes hostel fees) and Rs. 1,26,000 (including hostel fees, KITM, 2015). The result is not that surprising and follows a historical trajectory: public institutions cost less than private institutions. At the same time fees are rising at all institutions.

Determining the Quality and Costs of Post-secondary Institutions

The cost-benefit analysis of attending a post-secondary institution is arguably one of the most complex and debated areas of higher education research. This analysis hinges on a large number of factors based on how one interprets the existing data and presumably the data that will exist once a consumer attains employment. One question, for example, pertains to the ability of a student to acquire a job when he or she completes the requirements for a degree. In part, colleges and universities need to be training individuals for jobs that may not yet exist. Prognostications about what sorts of job the economy will need in a decade are marked by historical inaccuracy, while at the same time, people have some information. Obviously, there will be a greater need for graduates with computer skills than simple secretarial typing skills. Similarly, students may be trained for a job that provides employment but the costs associated with that training may be so high as to be prohibitive. Is it possible, for example, that another institution can provide similar education at a lower cost? This question is particularly pertinent with regard to the ostensible rise of on-line and distance learning. The assumption is that on-line learning can be done at a much lower cost than traditional formats of education though that is yet to be borne out.

These two questions are also critical for an analysis of India's higher education system. Many suggest that students are not being trained for the right jobs (PC, 2013, p. 139), and that they are faced with the prospect of unemployment upon graduation.

Although such data is far from perfect and comes with multiple caveats, we do know, ironically, that the rate of unemployment in India tends to increase with every level of education. For example in the year 2009-10, the unemployment rate was 0.3 per cent for those who were not literate, 5.2 per cent for high school graduates, and 6.9 per cent for college graduates. The highest level of unemployment rate is observed among those who have acquired 1–2 years of post-secondary education. The unemployment rate was 9.6 per cent for those with a diploma (PC, 2013, p. 162). This finding stands in contradistinction to the trends in the developed economies where the acquisition of more education suggests a greater likelihood of employment.

However, in a country where 85 per cent of the workforce is casual labour, those at the very bottom of the economic ladder will be employed, albeit with wages that barely enable them to survive.

The same confusion exists with regard to the costs associated with attaining a degree. The private sector historically will argue that they are able to provide basic services at a cheaper cost when public subsidies are factored into the overall costs of a public institution. Critics will counter this argument by pointing out that the wages and benefits accruing to private boards and senior staff are exorbitant and entail costs for taxpayers that could otherwise be used for public goods and services.

Developing Data on Workforce Needs and Quality Assurance

The current models of expansion have been based on the desire for more people to participate in higher education with little understanding about the need for more citizens with post-secondary credentials, that is, rather than an output model—which shows that a particular number of graduates are needed for the workforce—the system functions on an input model, which determines the number of high schools students who will graduate.

Such a push for expansion is understandable. On the one hand, those who are committed to access and equity want those who are the poorest in society to reap the benefits of higher education. On the other hand, constant messages about the "knowledge economy" suggest that more people need to participate in higher education.

At the same time, there is widespread discontent about the quality of private and public institutions. As we suggest elsewhere (Tierney and Sabharwal, 2016), there is rampant corruption, which, in turn, has led to a deterioration of academic quality. Before the system expands even more, an analysis seems warranted about workforce needs as well as a determination about the sort of skills that students learn in order to ensure that the system is functioning properly.

We have attempted to delineate six key issues that pertain to how one views post-secondary education in the light of our previous definition of a public good. All these ideas turn on the notion of how one frames the social ecology of post-secondary organisations and how those institutions get defined within that ecology, to which we now turn.

The Social Ecology of Post-secondary Providers[7]

The social ecology of higher education can be confusing, given the various names provided for universities and the forms that they assume. Such confusion also makes systemic change more difficult. This is especially so due to the existence of many sorts of institutions that lead individuals to misunderstand foundational terms such as "private" or "public". Simply stated, as elaborated below, there are six forms of post-secondary providers in India. It is also useful to note that at present, India neither allows for-profit providers nor permits other countries to offer stand-alone credit-bearing degrees. Regardless of institutional form, any post-secondary provider has the following six characteristics that largely define all institutions within any country's post-secondary social ecology:

(a) *Ownership and governance:* This refers to the person(s) with legal control and authority in the organisation and the manner in which the latter is governed.

(b) *Funding arrangements*: These pertain to the way in which the organisation supports itself and what it does with the income (for example, in some countries, an organisation might be a private for-profit entity seeking to generate revenue, a not-for-profit entity independent of the state government, or a not-for-profit entity that is part of the public sector).

(c) *Decision-making*: This term delineates the manner in which decisions get made.

(d) *Curriculum*: This pertains to the kind of teaching and learning that take place.

(e) *Clientele*: This accounts for the type of students who attend the institution and where they are geographically located.

(f) *Faculty*: This term highlights the faculty members and their roles and responsibilities.

[7] The terms 'post-secondary' and 'higher education' are used interchangeably. Post-secondary providers do not include stand-alone institutions that offer diploma/post-graduate diploma level programmes.

These six forms of institutions have overlapping as well as distinct purposes, as depicted in Table 6.

Table 6: Characteristics of Higher Education Providers in India*

	Ownership and Governance	**Funding**	**Decision-making**	**Curricula and Pedagogy**	**Clientele**	**Faculty**
Traditional Public University Federal	Non-profit, federally appointed and administered	Federally funded	External and centralised decision-making	Traditional and non-traditional formats and curricula	18–24, full-time, national	Full-time, mostly doctorate
Traditional Public University State	Non-profit, State-appointed and administered	State funded	External and centralised decision-making	Traditional and non-traditional format and curricula	18–24, full-time, part-time, state, regional	Full-time and part-time, varied degrees
Traditional Private University	Non-profit independent administration	Tuition fees	Internal and centralised Decision-making	Traditional formats and curricula	18-24, full-time, national	Full-time, mostly doctorate
Publicly-supported Public College	Non-profit, State-appointed and administered	State funded	External and centralised decision-making	Traditional formats and curricula	18-24, full-time, national	Full-time and part-time, varied degrees
Publicly-supported Private College	Non-profit, independent administration, partial State involvement	State funded, nominal tuition fees	Internal and centralised	Traditional format with focus on employment skills	18–24, full-time, local and adult, part-time, national	Full-time and part-time, varied degrees
Privately supported Private College	Non-profit, independent administration, partial State involvement	Tuition fees	Internal and centralised	Traditional format with focus on employment skills	18–24, full-time, local and adult, part-time, national	Full-time and part-time, varied degrees

Source: *Adapted from Tierney, 2010.

We employ these forms as ideal types to highlight the overall social ecology of the system. Some institutions with a particular form are in direct competition with another, whereas others have carved out a distinct niche. Some institutions have the potential to capture the clientele from another group of institutions while many are in competition for the services of the same faculty. These forms may be found in many countries but may not have existed only a decade ago in one or another country. Finally, what we have not included are the myriad number of stand-alone institutions that offer diplomas and certificates that might be thought of as para-professional

careers; although those need to be reconfigured, as well we will save that discussion for another time.

This paper attempts to rethink the current taxonomy that exists for post-secondary institutions in India. Currently, there are 15 different types of institutions in India (see Table 7) with overlapping and contradictory roles and responsibilities. Such complexity tends to stymie change rather than enable it; it makes functioning less transparent and more susceptible to atrophy. Our challenge here is to revisit the current taxonomic structure that is based on what has been conceptualised as a country's public good, the role of private institutions in that framework, and how best to balance the needs of research excellence, the perceived need for massification, and quality.

Table 7: Types of Institutions

Universities	Colleges
1. Central University	13. Government Colleges
2. Central Open University	14. Private Aided Colleges
3. Institute of National Importance	15. Private Unaided Colleges
4. State Public University	
5. State Open University	
6. State Private University	
7. State Private Open University	
8. Institute Under State Legislature Act	
9. Deemed University—Government	
10. Deemed University—Government Aided	
11. Deemed University—Private	
12. Other Institutes (An Institution Not Falling in Any of the Above Categories but Established through a State/Central Act and Awards a Degree)	

Source: Prepared from MHRD, 2015.

Albeit, additional forms of institutions may be created and/or unique arrangements will arise within a country because of a specific regulatory environment that impacts the entire social ecology. Different forms of institutions also have unique characteristics. For example, accreditation is a critical characteristic for some providers and taken as a given at others; research is a defining purpose for what we call 'traditional public' institutions at a federal level, but irrelevant for many other colleges and universities. However, the 'alphabet soup' that currently exists has no overarching public philosophy and instead seems to parade as a grab bag of institutional types. We

are suggesting that this sort of grab bag has hampered research excellence and been a roadblock to quality assurance.

Organisational Forms

The Traditional Public University—Federal:[8] The majority of the world's universities have been, and remain, public. Although the manner in which these universities are governed differs from country to country, while the control for the institution ultimately resides with the federal body that has granted the university its charter. Frequently, the governing authority is the State itself or a governing board appointed by the State. Although the faculty has some role in the governance of the institution, in general, public institutions outside the United States and Latin America are centralised entities with a hierarchical decision-making structure.

Until recently, most public institutions received approximately 90 per cent of their funding from the government. Student fees were low or null, revenue from donors or corporations was meagre, and capital investments were virtually non-existent. The student body consisted primarily of students of the nation, most of whom were of a traditional college-going age (approximately 18–24 years). As students attend university in large part to be trained for employment, the curriculum is aimed at equipping them for professional workplace as well as at training them in the arts and humanities. The manner in which teaching and learning occur is not very different from what occurred in past decades. Faculty members deliver lectures or advanced students have small seminars where a professor leads a discussion. The faculty is professionally trained, and over time, at the better institutions, all faculty members hold doctoral degrees.

India has three forms of public universities. Of these, the ones that are federally chartered receive their authority and funding from the federal government. In India, these are also called Central Government Funded Higher Education Institutions (CGFHIs). These are generally thought of as being among the best universities in the country. Of the 16 Indian institutions listed among the 200 best universities in the Times Higher Education World University Rankings of BRICS and Emerging Nations, for example, 10 are what we define here as Federal Public Universities. Examples of universities that fall under this form would be Delhi University and the Indian Institute of Technology (IIT). The Indira Gandhi National Open University (IGNOU), a distant education institution with 4 million students, is also an example of the second form of a federal public university.

[8] Central Government Funded Higher Education Institutions in India fall in this category.

A third form of public or private university is what has been known as a 'deemed university.' Heretofore a traditional university has been created by an Act of Parliament or a State legislature. Deemed Universities, however, as well as four "other institutes" are set up by an executive order of the Central Government on the recommendation of the University Grants Commission (UGC). They are funded by the government or aided by funding from the government. Universities are usually, but not always, premier institutes and discipline-specific, and they offer programmes at advanced levels. Institutions that apply for this status are monitored for a period of five years and then granted deemed university status. The Tata Institute of Social Sciences (TISS), Mumbai, and Indian Institute of Science, Bengaluru, are examples of premier institutes that have been granted deemed university status. The problem with institutions falling in this category, however, is that to outsiders they are constantly seen not as "deemed" but as "less than" a university. Rather than be placed in a category that appears to be temporary, they should either become universities after a period of time, be absorbed by a university or be closed down. Recently, for example, a variety of institutions have been recognised as deemed universities and their quality have been questioned. In a national report commissioned by the government, of the 126 deemed universities reviewed, the recommendation was that 88 institutions had deficiencies (MHRD, 2009). The Commission decided that the problems of 44 institutions might be remedied if significant improvements were to be made, but that 44 institutions should be closed down.

The Traditional Public University – State: The second form of a public university is that which is funded by one of India's states, including an institute and an open university, but more commonly a geographically based institution. Although research may be a focus in some of these institutions, they are more concerned with training the state's citizenry for employment. Nevertheless, five universities were listed among the BRICs and emerging economies. The funding for these comes primarily from the state. Examples of universities that fall within this category are the University of Lucknow, Uttar Pradesh, and Nagpur University, Maharashtra. As with the other categories, the quality of the faculty and training in these institutions is variable. A majority (85 per cent) of the post-secondary students in India attend this form of university and colleges affiliated to it (MHRD, 2015).

The Traditional Private University – Private: Traditional private universities have a long history; in some countries, such as Brazil, they actually outnumber public institutions. The traditional private institution, in general, parallels the national public universities with regard to the student body, curriculum, and faculty. They often have a

distinct tradition: some are religious or single-sex; others have a unique pedagogical focus delivering instruction through small seminars or a narrow curricular focus in a particular field of study (for example, law, medicine, and engineering. Nevertheless, traditional-aged students and doctoral-holding faculty members are involved in a teaching and learning experience that is more similar than different from that in a federal public institution.

Ownership and funding arrangements are what separates the institution from a public university. A traditional private university is a non-profit organisation with a governing board that is separate from the federal or state government. In most countries, the State has granted the organisation the right to offer courses as a university, but the organisation exists as any non-profit organisation rather than receiving direction and authority from the State. The funding scheme relies on student tuition, and, quite frequently, the donations of wealthy alumni and benefactors. Many private universities also receive funding through research grants and community-based projects, but the bulk of income derives from student tuition and fees.

The organisation may be centralised or decentralised, but the direction that the university takes is decided by the board, that is, the faculty may have a significant say in the governance of the institution, or their power may be circumscribed, but the organisation does not receive centralised direction from a ministry or the government. Vice-chancellors tend to have more authority in a traditional private university than in a public institution, primarily because their role is akin to that of the chief executive officer of a private company rather than that of a senior administrator of a public university controlled by a government ministry.

Over the last generation, several private universities have been set up in India based on the munificence of a benefactor or family foundation. The universities largely rely on a particular state to provide the land for the campus and continue to operate through fees and donations. The universities portend to offer a quality curriculum with full-time faculty, and to minimise government interference, bureaucratic structures, and lethargic decision-making. Examples of these sorts of institutions would be Ashoka University, Shiv Nadar University, and O.P. Jindal University. Of the 16 Indian universities listed among the Time Higher Education survey, one of them was a private. The government also has approved private deemed universities which would fall within this category.

Finally, private universities in India mostly cater to undergraduate students; approximately 61 per cent of the students are pursuing an under-graduate programme

as compared to 1.2 per cent enrolled in research programmes (MPhil/PhD) (MHRD, 2015). It has also been observed that out of the total number of students pursuing research programmes in India, the share of private universities (3.7 per cent) and private deemed universities (12 per cent) is lower than that of public universities (84 per cent) (Sabharwal, 2015).

Publicly Supported Public Colleges: Such institutions are common not just in India but also in the rest of the world. The publicly supported public college receives funding from the State and charges little, or no, tuition and fees from its students. There are currently 7,230 publicly supported public colleges in India (MHRD, 2015). Their clientele largely includes full-time and local, or regional traditionally aged students. And, if the college is affiliated to a federal University, (for example, Delhi University), then the students can be from any state in the country. The institutions offer a variety of degrees in relatively traditional formats with a standardised curriculum. As public entities, they are non-profit and State-appointed and administered. Their employees are public employees, and decision-making tends to be centralised and external.

Publicly Supported Private Colleges: A vast majority of post-secondary institutions in India are colleges affiliated with a university in some fashion. Public universities have colleges attached to them, but the distinctions revolve around differences in curriculum and clientele, rather than differences in finance, governance, or decision-making.

As noted above, of the 37,357 post-secondary institutions in India, 22,100 are private colleges. There are two forms of private colleges and their differences pertain to funding, governance structures, and decision-making. A publicly supported private college does not signify a new form of privatisation in India.[9] As with any private company, the State has to grant permission for the private entity to function, but in this example, it also financially supports the private entity. The State retains a voice in deciding the kind of curriculum that the college will develop and offer. In effect, the State is a major supporter of the private college, as any investor would be of a private for-profit company and of consequence has a say in curricular offerings. However, the incentives for the State to support these institutions are not fiscal; instead, the educational and social benefits accrued by its citizens who attend the institutions is presumably why a state invests in a private entity.

This institutional form is a departure from the idea of education as a public good that not only derives from public monies but is also administered as a public entity.

[9] Publicly supported private colleges are known as private-aided colleges in India.

Education remains a public good as the funding is largely public, but the purveyor is private. These institutions do not grant degrees on their own but are instead affiliated with a public state university. The university has control over the public colleges with regard to the curriculum, clientele or faculty. Some public state universities, such as the University of Delhi have 20 public supported private colleges affiliated to the University (UGC, 2014, p. 261). The assumption is that whether the purveyor is private or public is irrelevant and what matters is the outcome for the citizens. One might enquire why a public entity such as a public university does not offer courses and degrees for the same or less cost than the private entity and provide similar or better quality of education, and the answer would be that the government does not provide sufficient support to these institutions. A fair amount of concern has been levelled at these institutions with regard to academic quality and the quality of the faculty.

Privately Supported Private Colleges:[10] Another form of college is one that does not receive federal or State support and is instead able to set its own tuition fees within the limits laid down by a state government. These sorts of institutions frequently get defined by the curriculum that they offer and increasingly emphasise the need for training in engineering, science or medicine. The result is that they are able to charge a relatively high fee, perhaps as much as Rs. 3,03,380 for a B.Tech course of four years (KITM, 2015). These colleges must also be affiliated with a state public university but their relationship is equally tenuous. The college is able to hire faculty and admit students; governance and decision-making occurs through the college and not the affiliated university. The institution adheres to government standards for the curriculum. Since the fees are paid by the consumer/student, the institutions are also largely unregulated. It is fair to say that over the last decade, the largest degree of concern has been raised with this form of post-secondary institutions. Students pay a premium to attend the institutions and some critics allege that the costs are not in consonance with the quality of education in terms of the faculty, and learning that would enable individuals to get a job upon graduation. Aggarwal has pointed out that "quality and accountability in private higher education is often uneven" (Agarwal, 2009, p. 232).

Conclusion: Rethinking the Public Good

What can be made of such a dynamic market other than to acknowledge how fast the system is evolving and how many different players are involved in these changes? More importantly, what suggestions might be made about the worth of these changes

[10] Privately supported private colleges are called private unaided colleges in India.

for a nation such as India? N.V. Varghese has concluded with regard to private higher education: "The Indian policy response to private higher education has gone through a process of evolution from a reliance on public institutions to promoting private higher education institutions to expand the system" (Varghese, 2013, p. 149). We agree but wish to ask if the social ecology of post-secondary education that has been created is in the best interests of the country? Obviously, insofar as the ecology is 'social', the shape of the ecology is determined by the citizens and government. China, for example, has followed a quite different model wherein the federal government has invested heavily in higher education and its ecology is largely public. One of its public universities has a research budget equalling that of 16 Indian Institutes taken together (Bothwell, 2015). India's system is largely privatised whereas China's remains largely public. Accordingly, we conclude with the following four observations about the way forward for India's social ecology of higher education.

Privatisation and New Providers Will Increase

All of the changes we have discussed are possibly little more than new players trying to enter a market that is expanding because of globalisation (Tierney, 2009). From this perspective, the "gold rush" that many believe exists in the education market is likely to continue unless the government provides more accurate projections about workforce needs and more forcefully focuses on academic quality.

Another possibility is that either the government will revert to a previous stance and restrict new entrants, or that a fiscal crisis will force fledgling companies to close and/or refrain from attempting new ventures. Although these scenarios are, of course, possible, we do not believe that they are likely in India. Although the time frame over the last 20 years has been long enough to demonstrate that education is, indeed, a growth market and globalisation suggests that developing countries need an educated workforce, two social facts need to be taken into account. First, the public sector cannot meet the increased demand by itself, which is why a carefully regulated, but not overly bureaucratic, private sector is necessary. However, given the serious concerns about academic quality and legitimate concerns about the need for expansion, before the sector increases yet again, some sorts of attempts need to be made to ensure that the product that is being produced – academic credentials – has some kind of quality assurances attached to them for the consumers/students.

Nevertheless, one might more accurately predict that additional entrants will try to gain a toehold in the tertiary education market, rather than fewer. It is entirely plausible that if we were to update this article a decade from now, additional forms of

privatisation might be categorised. The either–or dichotomy of public or private is an artefact of the twentieth century, and there are likely to be new entrants to meet the needs of specific niche markets. In particular, as technology improves, the potential for virtual universities that know no geographical boundaries is considerable (Marginson, 2007). The public sector must determine which markets it is to serve. Then it needs to make an argument as to why it, rather than institutions in the private sector, can better serve those markets. After all, why will a nation spend tax dollars for a service that the private sector can provide for the same or less cost if the quality is comparable?

Data about Societal Needs and Organisational Performance Need to be Improved

The provisional framework offered here necessitated an intellectual treasure hunt for verifiable data that was often contradictory and confusing. There are four critical reasons to collect systematic, verifiable and understandable data.

First, without trustworthy data, there is no way of knowing who is or is not participating in tertiary education, and what they are learning. This is important for any country concerned about educational equity for all citizens and is a key part of the idea of transparency as essential for good government. It is likely, for example, that some sectors of a society have greater educational opportunities than others. Without an awareness of why different sectors are participating at a lower rate than others, the country cannot create policies that increase participation among all constituencies.

Second, the institutions in the forms outlined above educate students for different kinds of employment. Some lead to working class jobs whereas others lead to professional employment and far too many others lead to no employment. Without data to track the success of employment for an institution's graduates, a nation will not know if an institution is actually doing what it promises. Further, as with our earlier point, some groups are more likely to attend institutions that place them on one sort of career path and other groups end up on another career path. If a nation espouses educational equity, it will want to know if groups are being tracked for lower-skilled jobs so that they might develop ways to overcome such problems.

Third, no one benefits if a student does not complete the intended degree or certificate. Certainly the reasons for non-completion are multi-faceted and frequently the onus falls on the individual student. However, not all institutions are similar and some do a better job than others at supporting students towards degree completion. All institutions exist because the state has granted them permission. If an institution

fails to meet its goals, then the government should have that data to determine which institutions to support.

Finally, there appear to be no adequate workforce projections about the kind of skills India will need in the foreseeable future. The result is that the country's tertiary education system has wild swings where there is an undersupply of engineers and then five years later, there is an over-supply. Scaling up and down in such a manner is neither efficient nor effective for private or public providers. To be sure, predicting the kinds of jobs that will exist in a decade is always just that—a prediction. And yet, forecasts in developed countries help a post-secondary system tailor course offerings that are needed rather than simply expanding a system in order for politicians to curry favour with a particular constituency. Post-secondary education is an expensive undertaking – to the student and to the country. On the one hand, if the country will have no jobs for students when they graduate from university, then one needs to slow down the admission rate; on the other hand, if the prediction is that the country will have jobs that demand a post-secondary education in greater demand than colleges and university can currently provide, then organised expansion needs to occur. A country without accurate projections for manpower needs not only short-changes employers but also makes creating a viable post-secondary system that much harder. And expansion makes quality assurance that much more difficult.

Quality Assurance Mechanisms Need to be Put in Place and Followed

Because globalisation is an evolving term, there remain few hard and fast rules about how a nation should respond with regard to education and privatisation. We have suggested here that privatisation is likely to increase and the number of providers likely to expand, and that to revert to strict market control or to believe that the trends will reverse is probably mistaken. What, then, is the role for the government other than to continue to monitor traditional public institutions in the same manner as in the past? The response is twofold.

On the one hand, the movement towards privatisation and the erosion of the traditional public institutions' market share suggests that the government needs to provide greater autonomy and leeway to public universities to allow them to more successfully compete against their private counterparts. Privatisation in the marketplace means that competition is a given. For an organisation to compete successfully, the focus and goals of the institution need to be driven by those closest to the decision making rather than to be managed from a distance. A concomitant point is that each institution has to distinguish itself with regard to purpose and

constituency. India, for example, currently has 45 public federal universities. If the government seriously considers the suggestions offered here they will provide greater autonomy to each institution, but at the same time, the Ministry will ensure that each institution has a distinctive niche in the higher education marketplace rather than all trying to be similar.

On the other hand, the government's role is to ensure that the product of any entity is of the highest possible quality, regardless if that entity is public or private. The consumer needs enforceable protections to ensure that an organisation actually delivers what it promises. The government needs to protect the citizenry from fraud and its many ramifications. Simply stated, individuals are at risk of losing their income if their money is not well spent because of the low standards or false claims of an institution. And far too many claims currently exist with regard to academic corruption and low quality (Tierney and Sabharwal, 2016). A simplified taxonomic structure with a more straightforward regulatory structure is a start. The 15 types of institutions outlined in Table 7 that require 16 regulatory agencies create problems rather than solutions.

Further, education is more than simply a product such as a food item. To be sure, if *samosa*s or *jalebi*s are tainted and individuals get sick, then a government needs to oversee the recall of those foods and deal with the local or foreign producer to ensure that they improve their quality. Education, however, affects more than an individual's physical well-being. In a globalised world, a nation will not prosper if it does not have the assurance that the system that provides educational goods and services is of the highest possible standard. In the twenty-first century, whether the provider is private or public is of less importance. What matters is that the provider turns out a product that will enhance the well-being of the individual and the nation, and this should be the focus of government. The result is that tenure, for example, is not simply a perk one receives if he or she has worked a set number of years and instead is earned based on what rigorous criteria the faculty desire to evaluate.

Just as the government's role is to protect the citizenry from health hazards such as smog, or to ensure that clean drinking water exists regardless of the provider, a government needs to have regulations in place to protect citizens from nefarious post-secondary providers. Consumer protection of a public good has to mean more than that the responsibility is entirely upon the individual to gauge an institution's effectiveness. A kneejerk reaction by those providers will be to bemoan red-tapism and the like. However, surely a system can be devised that is not cumbersome and

also affords citizens confidence in the quality of the product it is buying – a post-secondary degree.

The Federal Government Needs to Significantly Increase Its Investment in Public Higher Education

As others have suggested, even with an expanded private sector, the public disinvestment in higher education has been a long-term cost for India (Kapur and Mehta, 2007; Kapur and Perry, 2015). The purpose of having institutions ranked as "world-class universities" is relatively meaningless if it is nothing more than an exercise in national hubris. Insofar as the basic and applied research stimulates economic development, a government is beholden to move aggressively to restructure and refinance India's premier federal universities so that some become internationally ranked. Such an undertaking is not like putting a man on the moon or other such efforts, but it will take coordination and sustained support. The private sector also does not yet have the infrastructure or private support to become internationally ranked educational institutions for at least a generation. The economic well-being of India in part depends upon having a vibrant public post-secondary sector with approximately half a dozen internationally ranked universities.

Virtually all public institutions face two immediate problems. The physical plant is in serious need of repair. All institutions also face significant vacancies in their academic departments. Although one might argue that the budgets of India's institutions can be much better managed, without more public investment, the quality of India's institutions will not significantly improve.

The government's role also has to be to invest public monies in innovations in technologies that enable broad and widespread learning modalities to be implemented across the country. To remain wedded to traditional teaching and learning formats because most students do not have access to the internet, websites and the like, today, overlooks what will be available to students tomorrow. Such an investment may well come through innovative forms of public-private partnerships, but it is the public sector which needs to oversee and fund the attempts in a manner that ensures quality outcomes at minimal costs.

Our goal here has been to argue that the social ecology of higher education gets framed by how a country defines the idea of a public good. We have suggested that the definition of a public good is not static, but instead, protean. Globaliation has presaged world-wide re-formulations of how a country defines public goods, and in turn, encouraged the privatisation of goods and services.

The example of India has delineated how the country's commitment to public higher education has shifted, and the challenges and opportunities that have resulted with the increase in private colleges and universities. We are trying to walk a delicate line. As noted, we do not foresee in the immediate future a reversion to a largely public post-secondary social ecology. At the same time, because higher education remains vitally important for a country's health, the citizenry and government have to have a more vigorous response with how to improve its post-secondary system.

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About the paper

India, like virtually all other countries in the world, has seen a dramatic increase in the number of students attending a post-secondary institution. Globalisation has promoted the perception that individuals need some sort of post-secondary education in a "knowledge economy". The increase in the number of students has presaged a remarkable growth in public and private post-secondary education providers, with varying purposes. The rise in private institutions has been even more dramatic than that of public ones. The challenge, therefore, lies in identifying ways of accommodating rapid expansion, improving the overall quality of the system, and investing in a research infrastructure. This paper argues that a country's philosophy about a public good, in large part, shapes the social ecology of higher education. The paper first offers a definition of what has traditionally been meant by a public good, then reviews the landscape of India's higher education system, and suggests that both the private and public sectors have a crucial role to play in the sphere of higher education India. It concludes that if properly regulated and not allowed to become overly bureaucratic, private higher education has a crucial role to play in the social ecology of a country as large as India, but if world class universities, massification, and preparation for the workforce are primary goals, then the public sector needs to remain as a central agent

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