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What is the empirical evidence on the consequences of Indian reservation policies in admissions to higher educational institutions? Reservations at all levels of higher education both redistribute SC and ST students upward in the university quality hierarchy, and attract significant numbers of SC and ST students, who would not otherwise pursue higher education, into universities. That reservations tend to benefit a 'creamy layer' of SC and ST students does not mean they are failing in achieving their objectives. They should be understood, instead, as an effort to promote integration of the upper strata of society – by increasing the access of highly disadvantaged and under-represented communities to elite occupations and decision-making positions.

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Positive discrimination policies have become an increasingly controversial issue in India as well as in other countries where they are practised, such as the US. These policies elicit high passion among both proponents and opponents, and they have given rise to at least as much polemical as scholarly writing, plenty of lively public debates, many demonstrations and myriad lawsuits. These are contexts in which a good deal more heat than light tends to be generated. I believe that careful empirical analysis of the consequences of positive discrimination policies can lead to more reasoned evaluation of their overall desirability.

In an earlier article published in the *Economic and Political Weekly* [Weisskopf 2001], I reviewed recent empirical research evaluating the effects of affirmative action in admissions to US higher educational institutions – an important sphere in which positive discrimination policies have been applied in the US. My aim in this article is to compile and analyse empirical evidence on the consequences of Indian positive discrimination policies in the same important sphere. I propose to review the available evidence on the consequences – positive or negative – of reservation policies as implemented over the past half-century in admissions to higher educational institutions in India. The evidence is regrettably rather limited in scope, especially regarding long-term consequences. Yet over the last three decades there has been a slow accretion of relevant studies, which can now shed a good deal of light on the consequences of reservation policies in higher educational admissions.

I begin in Section I by examining evidence on the impact of reservation policies (RP) on the composition of students enrolled in higher educational institutions. In Section II, I examine evidence relating to student academic performance at such institutions: how well do RP beneficiaries do in their studies? In Section III, I focus on the long-term consequences of reservations: how well do RP beneficiaries do in their post-university careers? Finally, in Section IV, I summarise the evidence and offer some concluding observations about the consequences of reservation policies in admissions to Indian higher educational institutions.

I
Reservation Policies and Enrolments in Indian Universities

SC and ST Enrolments in Higher Education[1]

Total student enrolment in higher educational institutions in India has been increasing rapidly over the past half-century, from less than 2,00,000 in 1950 to almost seven million by the year 2000.[2] During this time, the proportionate representation of scheduled caste (SC) and scheduled tribe (ST) students in total higher educational enrolment has been slowly rising. From the late 1970s to the late 1990s the SC proportion rose from 7 per cent to 7.8 per cent and the ST proportion rose from 1.6 per cent to 2.7 per cent [Rao 2002:47]. These percentage figures should be compared to the corresponding SC and ST shares of the total population of India: roughly 16 per cent and 8 per cent, respectively.[3] Thus, by the end of the century, SC and ST student representation in higher educational institutions had reached roughly one-half and one-third of their representation in the population as a whole.[4]

SC and ST students are distributed quite unevenly across the various degree programmes offered at Indian colleges and universities [Chanana 1993; HRD 1997]. Roughly 40 per cent of all higher education students in India are enrolled in (relatively low-prestige) arts programmes, but the corresponding figure for SC students is over 60 per cent and for ST students roughly 75 per cent. Correspondingly, the percentages of SC and ST students enrolled in the most prestigious programmes – engineering, law and medicine – are much lower than for students from the rest of the population. Not surprisingly, SC and ST students tend to be more under-represented in master's and PhD programmes than at the bachelor's degree level.

There is a limited amount of evidence available on the number of dalits and adivasis who have graduated from higher educational institutions. I have calculated from census data[5] that the SC proportion of all graduates of Indian higher educational institutions rose from 0.9 per cent in 1961 to 3.3 per cent in 1981, and the corresponding ST proportion rose from 0.1 per cent in 1961 to 0.8 per cent in 1981. No doubt the SC and ST proportions have increased further since then. But SC and ST graduates represented in 1981 only about 3 per cent and 1 per cent of all Indian graduates – far below their shares of the total Indian population.

Impact of RP on SC and ST Enrolments

There can be no doubt that a substantial share of SC and ST student enrolments in Indian higher educational institutions is attributable to India's reservation policies. It is very difficult, however, to estimate just how much difference these policies have made. The difficulty of such estimation is due not only the scarcity of detailed data on the composition of higher educational enrolments. It is also due to the complexity of the way in which India's reservation policies in the educational sphere are structured and administered. First of all, the policies apply only to public institutions. The majority of Indian higher educational institutions are indeed under central- or state-level government control; but the number of private institutions has been growing rapidly since the early 1990s.

In virtually all centrally-controlled higher educational institutions, 15 per cent of the seats are reserved for SC members and 7.5 per cent for ST members; these ratios were established to reflect the corresponding shares of dalits and adivasis in the national population.[6] Although the reservation of seats at higher educational institutions for SC and ST students was established as a national policy in the early 1950s, its actual implementation was delayed by a decade or two in various regions and institutions, and even now it is not fully established everywhere in India. In the case of higher educational institutions controlled at the state level, the percentages of SC and ST reserved seats are determined by the (approximate) proportions of these groups in the state population. Some states also have a percentage of seats reserved for other backward castes (OBCs).

General entry seats are filled first, with applicants from the top score downward in the relevant examination. Where OBC seats are reserved, these too are almost always filled – with applicants from the top down to a somewhat lower cut-off point score. In the case of SC and ST reserved seats, minimum qualifying scores are set well below the cut-off point for general entry applicants, and some schools do not require any minimum exam score; age limits are also often waived for SC and ST students. Even so, SC and ST reserved seats often go unfilled – especially at the more selective schools – because there are not enough applicants from these groups who have completed secondary education and otherwise met the requirements for admission.[7]

One piece of hard evidence on the impact of reservation policies comes from Patwardhan and Palshikar's (1992) study of a respected regional medical college in Pune, Maharashtra. They found that roughly 1/6th of a sample of SC and ST students who were admitted to reserved seats scored high enough on the qualifying entrance examination to have been admitted as general-entry students. In the case of OBC students in reserved seats, the corresponding figure was roughly 5/6th [Patwardhan and Palshikar 1992:44].

What can we conclude about the overall impact of reservation policies on the representation of SC and ST students in Indian higher educational institutions? First of all, we can be quite confident that virtually all SC and ST students at the most elite Indian universities and institutions for professional and technical training (most of which are centrally-controlled) would not have been admitted in the absence of reserved seats. Very few SC and ST students can succeed in open competition for general entry seats at prestigious institutions because they rarely have access to high-quality secondary education, or to privately-funded preparatory workshops and tutorials, all of which contribute to the substantial competitive edge enjoyed by students from relatively well-to-do families. Even with lower cut-off points for admission, SC and ST students typically do not come close to filling the available reserved seats at such institutions.

It is much harder to estimate the number of SC and ST enrolments attributable to reservation policies in the vast majority of Indian higher educational institutions, where admissions requirements are much less demanding than at elite schools. A considerable number of SC and ST applicants score high enough on the relevant examinations to qualify for general entry admission to some non-elite institution. In many cases, the effect of reservation policies is simply to redistribute beneficiary students upward in the hierarchy of institutional selectivity and quality. Without reserved seats, however, the appeal of a higher educational institution for SC and ST potential students is likely to be substantially diminished. For one thing, the availability of reserved seats improves the quality of the school that an SC or ST student can enter – and hence the value of a higher educational degree in the job market. Second, admission to a reserved seat enhances the ability of an SC or ST student to gain access to financial and other forms of government aid, without which staying in school may prove very difficult. Government provision of scholarships, special hostels, meals, supplies and book loans have enabled many SC and ST students to enter and persist in higher education; even though such support is usually inadequate to meet all the economic and social needs of such students, it often makes the difference as to whether such a student decides to continue his/her education [Mendelsohn and Vicziany 1998].

In order to get a sense of the overall quantitative significance of India's reservation policies in higher education, I will estimate how many SC and ST students have been enabled by reservation policies to enrol in 'desirable' higher educational programmes. As a rough approximation, one may consider all programmes other than the low-prestige arts programmes to be (relatively) desirable. According to Rao (2002: 47, Table 1), a total of roughly 5,10,000 SC students and 180,000 ST students were enrolled in Indian universities in 1996-97. In the previous section I cited estimates that roughly 60 per cent of SC students and 75 per cent of ST students were enrolled in arts programmes. These figures imply that roughly 2,00,000 SC students and 45,000 ST students were enrolled in the remaining programmes – commerce, science, engineering, etc. A non-negligible fraction of these students would surely have qualified for admission to some – the relatively less demanding – of these programmes; so a very rough estimate of the total number of SC and ST students enabled by reservation policies to attend desirable programmes is 2,00,000.

In sum, it seems reasonable to conclude that about a third of the SC and ST students enrolled in Indian higher educational institutions in the late 1990s were pursuing higher education in a relatively desirable programme because of the existence of reservation policies in admissions.[8] Taking into account also the

likelihood that a significant number of SC and ST students were encouraged by reservation policies to pursue higher education in less desirable programmes, one may conclude that these policies have made a difference in the case of about half of the roughly 7,00,000 SC and ST students enrolled in higher education in the late 1990s. Still, the data adduced in the previous section indicate that, even 50 years after independence, at least half of the seats reserved in Indian higher educational institutions for SC students, and at least two thirds of the seats reserved for ST students, go unfilled.

RP and Academic Qualifications of Enrolled Beneficiary Students

The evidence presented earlier shows that there have been significant increases in the enrolment of SC and ST students in Indian higher educational institutions over recent decades, even though SC and ST representation in such institutions remains proportionately well below that of the general population. Indian reservation policies have no doubt played a major role in increasing the opportunities for SC and ST students to continue their education at the college and university level. They have done so, however, in large part by requiring of SC and ST students significantly lower minimum exam scores to enter universities – as compared with the scores required of general entry applicants. While entrance qualifying exam scores cannot be considered a good predictor of performance in higher education, the lower scores characteristic of most SC and ST students – especially at elite institutions – do reflect less adequate academic preparation for the demands of a university-level education. Both the lower scores and the less adequate academic preparation are also, of course, correlated with socio-economic disadvantage, which further heightens the challenge faced by the typical SC or ST student embarking on a higher educational experience.

The situation of SC and ST students at elite Indian institutions is well illustrated by their experience at the Indian Institutes of Technology (IITs), whose programmes attract many of the best students in India. The five main IITs[9] began implementing reservation policies in admissions in the early 1970s, admitting SC and ST students with entrance exam scores well below the cut-off score for general entry students. After an initial period in which many SC and ST students admitted via reservations were found to be poorly prepared and dropped out, the IITs established a year-long preparatory programme for students whose entrance exam scores were less than two-thirds of the general entry cut-off score. These students gain admission to reserved seats only if they successfully complete that preparatory programme. Yet by the mid-1990s, after reservation policies and related programmes had been underway for two decades and the process was well established, many of the seats reserved for SC and ST students continued to go unfilled. Admissions data for 1994-95 indicate that only about half of the seats reserved for SC students were filled, while the corresponding figure for ST students was less than one-sixth.[10]

In non-elite higher educational institutions, reserved seats for SC and ST members have also often gone unfilled. According to Aikara (1980), medical schools in Gujarat filled less than 5 per cent of their reserved seats in the 1970s. Velaskar (1986) conducted very useful research on medical colleges in Mumbai, generating the following findings. In 1969, SC students filled much less than half of the 11 per cent of seats reserved for them. Minimum qualifying standards for Mumbai medical colleges were subsequently lowered; but in 1979-80 and 1980-81 still only a third of them filled their SC and ST quotas – while some had no SC and ST students at all. In more recent times Mumbai medical colleges have most often been filling SC reserved seats (sometimes, as noted earlier, with students whose claims to SC status are questionable); but medical schools across the country have continued to lag in this respect. Those SC students who do enrol in medical schools tend increasingly to come from a few dominant dalit castes and from relatively well-off dalit families living in urban areas, which enables some of them to attend private secondary schools. This trend toward larger numbers of SC applicants with relatively privileged backgrounds suggests that the average level of academic qualifications of incoming SC students may be rising.

There is indeed some evidence of a decline over time in the gap between the average entering exam scores of SC and ST reserved seat students, as compared with the average scores of general entry students – at least in the better schools. The best evidence of this comes from an unusually thorough and detailed study by Patwardhan and Palshikar (1992), who compiled and analysed a rich set of data on students who attended a prominent regional medical college – BJ Medical College in Pune, affiliated with the University of Pune. This college admits students in five separate categories, consisting of general entry seats and seats reserved for OBC, SC, ST and 'Vimukta tribes' (a regional group of tribal communities). Comparing the entrance exam scores of students in each category admitted in 1970, 1980 and 1985, the study found – not surprisingly – that the cut-off scores for admission were highest in the general entry category and successively lower in the OBC, SC and tribal categories. Significantly, however, the study also documented a general upward trend in the cut-off scores for admission in each category as well as a general reduction in the gaps in admitted student scores as between the different categories. The authors suggest that the significant rise in the cut-off marks for admission in the case of the reserved groups may be due in part to a second-generation effect, in which a growing proportion of OBC, SC and ST applicants are the children of parents who have been able to improve their educational and socio-economic status by virtue of their own access to reserved seats in educational institutions.

Issue of the 'Creamy Layer'

Critics of reservation policies in India have claimed that they are inequitable because they make available valuable educational opportunities mainly to well-to-do applicants – the creamy layer – rather than to more needy members of disadvantaged groups. Thus it is argued that reservations for SC and ST applicants increase inequalities within these groups and reduce educational opportunities for general-entry applicants from other groups who may be worse off than the SC and ST beneficiaries.

I have found no evidence addressing directly whether reservation policies in university admissions have increased overall inequalities, by benefiting well-off dalits and adivasis at the expense of less-well-off university applicants from the rest of the population. To determine whether there really are such inequitable redistributive effects, one would have to compare the socio-economic class backgrounds of SC and ST beneficiaries with the class backgrounds of those general-entry applicants displaced from university admissions by reservation policies; but such data do not appear to be available. Evidence discussed in Section II makes it clear that, among those admitted to university

programmes, SC and ST students tend to come from significantly less privileged socio-economic backgrounds than non-SC and ST students. This suggests that it is quite unlikely that those non-SC and ST applicants who are displaced by reservation policies are less well-off than the SC and ST students who benefit from them.

There is no lack of evidence on the redistributive effects of reservation policies within SC and ST groups. There can be no doubt that it is indeed a creamy layer of dalits and adivasis who constitute the vast majority of beneficiaries of India's reservation policies in university admissions. With few exceptions, only children from the better-off dalit and adivasi families are able to stay in school through a full secondary education and thus even be in a position to apply to a college or university. In a case study of wastage and stagnation in Maharashtrian primary and middle schools, Henriques and Wankhede (1985) show that those SC and ST students who do finish their secondary education are more likely to be boys than girls, and that they are most likely to come from the uppermost socio-economic strata of the dalit and adivasi population. The fact that higher education represents potential earning foregone and calls for expenditures on school supplies, housing and possibly transportation, which are rarely covered in full by government aid programmes, means that it is mainly the best-off students who can afford to spend several post-secondary years in an educational institution.

As Velaskar (1986:604) observes, "...it is clear that the [reservations] policy is steadily serving as a channel of access to mediocre performers of the relatively privileged sections of the dalit population". She goes on to note that there is a small segment of SC students that performs on a par with general-entry students; these high performers typically come from well-off families and English-medium high schools. Patwardhan and Palshikar (1992) conclude that reservations favour urban and male students, and that they disproportionately benefit a small number of sub-castes within the SC group and particular tribes within the ST group. They suggest, further, that the beneficiaries of reserved seats are increasingly second-generation students from the favoured groups, whose families have benefited from positive discrimination to become middle to upper-middle class; while children from more backward sub-castes and tribes find it difficult to compete. This proposition receives clear empirical support in the experience of the elite IITs: Kirpal and Gupta (1999: 148) found that 40 per cent of the SC and ST students in their sample of IIT BTech students admitted from 1989 through 1992 were second-generation beneficiaries – undoubtedly a much higher percentage than when reserved seat admissions were first begun in the early 1970s.

Rao corroborated the above observations in writing, "...the schemes of reservation tend to reproduce within the beneficiary class the same kind of clustering the reservation is meant to remedy...those among the beneficiaries who already enjoy the greatest advantages obtain disproportionately large shares of the benefits" [Rao 2001:51]. This process operates across sub-castes and tribes, as well as across socio-economic strata, within the SC and ST groups. This has led to calls for more finely sub-divided categories for reserved seats, so that the least-well-off sub-castes and tribes (who typically capture few reserved seats) would be entitled to their own separate reservation category.[11]

The evidence clearly supports the contention that reservation policies in university admissions have, at least in their direct effect, increased inequalities among dalits and adivasis by providing benefits primarily to the best-off individuals and subgroups within the dalit and adivasi populations. However, positive discrimination policies may indirectly benefit less well-off members of the beneficiary groups, insofar as the direct beneficiaries are thereby enabled more effectively and more extensively to hire, support and otherwise come to the aid of their less well-off kinsfolk and community members. The empirical significance of such indirect benefits in India is hotly disputed.

Sacchidananda's (1977) work on the 'harijan elite' tends to support the common view that reservation policies have created a privileged dalit elite devoted to its own petty advancement and uncaring about the wider-dalit community. Such criticism has grown also among some dalits themselves, who have also expressed concern about the stigmatisation of SC occupants of reserved positions as inferior. But Mendelsohn and Vicziany (1998: ch 8), in reporting on interviews with dalit members of parliament, suggest that – far from conveying the impression of being any kind of elite – they themselves are often struggling with personal material and social deprivation and against a hostile power structure. Mendelsohn and Vicziany find little evidence that reservation policies have created a particularly selfish and uncaring dalit community of politicians; indeed, they are inclined to turn Sachhidananda's conclusion on its head, opining, "the creation of a more privileged group among untouchables could well be of benefit to the general untouchable population" (p 255) – by enabling them to play a stronger and more independent role as leaders of their own communities.

II
Reservation Policies and Academic Performance in Indian Universities

Academic Performance of RP Beneficiaries

The availability of data on the performance of SC and ST students in higher education is unfortunately rather limited. In most cases these data apply strictly to SC and ST students who occupy reserved seats. Even when they include some other SC and ST students they are usually few in number; so the overall data are very likely to reflect the experience of those who have benefited from reservation policies. In the following paragraphs I report on the most relevant studies and findings, in chronological order.

The earliest systematic studies of SC and ST student academic performance in higher educational institutions are based on data collected in the late 1960s and early 1970s. Karlekar (1975) reports on a survey by the University Grants Commission (UGC) of 15 universities in the academic year 1965-66, which found that only 36 per cent of 4,100 SC students (in a variety of undergraduate and postgraduate fields) had passed their examinations. Galanter (1984: 63) cites a Maharashtra Development of Social Welfare study in 1969 that found that only 8 per cent of SC and ST students earned their college degrees in the prescribed four years and altogether only 15 per cent ultimately received their degree. Even those who did so tended on average to receive rather low grades. Chitnis (1981) surveyed arts and science colleges in Mumbai in the late 1960s and found that most of the SC students were enrolled in colleges whose students tended to be least successful in the University of Mumbai examinations taken by most local college students. In any given college the average academic performance of SC students was distinctly worse than that of non-SC students; and rates of wastage and stagnation were very high among SC students.

In a major research project sponsored by the Indian Council of Social Science Research (ICSSR), systematic surveys of SC and ST high school and college students were carried out in 15 Indian states in 1972-73. Reporting on the findings of this study, Chitnis (1981) indicated that most of the student respondents were progressing satisfactorily in their studies. She noted, however, that the surveys did not throw any light on the performance of SC students compared to that of other students, and she cautioned that SC students faced many challenging obstacles in their efforts to pursue a successful educational career. Karlekar (1975) made use of data from some of the ICSSR surveys, as well as from the UGC study cited above and annual reports of the Commissioner for Scheduled Castes and Scheduled Tribes, to conclude that SC students in higher educational institutions experienced high dropout rates (mainly because of economic pressures) as well as relatively low academic marks.

An informative study of SC student academic performance at the university level was carried out by Aikara (1980), on the basis of data from the early 1970s collected from 10 Mumbai colleges. The included colleges spanned programmes in a variety of fields (arts, science, commerce, law, medicine and engineering), and it included private as well as government colleges. Of all the students enrolled in these colleges (at all four year-levels of a college education) during the period of the study, a little over 10 per cent were SC students. Most of the SC students were enrolled in (less prestigious and less demanding) private colleges, and a majority of them were clustered in one single college catering primarily to SC students. Very few SC students were enrolled in the (more prestigious and more demanding) government colleges and/or in the (highly coveted) medical and engineering programmes.

Comparing the performance of SC students and a stratified sample of non-SC students enrolled at all levels in the 10 colleges over the three academic years from 1970 to 1973, Aikara found that only 23 per cent of SC students passed their year-end examinations, whereas 52 per cent of non-SC students did so. Of those who did not pass, a majority in both cases took but did not pass the exams – thus stagnating; the rest did not even appear for them – thus dropping out. A substantial majority of SC student dropouts left college while enrolled in the first-year class, but many of these SC dropouts were already in their second or third year of study at that year-level. Roughly 60 per cent of SC students who initially enrolled in 1970 were gone within three years; not having data beyond 1973, Aikara did not have precise figures on the percentage of those students who ultimately graduated; but it seems reasonable to infer that it must have been below 20 per cent.

In all 10 colleges, the academic performance of SC students was lower than that of non-SC students. Interestingly, those (few) SC students enrolled in the more challenging government and/or medical and engineering colleges were considerably more likely to pass their examinations than those (many) SC students enrolled in the remaining colleges. The former appear to be exceptionally well motivated, considerably more skilled, and better prepared and supported than the great majority of SC students who enrolled in low-prestige colleges. Without reserved seats, there would no doubt have been even fewer such SC students enrolled in the more challenging colleges and fields. Aikara concludes from his study of Mumbai colleges that, with the exception of a high-performing minority, the great majority of SC students suffered from high rates of wastage and stagnation and registered lower rates of performance and progress as compared to their non-SC peers.

In her research on medical colleges in Mumbai in the 1970s cited earlier, Velaskar (1986) found that roughly a quarter of SC students finished their degree programme on time – as compared to roughly three-quarters of non-SC students. Vakil (1985:138) reported a similar finding with respect to the few SC students who entered Nehru Medical College in Raipur in the late 1960s and early 1970s: of 42 entering students, only four completed college within the standard four and a half years; 23 did so within eight years. Velaskar found that a majority of the SC students do eventually manage to graduate from Mumbai's medical colleges, typically requiring some extra years of study; virtually all non-SC students graduate, most often on time. She noted also that SC students generally enter medical school with a significantly poorer academic background than non-SC students, and – with a few exceptions – they perform more poorly than OBC students as well as general-entry students. However, she found that they are considerably more likely to persist in and graduate from Mumbai's medical colleges than from engineering colleges – probably because the former have a social environment that is more local in flavour and thus more congenial to SC students, who are less comfortable with national culture in general and the English language in particular.[12]

More recent evidence on the academic performance of SC and ST students is available from two very well designed and executed studies published in the 1990s. The first of these is the previously cited study by Patwardhan and Palshikar (1992). The authors not only compiled academic records (at entry into as well as in each year of college) for reserved-seat students and a control group of general-entry students over a period stretching from the 1970s into the 1980s; they also sent out questionnaires to a substantial number of reserved-seat and general-entry graduates, and conducted personal interviews with each respondent. Following are their principal findings with respect to the in-college performance of reserved-seat students; I will review their findings with respect to post-college career performance in Section III.

As expected, the rank ordering of average exam marks by student category runs from general-entry students (at the top) to OBC students to SC students to ST students.[13] By and large the same ordering applies – inversely, of course – to the number of attempts needed to pass a given exam, to the number of years taken to complete the degree programme, and to the proportion of students who sooner or later drop out of the programme. But an impressive proportion of SC and ST students do ultimately graduate: among students entering in 1972-76 (and graduating by 1984), the SC graduation rate was 92 per cent and the ST rate was 87 per cent.

Overall, Patwardhan and Palshikar found that SC and ST students are behind other students academically at the time of their admission to the B J Medical College, and they tend to fall further behind during the course of their studies. But of the admitted SC and ST students, they find that only about 25-30 per cent perform in a less than satisfactory manner – either by dropping out, by requiring more than eight years to complete their degree programme, or by graduating with barely more than the minimum passing score on their final examinations. Moreover, the authors speculate that the success rate for SC and ST students has likely increased since the period of their study – because the cut-off marks for admission of students to SC and ST reserved seats have been rising over the years.

The most recent systematic study of the performance of SC and ST students in higher educational institutions was carried

out by Kirpal and Gupta (1999), who focused their attention on the prestigious IITs. It is safe to assume that virtually all the SC and ST students enrolling in an IIT are doing so via the SC and ST reserved seat categories, since the competition for general-entry seats at these most elite of Indian national higher educational institutions is ferocious.[14] Following several earlier studies of SC and ST students at IIT-Mumbai in the 1970s [Kirpal 1978; Kirpal et al 1985a, 1985b], the two scholars compiled a rich data set on the reserved-seat students entering the BTech programmes of all five of the main IIT campuses – Mumbai, Delhi, Kanpur, Kharagpur and Chennai – between 1981 and 1992.

Kirpal and Gupta found, first of all, that the consolidated average graduation rate for all SC and ST students was 84 per cent, as compared with 94 per cent for general-entry students.[15] The average dropout rate of 16 per cent for reserved-seat students entering in the 1980s compares very favourably with the much higher rates of wastage found among such students in the 1970s by Kirpal et al (1985a) and Chitnis (1986). As a result of those higher earlier rates, the IITs instituted significantly improved recruitment, preparation and retention efforts – including a year-long remedial programme for many SC and ST applicants. Kirpal and Gupta's principal findings with respect to student academic performance at the IITs can be summarised in terms of the 'mean cumulative performance index' (MCPI) of a roughly 10 per cent sample of general-entry, SC and ST students who enrolled during the years 1989-1992. The MCPI figures were 7.88 for 436 general-entry students, 6.23 for 115 SC students and 5.93 for 21 ST students. Clearly, and not surprisingly, SC and ST students lag well behind general-entry students in their performance on IIT examinations. Moreover, those who graduate as a rule take more years to do so than their general-entry peers. Still, the fact that graduation rates for SC and ST students are now over 80 per cent at the elite IITs suggests that these beneficiaries of reserved seats – and the institutions that are admitting them – are achieving important successes.

Reasons for Relatively Poor Academic Performance of RP Beneficiaries

Scholars who have studied the experience of SC and ST students in higher education report widely varying rates of graduation, depending on the institution, the circumstances and the time period. They are unanimous, however, in concluding that, on average, the academic performance of SC and ST students is well below that of their peers. SC and ST students typically attend less prestigious universities, tend to concentrate in less promising fields of study, take longer to complete their degree, drop out at higher rates, and score lower in their exams. There is no lack of plausible explanations for the relatively poor performance of these students, most of whom benefit in some way from India's reservation policies.

First of all, SC and ST students – with relatively few exceptions – come from a distinctly less privileged socio-economic backgrounds than their peers. All of the scholars whose work was cited in the previous section provide evidence of the relatively low socio-economic status of SC and ST students. For example, Aikara (1980: Table 4.2) found that only 5 per cent of the SC students in his sample had at least one college-educated parent, as compared with 32 per cent of non-SC students; 34 per cent of the SC students had two illiterate parents, as compared with 11 per cent in the case of non-SC students. Furthermore, 88 per cent of SC students had at least partial freeships to support them in their studies, and only 4 per cent of them relied largely or fully on parents of relatives for financial support; whereas the corresponding figures for non-SC students were 14 and 64 per cent. Aikara (1980: Table 3) also noted that the primary reason for which SC students dropped out of college was failure at exams; but almost as significant was a need to find employment in order to provide financial support for oneself and one's family. He concluded that considerably higher levels of financial aid would be necessary in order to reduce the high incidence of SC student wastage and stagnation.

In their study of students at BJ Medical College in Pune, Patwardhan and Palshikar (1992) found that 40 per cent of the parents or guardians of general-entry students were professionals, while only 1 per cent were labourers; they also discovered that 53 per cent of the general-entry students came from brahmin families. In the case of both SC and ST students, only 9 per cent of their parents or guardians were professionals; 21 per cent and 17 per cent, respectively, were labourers.

In the elite IITs, the family backgrounds of SC and ST students were relatively higher in socio-economic terms, though still on average well below those of the general-entry students. Kirpal and Gupta (1999: Tables 2.3, 2.4) reported that 54 per cent of the general-entry IIT students in their sample had fathers who were high ranking executives and 22 per cent had fathers who were educators; 66 per cent of the fathers had postgraduate or professional degrees. The corresponding figures for SC students were 27 per cent, 21 per cent, and 34 per cent; and for ST students they were 29 per cent, 10 per cent, and 24 per cent. Kirpal and Gupta (1999: Table 2.7) also reported that 84 per cent of the general-entry students attended English-medium secondary schools, while 63 per cent of the SC students and 38 per cent of the ST students did so.

Velaskar (1986), in her study of medical colleges in Mumbai, confirmed that SC students typically enter college with poorer socio-economic and academic backgrounds, which helps to explain why they perform more poorly than either OBC students or general-entry students. SC students tend to go to lower-quality primary and secondary schools than other students; and very few of them can afford the kinds of special tutoring or coaching classes that enable so many other students to prepare themselves well for exams. Like several other scholars, however, Velaskar did note the existence of a small minority of SC students who perform on a par with other students. These latter students, with a few heroic exceptions, typically come from well-off families and have attended English-medium high schools.

Velaskar argues that the relatively poor academic performance of most SC students can be explained in terms of differences in their socio-cultural backgrounds, even more than differences in their socio-economic backgrounds. The families of SC students are certainly not well off, but – in spite of frequent financial problems – they were by the 1980s comparable in socio-economic status (SES) to families of a significant fraction of (the less well-off) general entry students. The most significant deficit of SC students vis-à-vis general-entry students is in their 'cultural capital'. The cultural capital deprivation of SC students is evidenced by lower levels of education among family members, lower levels of participation in edifying cultural activities, and in general a home environment less conducive to learning. Most critically, SC students typically lack the most important source of cultural capital in modern India – good command of the English language.[16] General-entry students who are at the same socio-economic level as SC students are much more likely to have

greater cultural capital, including significantly better English language capabilities. The importance of a strong socio-cultural background, as distinct from high socio-economic status per se, is suggested also by the over-representation of brahmins among general-entry students. Many brahmin families are of low SES but even low-SES brahmin families are likely to be much richer than dalit families in cultural capital.

As Velaskar points out, SC students are generally not accepted by others as equals – as much because of their inferior socio-cultural backgrounds as because of their inferior academic backgrounds and performance. Kirpal and Gupta (1999: Ch 4, 5) provide much evidence of the same phenomenon in the IITs. The more privileged general-entry students have usually benefited not only from a home environment more conducive to educational success but also from a secondary education at schools with better non-academic facilities as well as a better academic environment. All of this contributes to their relatively confident disposition and their linguistic competence, both of which go a long way in interviews and oral examinations. SC students experience considerable social distancing because of disdain from non-SC students, which tends to be compounded by their own feelings of inferiority. Social discrimination against SC students in colleges and universities is a fact of Indian life; what is not so clear is if it is based primarily on caste identity per se or on cultural differences. To overcome this kind of handicap requires an especially strong motivation and effort by an SC student, as well as a facilitating environment – including friendship and help from other students.

Parmaji (1985) reports on a series of survey-based research studies he undertook (with others) in the 1970s and early 1980s at a number of higher educational institutions in Andhra Pradesh. Distinguishing between 'forward castes', 'backward castes' and SCs and STs, he found that performance on various examinations was positively and significantly correlated with caste status. He attributed the relatively poor performance of the lower castes more to cultural deprivation than to low socio-economic status, for he found that, among students from castes with similar SES, those from 'sanskritised' castes did better than others. By 'sanskritisation' he meant, following M N Srinivas (1962), the imitation by lower castes of brahmanical culture, which in turn implies the acquisition of superior linguistic abilities and cultural levels. Interestingly, Parmaji also found some evidence to suggest that, among students pursuing higher education in a residential college or university, the extent to which examination performance improves from admission to graduation is inversely correlated with caste status (unlike the absolute level of performance at any given stage). He concludes that a stimulating milieu at a later stage of education can help overcome the prior cultural deprivation of lower castes.

All the scholars who have examined the relationship between socio-economic status and academic performance confirm that high SES is correlated with good academic performance in higher educational institutions. This is true within each major category of students (general-entry, SC, ST, etc) as well as across the student body as a whole. Patwardhan and Palshikar (1992), however, have noted an interesting twist on this correlation. In their sample of students at a prominent medical college in Pune, they found that students from families at the very lowest socio-economic level (illiterate and/or labourers) did better on their exams than students from families at an intermediate socio-economic level (e g, lower-level government service, school teaching). In a parallel fashion, students from the most favoured dalit sub-caste (mahars) did not do as well as students from other dalit sub-castes. The authors speculate that students from families that have made it up from the lowest rungs of the socio-economic and caste ladder may have become somewhat complacent, as compared with those who are still struggling to make it out of the nether ranks [Patwardhan and Palshikar 1992:33-34].

III
Evidence on Post-University Career Paths of RP Beneficiaries

In any effort to assess the extent to which positive discrimination policies are achieving their objectives, it is critical to consider evidence on the long-run career paths of beneficiaries. Systematic evidence of this kind is difficult to obtain, since it calls for information to be gathered on the trajectories of representative samples of former students long after they have graduated from – or dropped out of – college and/or university degree programmes. It is, therefore, not surprising, but nonetheless regrettable, that little such systematic evidence is available in the case of SC and ST beneficiaries of India's reservation policies. Here I report on the findings of four studies that have addressed in one way or another the career paths of dalit and adivasi students following their higher educational experiences at particular institutions.[17]

Wankhede (1978) carried out the first such study on a sample of students in the Milind College of Arts (MCA) at Aurangabad, Maharashtra. MCA is the first higher educational institution in India set up specifically for dalits. It was founded by B R Ambedkar and run by his People's Education Society, which subsequently established several high schools and several more colleges (law, commerce, science) in Aurangabad along the same lines. In these institutions, most students and many faculty are dalits, and students receive scholarships, special facilities and extra attention more readily than in most government high schools and colleges in India. The dalit students at MCA are obviously not beneficiaries of reserved seats under India's reservation policies in higher education. Their experiences are nonetheless relevant to a study of such policies, because they are representative of the kind of dalit students who would be likely to qualify for reserved seats at more prestigious government-run institutions of higher education. They can thus serve as a kind of control group against which to consider the experiences of actual beneficiaries of higher educational reservation policies.

Wankhede focused his research on those MCA students who completed their BA in 1972. Most of these students were from the mahar sub-caste of dalits, and most were male, unmarried and neo-Buddhist (a designation given to dalits who converted to Buddhism in the wake of Ambedkar's conversion in 1956).[18] Data are not available on how many students in the same cohort dropped out before completing their BA but the graduation record of the MCA is good, and it is probable that most students who enrol do ultimately graduate.

Questionnaires were mailed to all 170 of the 1972 MCA graduates in the mid-1970s and Wankhede received responses from roughly three-fourths of them. He found that about half of the respondents had gone on to pursue further education at the master's level; of those, about 40 per cent actually completed their programme and attained the degree. At the time of the survey, roughly one-third of the MCA graduates were unemployed and one-sixth were pursuing further studies. The remaining half were working in low-paid jobs for which the minimum

qualification was only a completed secondary school education. None of the graduates had secured a class I or II (administrative, as opposed to clerical or menial) government job, in spite of the fact that there are SC reservations for these jobs. However, most of the graduates found better jobs than their fathers – e g, involving service rather than manual labour – and their earnings were on average three times as high.

Wankhede was disappointed by his findings, because of the limited degree of social mobility they reflected. In spite of a favourable post-secondary educational environment, the career trajectories of dalit students appeared to involve moves from a traditionally poor background to what he termed as the 'disadvantaged educated class'. This is no doubt due, in large part, to the generally poor prospects for Indian college graduates, in an economy that suffers from a substantial excess supply of educated job-seekers for positions requiring a high level of education. But it does suggest that, if reservations for SC and ST students are to have a major positive impact, they will probably have to involve reserved seats at institutions whose graduates are unusually well positioned to move into good jobs.

Among such institutions are the Mumbai medical colleges studied by Velaskar (1986), which are considered quite good by national standards.[19] As previously noted, Velaskar found that most SC students who enrolled (via reserved seats) at these colleges did graduate – although they typically require more years to do so than non-SC students. She did not conduct a systematic postgraduation survey, but she was able to ascertain that the SC graduates by and large did end up in responsible and well-paying medical positions.

Velaskar also discovered some interesting differences between SC students and their non-SC counterparts in their choice of fields of specialisation and in the nature of their postgraduate careers. SC students were relatively more oriented to – and did better at – clinical, as opposed to theoretical, courses and training. SC graduates were most likely to become general practitioners, while non-SC graduates more often became (often consulting) specialists. Evidently SC graduates placed a higher value on developing good contact and relations with patients than did non-SC graduates. In general, Velaskar found that SC medical students (as well as general-entry students of comparably low SES) were more motivated to render service and reach out to help communities in need, while general-entry students of higher SES (often the product of medical/professional families) were more materialistic in their career aspirations.

By far the best and most systematic effort to trace the postgraduation career paths of beneficiaries of India's reservation policies in higher education is the one carried out by Patwardhan and Palshikar (1992). These scholars first sent questionnaires to a large stratified sample of doctors who had graduated from the BJ Medical College in Pune between 1971 and 1982. They received 100 responses, which they found fairly representative of the full sample (by comparison of basic characteristics of the respondents with those of the larger group). Their respondents were distributed across the main admissions categories as follows: general entry – 26; OBCs – 34; SCs – 30; STs – 3; Vimukta tribes (VTs) – 7. The latter four (much more heavily sampled) categories comprise the reserved-seat group to which 74 respondents belonged.

The general-entry and reserved-seat respondents – especially those from the last three categories – were quite typically differentiated by family background. Only about one-eighth of the SC, ST and VT doctors were from high-SES families, while very few general-entry doctors were from low-SES families. Most of the SC, ST and VT doctors found their medical programme of study very tough (especially the viva voce exams); and felt that their academic performance was often aggravated by non-academic factors such as teacher aloofness and sometimes even contempt. Of the entire group of 100 respondents, four were in the process of completing a postgraduate medical degree programme; of the remainder, about one-third were employed in government medical service and two-thirds were engaged in private practice. The SC, ST and VT doctors were disproportionately likely to be involved in government service – a more secure, but much less lucrative, position than is usually found in private practice. This appears to be attributable to a combination of lack of self-confidence, lack of capital and resources, aversion to risk – and in some cases a sense on the part of the SC, ST and VT doctors that they are likely to be more fairly treated in the public sector (whether or not they benefit directly from its employment reservations).

On the whole, the respondent doctors from the three most under-represented groups were doing quite well: about half of them were in private practice and half in government service, in almost all cases having attained a much higher level of earnings and overall socio-economic status than their parents – if less than their general-entry and OBC peers. It might be assumed that most SC, ST and VT doctors in private practice end up in remote rural areas or impoverished urban areas, serving a clientele consisting primarily of members of their own community. Among the questionnaire respondents, this was not at all the case. While the location and clientele of the SC, ST and VT doctors tended not to be as high-class as that of the general-entry and OBC doctors, and upper-caste patients do come less frequently to the former than to the latter, SC, ST and VT doctors typically serve a broad variety of communities and groups.

Patwardhan and Palshikar (1992) also arranged for personal interviews with 42 of the 100 respondents to their questionnaire, from which they were able to provide detailed accounts of the lifestyles and views of a reasonably representative sample of doctors from each of their five admissions categories. These interviews reinforced their conclusions that reserved-seat graduates – especially the SC, ST and VT doctors – have successfully achieved a significant upward movement on the socio-economic scale, and that virtually all reserved-seat graduates are unquestionably competent as doctors. Indeed, the study's authors sharply reject the widespread belief that the more disadvantaged of the reserved-seat students are unable to qualify as competent doctors and set up private practices. The interview evidence also shows clearly how high-SES family backgrounds provide critical benefits to most general-entry and some OBC students, in the form of capital, contacts and other kinds of support that facilitate advancement and success in one's professional career. On the other hand, there is evidence to suggest that the few most successful of the SC, ST and VT doctors – those who have completed postgraduate programmes in medical education and have attained highly prestigious positions, comparable to those of the top general-entry doctors – are likely to join the affluent professional elite and limit their contact and forego potential leadership of their own disadvantaged caste or tribal community.

Kirpal and Gupta (1999), in their study of reservation policies at the five main IITs, did not gather any evidence from graduates of those institutions. They did, however, ask current SC and ST students in their sample about their future plans and career goals. 60 per cent of their respondents indicated that they planned to

avail of reservations in the future, either in the context of admissions to postgraduate educational programmes or in applying for government employment (including jobs in public sector enterprises as well as administrative services).[20] In a rank ordering of career goals, the most commonly cited – each by about 20 per cent of the respondents – were employment in a public sector enterprise and in administrative service; roughly 15 per cent cited private sector jobs, 5 per cent setting up their own business, and about half the rest focused on the attainment of a higher degree (usually overseas). Kirpal and Gupta concluded from their overall survey of reservation policy beneficiaries: "it was obvious that reservations were helping the beneficiaries chiefly by improving their SES reflected in better financial conditions and better career options. But…it was equally obvious that internal growth in terms of self-confidence, acceptance, integration with mainstream students and the ability to stand on their own feet, was generally lacking" [Kirpal and Gupta 1999:156-57].

IV
Conclusion

Reservation policies at all levels of higher education both redistribute SC and ST students upward in the university quality hierarchy and attract into universities significant numbers of SC and ST students who would not otherwise pursue higher education. My very rough estimate is that reservation policies enabled about half of the 7,00,000 SC and ST students attending Indian universities in the late 1990s either to gain access to a relatively desirable institution or programme, rather than settle for a relatively mediocre one, or to enrol in a university at all, rather than abandon any possibility of pursuing higher education. The vast majority of SC and ST beneficiaries of reservation policies enter university programmes with poorer preparation and lower academic qualifications than their peers and, not surprisingly, they tend not to perform as well in their studies. There is evidence, however, that the entry-test-score gap between SC and ST and other students has been narrowing over the past few decades.

There can be little doubt that most of the SC and ST beneficiaries of India's reservation policies in university admissions do indeed come from a 'creamy layer' of the dalit and adivasi population; it could hardly be otherwise, given the immense obstacles faced by the poor in any effort to persist in school, through to higher education. There is also much evidence that beneficiaries tend to come disproportionately from the better off castes and tribes within the SC and ST categories. Thus, in their direct impact, reservation policies have increased inequalities within the SC and ST populations. However, available evidence also suggests that the average socio-economic status of SC and ST students is significantly below that of other students. Thus it is highly unlikely that reservation policies have benefited well-off dalits and adivasis at the expense of less-well-off university applicants from the rest of the population.

The average academic performance and graduation rates of SC and ST students is distinctly worse than that of other students. This is hardly surprising, in view of the weaker educational backgrounds of most SC and ST students as well as the variety of obstacles they face in pursuing a degree programme to completion. It appears, however, that the differential in graduation rates between SC and ST and other students is not so great in India's elite higher educational institutions. There is also some evidence from relatively selective institutions that graduation rates for SC and ST students have been improving over time, as their entering qualifications have risen and as the institutions themselves have found ways to improve the learning environment.

There have been very few studies attempting to trace the post-university careers of entering cohorts of students at Indian higher educational institutions. The few studies actually done suggest that SC and ST students who graduate from relatively elite institutions tend to end up in responsible and well-paying positions, typically attaining a much higher socio-economic status than their parents – albeit not as high as that of their non-SC and ST peers. The gap in performance between SC and ST and non-SC and ST students appears to be considerably less in post-university career achievements than in conventionally-measured academic performance in university studies. This suggests either: (1) that conventional within-university performance measures understate what these students are actually gaining from higher education or (2) that SC and ST students make further progress in catching up to their peers after university studies.

Some critics of positive discrimination policies have claimed that the beneficiaries perform so poorly in the programmes to which they gain preferential admission that they would actually have been better off without such preference. There have been no sophisticated studies of the way in which the career achievements of reservation policy beneficiaries compare with what might have been expected in the absence of such policies. However, the limited available evidence does suggest that SC and ST students are graduating at reasonable rates from the more elite higher educational institutions (even though their academic performance tends to be weaker than that of their peers), and that for the most part these graduates are going on to successful careers. This evidence, and the undeniable fact that a degree from an elite institution carries much greater promise of a good career than a degree from a run-of-the-mill school, suggest that it is highly unlikely that SC and ST students at the more elite schools would have been better off without access to reserved seats at such institutions.

The fact that reservation policies in admissions to higher educational institutions tend to benefit a creamy layer of SC and ST students is often taken by critics as prima facie evidence that these policies are failing to achieve their objective. Such an inference would be warranted, however, only if the primary objective of these policies were to improve the distribution of educational opportunities within the SC and ST communities. But reservation policies in higher educational institutions are obviously not the right way to promote such an objective; a much more promising way would be to expand SC and ST access to primary and secondary education and to improve the quality of the schools in which SC and ST students are most likely to enrol.

Positive discrimination policies in admissions to higher educational institutions should instead be understood as an effort to promote the integration of the upper strata of society – by increasing the access of members of highly disadvantaged and under-represented communities to elite occupations and decision-making positions.[21] Such integration of a society's elite promises a variety of benefits, including: greater legitimacy of the political system, better performance of jobs involving familiarity with and understanding of disadvantaged communities; more equal opportunity for ordinary members of SC and ST communities to resources and jobs; greater motivation of SC and ST youth to work to better their future prospects. From this perspective, what matters most in judging the success of reservation policies in higher educational admissions is whether the beneficiaries in

relatively elite institutions succeed in completing their degree programmes and advancing into successful careers. The very limited evidence available on this question suggests that most SC and ST students enrolled in elite higher educational institutions in India do indeed go on to successful careers – certainly much more so than they would have in the absence of reservation policies.[22]

The paucity of hard evidence on the post-university careers of reservation policy beneficiaries points to the great need for more research on this topic. What is needed are many more systematic empirical studies of the long-run consequences of reservation policies in higher education – of the kind carried out by Palshikar and Patwardhan (1992). One hopes that many more such studies will be undertaken in the future.[23] EPW

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Notes

[Most of the content of this article is drawn from my recently published book, *Affirmative Action in the United States and India: A Comparative Perspective*, Routledge, London, 2004, especially chapters 10 and 12.]

1 Most of the empirical evidence on the consequences of India's reservation policies that I present in this article involves only SC and ST students. To present and analyse such evidence in the case of OBCs would require a much more detailed state-by-state investigation, since the situation of OBCs varies widely across the different states of India.

2 Data on student enrolment are presented in the annual reports of the Ministry of Human Resources Development, Government of India, New Delhi.

3 According to official Census of India data, the SC and ST shares were 15.5 per cent and 7.8 per cent in 1981 and 16.5 per cent and 8.1 per cent in 1991.

4 It should be noted that data on SC and ST enrolments in Indian higher educational institutions are probably somewhat overstated, because some non-SC and ST applicants manage to claim SC and ST status and thereby gain admission via reserved seats to institutions for which they do not qualify as general entrants; see, for example, Velaskar (1986:600-01) and Patwardhan and Palshikar (1992:24).

5 Detailed data on the educational attainments of SC and ST members (as well as the rest of the population) have been gathered by the decennial Indian censuses since 1961, but the SC and ST data have been made available only for the 1961, 1971 and 1981 censuses. In the case of the 1961 census, data on graduates of higher educational institutions are available only for urban areas; I estimated the overall 1961 figures by multiplying the 1961 urban figures by the 1971 ratios of total to urban graduates.

6 Among the few exceptions to the rule of reserved SC and ST seats at centrally-controlled institutions are centres of 'postgraduate' (graduate-level) studies that have received special exemptions, such as the All-India Institute of Medical Sciences in New Delhi and the National Institute of Advanced Studies in Bangalore. The SC reserved seat percentage has been 15 per cent all along; the ST percentage was initially set at 5 per cent but then raised to 7.5 per cent in 1982.

7 In principle SC and ST (as well as OBC) applicants who score well enough to be admitted as general entry students are supposed to be included in that category rather than be counted toward the corresponding quota of reserved seats. In practice, however, such high-scoring applicants are often placed in seats reserved for their category of applicant. This means that overall enrolment figures on the number of SC, ST and OBC students

somewhat overstate the number of these students who actually owe their admission to reservations.

8 One should also note the role of educational institutions set up specifically to cater to SC and/or ST students – for example, colleges run by the People's Education Society, which was founded by B R Ambedkar in Maharashtra to promote the education of dalits. While such schools have certainly played a very positive role in increasing the quantity and quality of educational opportunities available to disadvantaged students in certain areas, the number of higher educational institutions of this kind is very small in the all-India context.

9 The five long-standing IITs are in Mumbai, Delhi, Kanpur, Kharagpur and Chennai. In the mid-1990s a new IIT was opened in Guwahati.

10 These ratios are based on admissions data compiled by Rao (2002:Table 2).

11 Rao (2002:56) discusses, as an instructive example, the case of the two major dalit castes in Andhra Pradesh – the Mala and the Madiga. The former are mainly agricultural labourers with a sense of superiority over the latter, who work with animal hides. The Mala have always had considerably greater access to schooling, and they now capture the lion's share of reserved seats in higher education, as compared to the Madiga.

12 This hypothesis was conveyed to the author by Velaskar in an e-mail message dated January 24, 2002.

13 The Vimukta tribe students in Patwardhan and Palshikar's sample tended to do better than SC and ST students in examination marks, but their drop-out rate was higher.

14 According to Kirpal and Gupta (1999), only 2,250 students (including less than 100 SC and ST students) are admitted annually from among roughly 80,000 applicants – an admissions ratio of 2.8 per cent.

15 Kirpal and Gupta's data show that, among the IITs, IIT-Kharagpur enrols a disproportionately high proportion of SC and ST students, and it also graduates a significantly higher proportion of them than do the other four main IITs. The overall figures cited in the text thus overstate the success of SC and ST students at the IITs in Mumbai, Delhi, Kanpur and Chennai – which are the most prestigious.

16 See Kumar (1997) for a very useful analysis of the role of the English language in Indian educational inequality.

17 These are the only such studies of which I am aware.

18 Wankhede notes that these neo-Buddhist students had to claim Hindu status in order to get access to government-funded special facilities (such as a hostel) designated for Hindu scheduled castes.

19 According to an e-mail communication from Velaskar to the author on January 24, 2002.

20 The fact that many beneficiaries of higher educational reservations among SC and ST graduates benefit from additional reservations in post-graduate studies, or in public employment, means that their career attainments may somewhat overstate the effects of their initial access to reservations. Even when this is the case, however, one must recognise that the ability of such SC and ST members to succeed in advanced studies, or in jobs in which they have benefited from reservations, may be due to the fact that they first gained access to higher educational institutions that provided them with the preparation and training they needed.

21 This understanding of the objective of positive discrimination policies has been most persuasively articulated by Elizabeth Anderson (2000, 2002).

22 This conclusion is supported by other scholars of reservation policies in India. Thus Galanter, author of the most comprehensive study of reservation policies in India from a legal perspective, wrote: "...compensatory discrimination has been a partial and costly success. Although few direct benefits have reached the vast mass of landless labourers in the villages, compensatory discrimination has undeniably succeeded in accelerating the growth of a middle class within these (SC and ST) groups – urban, educated, largely in government service. Members of these groups have been brought into central roles in the society to an extent unimaginable a few decades ago..." [Galanter 1984: 551]. Writing much more recently than Galanter, social scientists Mendelsohn and Vicziany concluded: "Important benefits have indeed been provided to many thousands of individual untouchables, and much unwarranted discrimination in public employment and higher educational institutions has been overcome. Moreover, the emergence of quite large numbers of accomplished and professionally experienced untouchables cannot be discounted as a leavening agent for the larger untouchable population" [Mendelsohn and Vicziany 1998:146].

23 Together with two social scientists at IIT-Mumbai, I tried in 2001 to initiate a systematic study of the career paths of SC, ST and (a control group of) other IIT graduates. Regrettably, our research proposal was ultimately not approved by the relevant authorities – most probably because of the political sensitivity of the topic.

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