Educating India's poorest: A radical plan to attract private sector investment

Sreedharan, Ranjan

Independent

15 September 2009

EDUCATING INDIA'S POOREST:
A RADICAL PLAN TO ATTRACT PRIVATE SECTOR INVESTMENT

By Ranjan Sreedharan

ABSTRACT

Despite its recent economic successes, India still has a vast underclass where children either do not go to school or, if they did, they are forced to drop out early. This paper outlines a new model to attract 'for profit' private sector investment into the education of India's poorest and most vulnerable children who, given current realities, are unlikely to make their way out of the poverty trap anytime soon.

The idea is radical but at its core the plan is simple: "Recognizing that the private sector can work wonders when there is a profit motive at work, this paper proposes that the Indian government should invite them to set up schools and colleges for the very poor, or arrange to take them into existing quality schools and colleges, with the incentive that as when these children grow up and start earning their livelihood, the income tax paid by them to the federal government over their life-time would go to the entity that nurtured and educated them."

The financial viability of the model under Indian conditions is considered in Appendix A. This section has been contributed by Sankar Krishnan, formerly a global partner with McKinsey and Company.

Appendix B considers how a workable model—with returns to investors captured from future income tax payments—can be devised to attract corporate investment in college education for poor but talented American students.

Key words: Education, Poverty, Private sector investment, Radical plan, Income tax
JEL Classification: H42, H52, I39, O15

1. Background

There is just no denying that despite India's recent economic achievements, large sections of its population continue to see little improvement in their day-to-day lives. What is worse, they also have very little hope for a better future. A telling statistic is the continuing and widespread prevalence of malnutrition among children in India. At more than 40% (and greater than in sub-Saharan Africa), it is the surest indicator of the blighted future that lies in wait for so many (see, for example, Sengupta, 2009). The problem is not just that so much poverty exists, but that given current realities, it is very likely to be handed down as a cruel legacy from poor parents to children who remain poor because they would lack the skills to pull themselves up; either they do not go to schools or they are forced to drop out early on.

In a paper dealing with education and poor households in India, Pradhan and Subramanian (1999, p.3) put this problem into perspective:

> Despite much [sic] initiatives through universalisation [sic] of primary education, the number of illiterate persons aged seven and above increased from 350 million in 1981

> to 371 million in 1991. According to the MIMAP survey (NCAER, 1998) for the year 1994-95, 49.3 per cent and 16.8 per cent in rural and urban areas, respectively are unable to read and write. One-third of the children aged 6-14 years were out of school. Some obvious explanation for poor enrolment rate and high dropout rate in the literature is attributed to poverty, and child labour supplementing family income is considered to be the cause for such maladies.

In the decade since, a lot of ground has been covered in cutting down on the percentage of children not attending school. The Annual Status of Education Report for 2009 brought out by the NGO Pratham[1] says that nationally, the proportion of 6-14 year-olds not-in school is now at 4%, and the proportion of 11-14 year girls not in-school is at 6.8%. However, whether this translates into meaningful improvements in learning remains a different matter altogether.

2. Why the Private Sector?

We know from experience there are limits to what the government can do. The Indian story, in common with many other countries, has been that government efforts have in-built elements of waste, graft and other leakages that compel the use of disproportionate resources to achieve even modest goals. In early 2008, the New York Times carried a grim story detailing how India's poor are being hard-done-by a woefully inept public education system:

> Sixty years after independence, with 40 percent of its population under 18, India is now confronting the perils of its failure to educate its citizens, notably the poor. More Indian children are in school than ever before, but the quality of public schools like this one has sunk to spectacularly low levels, as government schools have become reserves of children at the very bottom of India's social ladder (Sengupta, 2008).

Referring further to a survey conducted across 16,000 villages in 2007 by Pratham, the article goes on to serve this stark indictment:

> While many more children were sitting in class, vast numbers of them could not read, write or perform basic arithmetic, to say nothing of those who were not in school at all. Among children in fifth grade, 4 out of 10 could not read text at the second grade level, and 7 out of 10 could not subtract. The results reflected a slight improvement in reading from 2006 and a slight decline in arithmetic; together they underscored one of the most worrying gaps in India's prospects for continued growth (Sengupta, 2008).

To someone living in India and even cursorily aware of the wider realities, the findings reported above would come as no surprise. It is amply clear that after 60 years of trying, government efforts have made little headway. What is more, there seems little reason to hope that in the years ahead, anything by way of more of the same can lead to a better outcome. It also follows that for any meaningful change to take place, greater private sector investment and involvement to supplement (even substitute) the efforts of the government is a must.

This is not to suggest that the private sector is now uninvolved in this sector, or, that it is not doing good work already. Indeed, this is a misconception that Tooley (2000) takes pains to dispel: "A common assumption about the private sector in education is that it caters only for the élite, and that its promotion would only serve to exacerbate inequality. On the contrary, recent research points in the opposite direction. If we want to help some of the most

disadvantaged groups in society, then encouraging deeper private sector involvement is likely to be the best way forward."

However, much of the existing private sector effort in education for the poor acclaimed by Tooley is directed towards those who, whilst poor, can still afford to pay relatively small amounts towards fees. That leaves out in the cold sizable numbers where parents are too poor to even feed their children properly (let alone afford other basic necessities) and where children are often expected to work and contribute to the family income.

What can private enterprise and initiative do for them?

Essentially, this is a question that boils down to: How do you draw the interest of the private sector into ventures that offer no profits and therefore no motives other than charity? Without a clear-cut answer, this area will continue to be the preserve of NGOs and other institutions operating largely as charities. And since there are natural constraints to how much (and how fast) charity can be scaled up, such efforts, while commendable in themselves, are doomed to inadequacy in the face the mounting challenges.

3. A radical plan

Here, then, is a new idea. Recognizing that the private sector can work wonders when there is a profit motive at work, this paper proposes that the Indian government should invite them to set up schools and colleges for the very poor, or arrange to take them into existing quality schools and colleges, with the incentive that as when such children grow up and start earning their livelihood, the income tax paid by them to the federal government over their life-time would go to the entity that nurtured and educated them.

The basic idea—of enlisting the services of a more efficient private sector for an identified national cause, by offering them a share of the future gains that accrue from the venture—is actually not very new. For instance, the thought behind getting private entities to build roads (or other physical infrastructure) by allowing them to collect and keep the toll for a certain period is very similar. The difference now is about extending this concept towards building our human capital. True, it has never been tried before, but there are close parallels to suggest that given a try it can work very well.

Consider, for instance, the example of the petroleum industry. This field has for long been dominated by privately owned multi-national Oil companies who operate under the most strenuous conditions. To start with, petroleum exploration and production is necessarily a high risk business venture due to multiple uncertainties. The oil-rich countries often lack expertise to develop their reserves themselves and fall back on royalty or production-sharing agreements where the investment is brought in by these Oil companies in return for a share of revenues once production begins. And typically, the investments required are huge. According to the Organisation for the Petroleum Exporting Countries (OPEC) (n.d.):

> Oil exploration can cost tens or hundreds of billions of dollars. The actual costs depend on such factors as the location of possible oil reserves (i.e. on land or in deep water), how large the oil field is expected to be, how detailed the exploration information must be, and the type and structure of the rock below the ground. Exploration requires careful mapping of the surface in order to locate suitable sites (i.e. types of geological structures), deep formation surveys (e.g. with two and three-

dimensional seismic techniques), and test-drilling. It is not easy to determine a typical cost of such activities.

And then, it is not that after committing to such massive investments, there is any assurance about the returns. "How long does it take to discover oil and bring it to market?" OPEC is categorical that there is no standard answer to this question: that it can take "anywhere from 3 to 10 years" from exploration, discovery, testing and development to the delivery of oil from a new field; and that it depends on where the oil is and how difficult it is to discover and develop. An offshore oil field in deep water, for example, can take far longer to discover and test, due to the exacting technical requirements (OPEC, n.d.).

Coming to the point, an industry which is routinely up against a staggering array of technical, financial, and political challenges, and where returns get delayed as long as a decade, has today spawned some of the most successful and valuable companies in the world. And the story finds mention here because it offers a simple and straightforward moral hugely relevant to the core idea of this paper: Given the right incentives, trust the private sector to move mountains.

4. The plan in practice

Under this plan, the beneficiaries will bear no formal obligation whatsoever to their benefactors. They will not be made to sign bonds or do anything out of the way; in fact, they would not have any say in the matter. Instead, using available, modern-day information technology, the system would maintain a centralised database that would automatically (or with a minimum of bureaucratic intervention) pick up the future series of income tax payments from them, no matter where in India they happen to be, and match it to their benefactors. Indeed, once the government has put in place the necessary legal, administrative and information technology framework (including the criteria for eligibility), the system could work pretty much on auto-pilot. Further, with the Indian government already working on a UID project—every Indian citizen will shortly get a unique identification number—a major technical obstacle will also be overcome soon.

The single-minded focus on the future income tax payments of the beneficiaries has two key advantages. First, it can easily be tracked or monitored at a centralised level. Second, it provides a ready and quantifiable measure of the success attained by each individual beneficiary, allowing for proportionate reward to the investor/benefactor, and without leeway for subjectivity and controversy.

5. The minutiae of implementation

Yes, once it comes to implementation, there are daunting procedural, logistical and moral concerns that would have to be addressed. Questions to be grappled with would include the tricky, finer details like: Should it be the whole amount of the income tax paid or only a part? Should it really last for a lifetime or for a pre-determined period? How do we ensure that only the genuinely poor benefit? What are the potential loopholes that would allow the unscrupulous to subvert the system?

Here, then, is a sample list—by no means exhaustive—of questions that require clarity before any attempt at implementation:

- Should it be the whole amount of the income tax paid or only a part? (Perhaps there can be some gradation based on, say, how long the particular beneficiary was supported.)
- Should it be for the lifetime or for a shorter pre-defined period? (The lifetime payout goes a long way in making the idea a viable business proposition. Indeed, considering the risks, the delayed returns, and the gambler's instinct that drives so much of the investments into risky ventures, capping the upside potential may well deal a death blow to the plan.)
- How do you ensure that only the genuinely poor benefit? (Well, no real harm even if the slightly less poor were to benefit.)
- What about children who do so well that they get jobs abroad and do not pay any tax here? (Every system will have some loophole or the other. Maybe, over time, this can become an international agreement with, say, the U.S. or the European Union governments, agreeing to pass on some of the taxes earned from beneficiaries who immigrate to those countries. Should this happen, it would be a powerful, additional incentive in the system.)
- How about someone who becomes successful, yet evades taxes? (So long as the numbers remain small, the overall outcome should not be affected.)
- In practice, won't this model end up as an exercise in 'cream skimming', where children with intelligence and potential get cherry-picked while the majority are left out? (Even so, it would still amount to a worthwhile beginning.)
- What about the problem of convincing destitute parents to let go of their children when they can well contribute to the family income or help out with domestic chores to enable their mothers to work? (Here are two reasons why it may not be serious. To begin with, it is not unreasonable to assume that most parents can be educated about the long term benefits of putting their children through school, and beyond. Second, a family with many children [pretty much the norm among the poor] should have no problems conceding one of them to an initiative under this plan. All the same, it is quite likely that entities operating under the plan may have to offer some extra compensation to the parents to overcome their unease or even resistance. Also, the legal framework around this plan may have to consider some form of binding 'guardianship' rights for the investor/benefactor to ensure that parents don't withdraw their children midway through out of impatience or any other misgivings.)
- Considering the timeframes, isn't the narrow focus on income tax potentially a major risk? What if the government were to drastically reduce income tax rates or even dispense with it altogether? (To begin with, the income tax rates will not matter so much as the amounts that are actually collected, and there is no necessary correspondence between the two. What presents a greater risk is the tendency in India to keep on raising the threshold income level up to which no income tax is payable. However, so long as these revisions represent an adjustment for inflation, there is no real loss involved. As for the income tax being done away with entirely, the chances are remote; the only countries today that don't have any income tax are the tiny 'tax havens' or the oil-rich countries in the Middle-East.
- Can the unscrupulous possibly subvert the system in some way or other? (Certainly, there will be loopholes but as long as the gains run well ahead of the costs, there should be no cause for undue concern.)

- Isn't the government—whose duty it is to ensure universal education—abdicating its responsibilities? (Social and economic policies can be framed based on how things are [the reality] or how things should be [the ideal]. There should be no doubt which one works better.)

6. Accepting the core idea is the real challenge

Perhaps more than the procedural and logistical challenges, the critical concern or stumbling block would be reconciling to the idea of private players motivated not by charity or the goodness of their hearts, but by future profits. Yes, this idea is also about bringing in the element of windfall gains into the area of education for our poorest and most vulnerable. Much in the way that privately owned companies drill for oil and continue to drill even after some wells turn out to be dry, private entities would have a powerful incentive to look after and take care of some of our most disadvantaged children and their families and lead them out of the vicious circle of poverty. They would know that even if a small minority plucked from the poorest could be nurtured to join the ranks of our wealthy and successful, they would be looking at mega profits.

As for the beneficiaries, every child who emerges with some degree of success would have pulled one family out of this vicious circle of poverty begetting more poverty. For the government, the only sacrifice is the loss of that future income tax revenue that most certainly would not have accrued but for this plan.

However, acceptance of the profit motive in the area of education remains a touchy subject in India. After two decades of economic reforms, India still does not allow 'for profit' organisations to invest in education—despite thousands of its finest students flocking to the U.S. every year to study at some of the best colleges and universities of the world that also happen to be run for profit.

7. The viability aspect

Ultimately, an idea like this can take roots only if it appeals to those who are expected to step forward and invest their money. Sankar Krishnan is a management consultant based in Trivandrum (Kerala) who works extensively with the 'not for profit' and social sectors in India and abroad. He was also, formerly, a global partner with the consultancy firm McKinsey & Company.[2]

Sankar Krishnan considered the viability aspect of the model under Indian conditions in some detail and is convinced the plan is both workable and worth pursuing. His calculations looked at a private corporate entity in India putting up the money to set up 10 brand new schools dedicated to this purpose and weighed the likely returns. He believes that the project would break-even by about 16 years and that over a timeframe of four to five decades it could generate very good returns, with an IRR in excess of 15%. His conclusions are presented in greater detail in Appendix A.

8. Why the private sector should rise to the bait

Ideally, this plan should be of interest to those players with deep pockets to ride out the initial 10 to 15 years of wait because, as an investment proposition, it involves spending money for up to 15 years and thereafter earning an income (from the 'successful' beneficiaries) for as long as 30 to 35 years. A critical milestone to reach — for any endeavour under this plan— would be the point where the first payouts commence. From here on, with more and more beneficiaries cascading into the tax paying band each year, the venture would rapidly acquire the 'critical mass' necessary for sustainable or long-term financial stability.

Also, there should be no underestimating the powerful lure of the potential for windfall gains from the exceptionally successful beneficiaries. Even at relatively low rates of overall success, investors would likely continue to line up, pulled in by the example of those handfuls who have chanced to strike gold. As Levitt and Dubner (2006, p.79) point out, "[people] respond to incentives. So if the prize is big enough, they will form a line down the block, just hoping for a chance."

9. Gains for the government

The government is actually a major beneficiary because:

a) It does not sacrifice current income. The future revenue required to be passed on is in a sense notional because it would not have materialised but for this plan. Also, despite having to forego the income tax component, the government will earn substantially from the indirect taxes and all the other positive externalities contributed by the beneficiaries.

b) There is strong anecdotal evidence to suggest that people who pull themselves out of poverty through education tend to ensure that their children also get educated. The escape from the poverty-trap becomes permanent with educated parents and educated children all likely to lead lives far better than what was originally in store for them. Contrast this with the typical government scheme to reduce poverty where many (if not most) of the beneficiaries would likely revert to poverty the moment the scheme is discontinued.

c) In India, which has in place a well defined system of affirmative action for those at the bottom-end of the caste hierarchy, this plan (whose beneficiaries would inevitably be drawn largely from these sections) would result in an increased pool of qualified manpower to fill in such positions. Therefore, it can actually take the edge off the most common criticism against affirmative action, viz. that it ignores merit.

10. A compelling rationale

In a recent Op-ed column in the Washington Post, Epstein (2009) lays out an inspiring vision of a corporate sector willingly stepping forward to finance the college education for poor American students. He refers to work done by the Nobel Prize winning economist James Heckman suggesting that the potential return on investment in the education of young children can be as high as 17 percent compounded annually and explains, "[t]he return manifests itself in increased future earnings and reduced social costs. Today, that 17 percent compound annual growth rate is inaccessible to investors, but if people could issue shares of their future cash flow, it would unleash that potential, initiating a massive influx of investment in children."

However, as anyone going through the article would likely notice, even as the vision is inspiring, it falls short when it comes to defining a robust and workable method to realize the same. The author talks of tax credits when the fact remains that this is always an unwelcome prospect for a cash-strapped government. There is also talk of corporate investors being repaid out of the future income of the beneficiaries and this is potentially a logistical nightmare: How do you enforce compliance without getting caught up in a tangled web?

The model outlined in this paper addresses precisely these shortcomings, albeit in an Indian context. Further, in Appendix B of this paper, there is an outline of a plan to attract 'for profit' investment into financing college education for poor but talented American students built around this idea of returns to investors captured from future income tax payments.

11. Other areas where this plan may apply

Here are some examples that come to mind.

a) Adoption and foster care**:** A similar incentive can be offered to encourage the adoption of children from the foster-care system with the adoptive parents made eligible for some (or even the full) share of the future income tax paid by their adopted children. In the U.S. foster-care system, for instance, about 120,000 kids await adoption every year of whom only about 55,000 or so actually get adopted (U.S. Department of Health and Human Services, n.d.). Moreover, payments from the state to the foster-parents cease when the child attains majority at 18 years of age. As a result, it is estimated that nearly 50% of the children who 'age out' of the system become homeless (Wikepedia, n.d.). With an incentive linked to future income tax payments, adoptive parents would have a powerful reason to continue giving care and shelter (and even putting their foster-children through college), if only to better secure their own future prospects.

b) Making NGOs and Charities self-sustaining: A lot of good work in India in the area of education for the poor is being done even now by NGOs and charities despite their constrained finances. These institutions can eventually expect to become a self sustaining model. Initially, they would depend on donors as usual, but later on they would have access to a regular income independent of donations (i.e. the income tax payments of their beneficiaries).

c) Opening up access to élite schools: India has many high-quality, fee-paying private schools that are currently restricted to the élite. Under this plan, élite schools would be presented with a powerful incentive to award scholarships and take in a certain percentage of poor students. In fact, these schools would be at a distinct advantage because unlike other investors they can get started immediately, and without having to invest in additional infrastructure. Meanwhile, their operating expenses would increase only to the extent of the marginal cost.

d) Motivate teachers in government run schools: A watered-down version of this plan holding out the promise of an extra future income (tied to successful poor students passing out from the school) could be used to motivate 'apathetic' teachers in government run schools in remote and rural areas where poor students study in large numbers.

12. A word in passing

A referee who went through at an earlier draft of this article came back with an account of a disturbing incident: On a bitterly cold winter morning, he had come across a thinly clad boy

about five or six years old sifting through garbage piled on a street-corner. It was obvious that this was a rag-picker's child being given an early start in the family profession.

Well, this child, and all others like him are precisely the ones for whom this plan is meant. Indeed, this paper has in mind all those children in India today who seem destined to grow up and become not what their talent or ambition leads them to, but merely what their despair will allow them to.

13. Conclusion

Elaborating on how the cause of the poor is, in truth, best served by the private education sector, Tooley (2000) asserts:

> All this evidence suggests to me that the received wisdom about the role of the private sector in helping the disadvantaged is completely misguided. In developing countries, it is not the state that has the greatest potential to help the poor, but the private sector. Sure, the very poorest may need additional assistance to help them attend these schools, in terms of public or private vouchers (or both). But the state's major role should be to help ensure that the regulatory and investment climate is conducive to the development and nurturing of these schools. And if this is true for India, then it may also be true for the developed world too.

However, international experience with the voucher system that Tooley endorses has been decidedly mixed. While it succeeds very well in improving parental choice and encouraging competition between schools, it has also had an indifferent to negative impact on the very poorest students, precisely the category being targeted for improvement. (see, for example, Lee & Wong, 2002).

This is where the plan outlined in this paper holds particular promise. Even with a pinpoint focus on the very poorest, it pulls away decisively from the 'tried and failed' government-led model to one that would co-opt the energy and purpose of the private sector. It seeks to do this with a path-breaking incentive mechanism offering extraordinary rewards for extraordinary success, at next to no cost for the government. In contrast to the voucher system which is all about the government spending its money more effectively, this model is about the government not spending money, in order to let the private sector do all the spending—with likely far better results.

Arguably, if this plan can be made to work well, it is potentially a game-changing idea; one that can transform the lives and fortunes of those children in our midst today leading the bleakest, most hopeless lives.

Finally, even as this article focuses on India, this is a model with relevance beyond India. To begin with, there are the other similarly placed countries of which South Africa and Brazil come readily to mind. And then, there are those chronically underprivileged communities in the developed countries too, for example, the children of the Roma in Eastern Europe, or African-American kids in the depressed inner-city ghettos in the U.S.

References

Epstein, D. A., 2009. A Share in Children's Success. *The Washington Post*, [Online], 6 June. Available at: http://www.washingtonpost.com/wp-dyn/content/article/2009/06/05/AR2009060503025.html [Accessed 27 January 2010]

Lee, V. & Wong, E., 2002. Education Voucher System. Research and Library Services Division, Legislative Council Secretariat, Hong Kong. [Online], Available at: http://www.legco.gov.hk/yr01-02/english/sec/library/0102rp06e.pdf [Accessed 27 January, 2010]

Levitt, S.D. & Dubner, S. J., (2006) *Freakonomics*. 2nd ed. London: Penguin Books

Lewin, T., 2009. College Dropouts Cite Low Money and High Stress. *The New York Times* [Online], 9 December. Available at: http://www.nytimes.com/2009/12/10/education/10graduate.html?_r=1&scp=1&sq=College%20Dropouts%20Cite%20Low%20Money%20and%20High%20Stress&st=cse [Accessed 27 January, 2010]

Organisation for the Petroleum Exporting Countries (OPEC), n.d. Frequently asked questions about the petroleum industry. [Online] Available at: http://www.opec.org/library/FAQs/petrol.htm [Accessed 27 January 2010]

Pradhan, B.K., & Subramanian, A., 1999. Structural adjustment, education and poor households in India: Analysis of a sample survey. In: World Bank workshop on *Poverty Reduction and Social Progress: New Trends and Emerging Lessons; Regional dialogue and consultation on WDR2001 for South Asia*, Rajendrapur (Bangladesh), April 4-6, 1999. New Delhi: NCAER. Available at: http://siteresources.worldbank.org/INTPOVERTY/Resources/WDR/dhaka/pradhan.pdf [Accessed 27 January 2010]

Sengupta, S., 2008. Education Push Yields Little for India's Poor. *The New York Times*, [Online], 17 January. Available at: http://www.nytimes.com/2008/01/17/world/asia/17india.html [Accessed 27 January 2010]

Sengupta, S. 2009. As Indian Growth Soars, Child Hunger Persists. *The New York Times*, [Online], 12, March. Available at: http://www.nytimes.com/2009/03/13/world/asia/13malnutrition.html?_r=1&emc=eta1http:// [Accessed 27 January 2010]

Tooley, J., 2000. Private Education: The Poor's Best Chance. [Online] Available at: www.ccsindia.org/tooley.doc [Accessed 27 January 2010]

U.S. Department of Health and Human Services-Administration for Children and Families. Trends in Foster Care and Adoption—FY 2002-FY 2008. n.d. [Online] Available at: http://www.acf.hhs.gov/programs/cb/stats_research/afcars/trends.htm [Accessed 31 January 2010]

Wikipedia: Foster Care: Problems within the United States Foster Care System. n.d. [Online] Available at: http://en.wikipedia.org/wiki/Foster_care#United_States [Accessed 31 January 2010]

Appendix A: The viability aspect

Sankar Krishnan looked at the example of a private corporate entity in India putting up the money to set up 10 brand new schools dedicated to this purpose and considered what the likely returns would be. He believes that the project would break-even by about 16 years and that over a timeframe of four to five decades it could generate very good returns, with an IRR in excess of 15%.

He summarises his conclusions in these words:

> Overall, the concept can be economically self-sustainable, provided we take a longer term (~ 20 year) perspective. If we consider a network of schools, breakeven can be achieved by about the 15th year, and the rate of return can be attractive (IRR >15%) in a 40-50 year timeframe.
>
> Roughly, if,
> ▪ Cost per school per year ~ Rs. 22.5 million [approx. US$ 500,000]
> ▪ Number of schools/company ~ 10
> ▪ Students per school at steady state ~ 120/class (with 3 sections) *12classes ~ 1440
> ▪ Drop outs + non tax payers ~ 40% of the above
> ▪ Top decile of each class makes Rs.1million per year (at peak salary)
> ▪ First class to pass out from school is after 5 years (i.e. initially you have classes 1-8 and then keep promoting)
> ▪ First pay back after first class passes out ~ 5-6 years afterwards (to account for further studies etc.)
> ▪ Inflation is 6%, and cost of capital is 14% etc
>
> Then
> ▪ Breakeven is after 16 years
> ▪ Total value in today's terms is ~ Rs.1150 million
> ▪ Total payout in today's terms in first 16 years is ~Rs.5280 million
> ▪ IRR (rate of return) ~ 15.9%
>
> These returns can be improved if we assume a quicker first income (i.e. class that passes out earns and pays taxes earlier). Also, if we assume a better distribution of income, and, therefore taxes.
>
> Obviously, the conclusions are very heavily dependent on the assumptions. Critically, running costs need to be managed carefully (the results above assume a figure of about Rs. 22.5 million/year for a school of about 1500 students). Further, the drop out rate needs to be minimized and the school curriculum and pedagogy should be oriented towards ensuring the "employability" of the students. To make the venture sustainable, about 60% of each incoming class should graduate successfully. Finally, tax leakage needs to be minimized."

Note 1: While the example involves corporate investors, this plan would also have room for private entities operating on a lesser scale with far less investment. Perhaps, even an ordinary individual who volunteers to pay for and support an eligible child, should be able to register under this plan.

Note 2: The plan as considered above involves no sacrifice on the part of the government. However, should concerns about viability arise — in particular, to sustain such ventures in the first fifteen years or so before the payouts begin— it would still be sensible for the government to concede some financial incentives, say, in the form of tax credits. This would ensure that the efforts don't flag during the crucial take-off period. Possibly such 'explicit' incentives could be adjusted against the future income of the venture so as to make it 'revenue neutral' over the long term.

Appendix B: Attracting 'for-profit' private investment into the college education of poor American students

> While 2.8 million students enroll in some form of higher education each year, most do not proceed straight through to graduation. Only one in five of those who enroll in two-year institutions earn an associate degree within three years, and only two in five of those who start four-year colleges complete their degrees within six years.
>
> "The conventional wisdom is that students leave school because they aren't willing to work hard and aren't really interested in more education," said Jean Johnson, executive vice president of Public Agenda. "What we found was almost precisely the opposite. Most work and go to school at the same time, and most are not getting financial help from their families or the system itself."
>
> (Lewin, Tamar, "College Dropouts Cite Low Money and High Stress" in *The New York Times* [Online], 9 December, 2009)

To many young disadvantaged Americans, a college education represents the surest path to upward mobility in life. Yet, the fact is, college is often expensive and effectively out-of-reach of many deserving American students. To be fair, scholarships are available but the numbers are not sufficient to go around. Student loans are also available but this has had the unwelcome consequence of many young Americans beginning their working lives under the shadow of a crippling debt. Evening colleges are popular but their drop-out rates are much higher because of the difficulties students face in juggling between school and work (Lewin, 2009).

Based on the idea of returns to investors captured from future income tax payments, here is a blueprint of a plan to enable 'for profit' private investment in the college education of talented but disadvantaged American students.

At the outset, a word about the differences in the two contexts. For private 'for profit' investors putting money into educating India's poorest children, the timeframes and the risks involved are huge, with a gap of up to fifteen years or so before the payouts begin. Investors in America looking at paying for the college education of deprived but talented students do not run this kind of risk because they would step in only after the potential beneficiaries have revealed evidence of their talent and capabilities. Moreover, the duration of a typical college

degree programme—effectively, the period of wait before the returns come through—runs to only about four years. Consequently, there seems no real reason to go anywhere near to the extent of signing away their entire future income tax or even extending the payout to their lifetime contributions.

The two questions that now come up are how much and how far: What percentage of the beneficiary's income tax contributions is to be appropriated in favour of the investor and how long should such appropriations continue?

A useful model to consider is the production sharing agreements under which western oil companies operate in the oil exporting countries. The two relevant terms are 'cost oil' and 'profit oil'. Cost oil is defined as "a portion of produced oil that the operator applies on an annual basis to recover defined costs specified by a production sharing contract." Profit oil is "the amount of production, after deducting cost oil production allocated to costs and expenses, which will be divided between the participating parties and the host government under the production sharing contract." [3]

Proceeding on these lines, the simplest plan would have the government passing on the entire income tax proceeds in the initial years to the sponsoring corporate investor until its 'defined' costs are fully met. Afterwards, a minor share would be passed on for a limited and pre-defined period. (Having minimized the risks, the upside can be capped as well.)

The disadvantage here is that the government's income takes an extra hit in the early years, and this might make it a difficult proposition to sell. For this reason, it makes sense to rework the model by taking the stand that what the government passes on to investors can only be that portion of tax paid which can justifiably be attributed to their intervention. This would involve defining a particular minimum level of income tax—say the median income tax amount for individuals nationally—up to which no amounts will be passed on to the benefactor since no out-of-the-ordinary success is indicated. In other words, this defined 'minimum' would be the amount of income tax the government could reasonably have expected from the beneficiary even without a college degree. Tax proceeds over this defined minimum would be passed on in full measure to the benefactor, though how long this arrangement should hold would have to be decided by expert opinion drawing a line between the interests of the investors and that of the government.

At this point, the cost of the college education to the beneficiary would amount to almost nothing. This has the drawback that anything given away for free soon loses value in the hands of the recipient. To overcome this, and to ensure that beneficiaries remain committed and motivated, it would be reasonable to put in place a requirement for a certain minimum contribution (say, 25 percent) to the total cost to be compulsorily borne by the beneficiary. This minimum share can be in the form of a down payment or a loan (with iron-clad repayment obligations).

Lastly, what is outlined above is merely a draft, with intention to set the ball rolling. Once there is more thinking along these lines, more refined and detailed plans can surely be expected to emerge.

Endnotes

[1] Established in 1994, Pratham is now said to be the largest NGO in India working (according to its website) "to provide quality education to the underprivileged children of India". The highlights of the ASER report for 2009 can be accessed at:
http://www.asercentre.org/asersurvey/aser09/pdfdata/national%20highlights.pdf

[2] Sankar Krishnan is an ex-partner of McKinsey & Company, who led McKinsey's healthcare practice, initially in India from 2000 to 2004, and then in Greater China from 2004 to 2006. Sankar left McKinsey in July 2006, to set up as an independent consultant in the not-for-profit/ development sector in India. In 2001, he was selected by a leading Indian business magazine (Business Today) as one among the Top 25 leading young achievers in India. This report is available online at:
http://archives.digitaltoday.in/businesstoday/20020929/cover2.html

[3] Source: Schlumberger, n.d., Oilfield Glossary. [Online] Available at:
http://www.glossary.oilfield.slb.com/search.cfm [Accessed 27 January, 2010]