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Quadir Prize: Annual Global Contest to Strengthen Bangladesh

Universal literacy for Bangladesh: Bangladeshi Literacy

Bonds

By Ronald Jacob Horesh

Bangladesh has a large population, and huge potential. Its people are no less ingenious and imaginative than any others. But too many of Bangladesh's inhabitants suffer from poverty, hunger and short life expectancy. Many parts of Bangladesh are blighted by environmental squalor and many Bangladeshis live in perpetual fear of flooding.

There is no single answer to any of Bangladesh's problems. The World Bank says that Bangladesh's public sector institutions are weak, and that governance is poor.¹

Certainly they are overextended. At the Cairo International Population Conference in 1994 Bangladesh was one of more than 170 governments agreeing that men and women should have the right to decide freely on the number, spacing and timing of their children, and to have the information and means to do so.² Information, and *the access to that information*, are crucial. And the key to that and to so much else is literacy.

The key: literacy

Literacy in Bangladesh has increased markedly over recent years; but it is still low. As well, there is a marked gender disparity. According to a 2004 UNICEF estimate, adult literacy rates in Bangladesh are 50 per cent among men and 31 per cent among

¹ 'Among Bangladesh's most significant obstacles to growth are poor governance and weak public institutions', World Bank July 2005 Bangladesh Country Brief.

² Source: <http://www.un.org/ecosocdev/geninfo/population/icpd.htm>.

women.³ The definition of adult literacy rate here means the proportion of persons aged 15 and over who can read and write.

But Bangladesh has many other social and environmental problems. Why focus on literacy?

First of all, because raising literacy is a valuable end in itself: it brings about greater self-esteem and awareness. It enlarges our capacity to reflect. Second, because literacy is a means to those ends that will be chosen by literate people themselves. It greatly expands the range of choices that people themselves can make and enables them to pursue those choices. Whatever their goals, Bangladeshis will find literacy an invaluable asset. Literate people can participate more fully in community, national and international exchanges. Literacy opens doors to a whole wide world: from the rich written culture of Bangladesh to the instructions on how to operate electrical equipment. Most obviously, it makes communication easier, especially at a distance. But literacy also helps people think along lines that are essential for basic human development: sequentially and logically. It allows people to read for entertainment as well as education and information, including—critically—information about family planning techniques. All this may seem obvious to ourselves as readers, but it should not be taken for granted. In a recent book Lawrence Harrison observes that gigantic investments in education, and especially in female literacy, lay the groundwork for transformative takeoffs for decades to come.⁴

³ Source: UNICEF

http://www.unicef.org/infobycountry/bangladesh_bangladesh_statistics.html.

⁴ *The Central Liberal Truth: How Politics Can Change a Culture and Save It from Itself*, Lawrence Harrison, Oxford University Press (US), May 2006.

Currently there are 20 000 non-governmental organisations operating in Bangladesh. Most of them, I am certain, do very worthwhile work. But I am not convinced that all their objectives and those of Bangladesh as a whole coincide. One significant example: in rural areas of the country there are few primary schools. While many of the non-governmental organisations concentrate on teaching girls Bengali and English, some of the boys are educated unofficially in Islamic schools, and taught Arabic and Urdu, which is the language of Pakistan. Ending such teaching is surely unnecessary. But what *is* necessary, for the interests of Bangladesh as a society, is to ensure that boys and girls equally attain near universal literacy in Bengali as well as some basic competence in English. That goal would generate all sorts of benefits not just for the boys and girls, but for the country of Bangladesh. It would help strengthen the country and unify its people.

I emphasise the goal, because this essay will propose a way of subordinating activities, and institutions, projects and funding, to it. This essay is not going to suggest ways in which the literacy goal can be achieved. It is not even going to suggest who should achieve it. Indeed, it recognises that no single agency, government or otherwise, can ever have all the answers. Effective literacy education is a complex and ever-changing affair. What works for one village might not work in another. What works one year might not work the next. So what is needed is a range of diverse and adaptive solutions; the sort of solutions that no single institution, however well-intentioned and well-resourced, finds possible to implement effectively. Now there already plenty of diversity amongst the non-governmental organisations and that would be a good thing if they were all aiming for the goal of universal literacy in Bengali. But they are not.

So we need to subordinate the goals of government bodies, and the goals of the multitude of non-governmental organisations operating in Bangladesh to our overarching targeted outcome: universal literacy, to be broadly defined as literacy in Bengali (calit bhāsā); along with some basic English to open the door to the wider world of global learning.

Typically, there is more consensus over the goal of universal literacy than the ways of achieving it. We can safely assume that, as a long-term goal, the Government of Bangladesh, non-governmental organisations, philanthropists and charities from around the world, do want to see higher literacy rates in that country. They are able and willing to contribute resources in furtherance of that goal, but they have sufficient humility to know that they do not have the expertise required to achieve it cost-effectively. They are though, rightly, convinced that their objective is the one that most of all serves the interests of the Bangladeshi women and men themselves, but also the wider, long-term interests of the entire region.

So there is broad agreement on the objective, and sufficient resources for it. Even so, there may be some opposition. So what we also need is a way of increasing literacy that can help to overcome the uncooperative or obstructive behaviour of people who may try to oppose it. Perhaps they feel threatened, or are just apprehensive about anything that smacks of change or modernity. We need a way that can support those people in positions of power who want to help, and at the same time reassure, bring onside, bypass or, if necessary, deter, those opposed to Bangladesh's literacy goal.

Ideally too, we would use market forces. Markets are the most efficient means yet discovered of allocating society's scarce resources. Many, however, believe that market forces inevitably accentuate extremes of wealth and poverty, or accelerate the degradation of the environment. There is some truth in this, but there is no inevitability about it. It is largely historical accident that market forces serve public goals only as a by-product of their achievement of private goals. Similarly, there is no necessity for non-profit bodies, including government agencies, to eschew the market's efficiencies, though that is what, by and large, they do. So it is important to be aware that market forces can serve public, as well as private, goals. The rest of this essay will describe a way of channelling the market's incentives and efficiencies into the achievement of universal literacy in Bangladesh.

Bangladeshi Literacy Bonds

Bangladeshi Literacy Bonds would be a new financial instrument, designed to channel the market's efficiencies and incentives into the achievement of universal literacy in Bangladesh.⁵

How would they work?

In brief; the Bangladeshi Government, in concert with aid agencies and other bodies would raise funds that would be put into an escrow account at a trusted financial institution. They would then issue bonds on the open market that would become

⁵ Bangladeshi Literacy Bonds are a particular application of the Social Policy Bond concept: see Annex.

redeemable for a fixed sum, only when literacy in Bangladesh reached an agreed targeted, higher, level. In this way there would be no need for the bond issuers to make assumptions as to *how* to bring about greater literacy.

Normal bonds are redeemable at a fixed date, for a fixed sum, and so yield a fixed rate of interest. Bangladeshi Literacy Bonds would not bear interest and their redemption date would be uncertain. Bondholders would gain most by ensuring that the targeted literacy rates are achieved quickly. They would target the literacy levels of all Bangladeshi children in Bengali and basic English. Bangladeshi Literacy Bonds would be redeemed *only when their literacy in Bengali and English had reached specified target levels.*

Once issued, Bangladeshi Literacy Bonds would be freely tradable on the open market. Owning such bonds, whose value would rise when the literacy goal became closer, would give bondholders an incentive to try to achieve that goal. They would have every motivation to choose and invent ways of achieving universal literacy that are cost-effective and efficient. Bangladeshi Literacy Bonds would have the effect of contracting out the achievement of the literacy goal to the private sector. Importantly, though, the backers of the bonds, whether they be public or private sector or some combination of both, would continue to set these objectives and to be the ultimate source of finance for their achievement.

The bonds would inextricably link rewards not to carrying out activities, but to achieving the goal of universal literacy in Bangladesh.

The rest of this essay looks in more detail at the Bangladeshi Literacy Bond concept.

Who would back the bonds and what would be their goal?

The issuers and backers of Bangladeshi Literacy Bonds could be government bodies, non-governmental organisations, charities or philanthropic organisations. They would collectively decide on the exact specification of their literacy objective and contribute toward the funds that would be paid out once that objective had been achieved. They could deposit these funds into an escrow account, and seek contributions from ordinary people all over the world to boost the available payout.

I believe that these broad guidelines for the target should be followed:

- Literacy should be in Bengali (calit bhāsā), with some basic English as well;
- Targeted literacy rates should be close to 100 per cent and equal for girls and boys;
- Literacy rates should be measured for girls and boys at age 11.

The objective of universal literacy, as targeted by Bangladeshi Literacy Bonds could be defined so that all of these goals will have to be met before the bonds can be redeemed. Refinements to this objective could be made, in consultation with development and educational professionals. For instance, it might be preferable, in

their view, to incorporate some measure of numeracy, or some rate of adult literacy into the targeted objective, to give a couple of examples.

Of course, it would be unsatisfactory to redeem such bonds as soon as the targeted universal literacy objective, however specified, had been achieved. The objective would be *sustained* universal literacy, and that is what must be achieved before the bonds can be redeemed.

Operation

Bangladeshi Literacy Bonds would be issued by open tender, as at an auction; those who bid the highest price for the limited number of bonds would be successful in buying them. Each bond would become redeemable for, say, \$1 million once the targeted level literacy, as certified by reliable and accurate measurements made by independent bodies, had been achieved and sustained. Assume that such bonds have been issued, and that they each sell for just \$100 000. People or institutions now hold an asset that can give them a return of 900 per cent once the targeted literacy level has been achieved. It is this prospect of capital gain that gives bondholders a strong interest in raising literacy rates in Bangladesh, as cost-effectively as possible.

Say that bonds are issued that would be redeemed only when the literacy of 11-year old girls and boys in Bangladesh reached very high levels. Success in achieving this objective could be measured by standardised tests of representative but random samples involving hundreds of Bangladeshi girls and boys. Once floated, the bonds could be bought by anyone and would be freely tradeable.

The operation of such a 'secondary market' is critical to the way the bonds work. Many bond purchasers will want, or need, to sell their bonds before redemption—which may be a long time in the future. With a secondary market, these holders will be able to realise any capital appreciation experienced by their holdings of Bangladeshi Policy Bonds, whenever they choose to do so. Tradability would make the bonds a more attractive investment in the first place.

As the bonds are traded, they would tend to flow towards those who are most able to help raise Bangladeshi literacy. In fact, though, it is not necessary for there to be any actual flow of bonds. Large bondholders might simply decide to subcontract out the required work to many different agents, while they themselves hold the bonds from issue to redemption. The important point is that the bond mechanism ensures that the people who allocate the finance have an incentive to do so efficiently and to reward successful outcomes, rather than merely to pay people for undertaking an activity.

Who would buy bonds?

Some organisations already working to raise literacy in Bangladesh might be tempted to invest in Bangladeshi Literacy Bonds. They would benefit from the rising value of their bonds as their efforts to raise literacy succeed. But each organisation's overall impact might be too small to affect the market price of the bonds.

Too large a number of small bondholders could do little to bring about increases in literacy. So if there were many such small holders, it is likely that the value of their

bonds would fall until there were aggregation of holdings by people or institutions large enough to initiate or finance effective literacy-raising projects. As has happened with share privatisation issues, the bonds would mainly end up in the hands of large holders - probably specialised financial institutions.

What would bondholders do?

Large bondholders could actively undertake literacy-raising projects, or they could function as brokers, allocating funds to literacy-raising programmes or bodies. They would do so quite differently from current institutions, because they have powerful incentives to make sure the funds are allocated cost-effectively. The bondholding bodies would gain most when universal literacy is achieved as quickly as possible.

Even then, each such body might not be big enough, on its own, to achieve much without the cooperation of other bondholders. But they will have a strong incentive to cooperate with each other, and to do so as cost-effectively as possible. If they did not, the market value of their bonds would fall. Their common interest in seeing literacy in Bangladesh raised quickly means that they would share information, trade bonds with each other and collaborate on literacy-raising projects. They would also set up payment systems to ensure that people, bondholders or not, would have an incentive to perform efficiently. Large bondholders, cooperating with each other, would be able to set up such systems cost-effectively. Bondholders could lobby the government to, say, give a higher priority to the literacy of schoolgirls, or they could develop literacy-teaching projects of their own. They might finance literacy programmes for TV, or set up village schools, or give prizes to the families of the most literate girls and boys in

every village. It would be up to bondholders to decide on those programmes that would generate the highest increase in Bangladeshi literacy per unit outlay.

Regardless of who actually owns the bonds, aggregation of holdings and the mutual co-operation of large bondholders would ensure that those who help achieve targeted goals are rewarded in ways that maximise the increase in Bangladeshi literacy per unit outlay.

If at any time others thought that they could do a better job than the current bondholders they would bid more for the bonds than they are worth to the current holders and accumulate them.

What will determine the price of the bonds?

The market prices of the bonds, and their changes over time, would supply helpful information as to how fast the objective is being achieved. These prices would be publicly quoted, just like those of ordinary bonds or shares. What determines their value?

Most obviously, the market's assessment of how close the literacy targets are to being achieved. The bonds would sell for small fractions of their issue price if people thought there were virtually no chance of literacy reaching the targeted level in their lifetime. People's views will change as events occur that make achievement of higher literacy a more or less remote prospect. But the bonds, once issued, would be transferable at any time. Bondholders, having done their bit to increase literacy, would

see the value of their bonds rise as the literacy target became closer. They could sell their bonds, realising the capital gain arising from the higher market price of their bonds.

Issuers can put a cap on their maximum liability by limiting the number of bonds issued. Or they could add to the number of bonds in circulation after floating, at any time, if they wanted to boost the efforts going into achieving the targeted literacy objective.

Advantages

Coherent objective

Why issue Bangladeshi Literacy Bonds rather than just continue on the present course? Perhaps the most important reason is that the Bangladeshi government and the thousands of non-governmental organisations operating in Bangladesh have different and, sometimes, diverging objectives. There is a genuine need to bring some coherence to the goals of existing and would-be literacy-raising bodies in Bangladesh. These goals should be congruent with the needs of Bangladesh as a nation. The priorities of individual bodies should be subordinated to those needs. A Bangladeshi Literacy Bond regime, with its laser-sharp focus on what must surely be Bangladesh's most urgent social problem, illiteracy, would minimise conflict between the goals of all the organisations working in the country, and channel energies into the single, unifying goal of universal literacy.

Efficiency

Bangladeshi Literacy Bonds would be more efficient than conventional means of raising literacy in Bangladesh. Their efficiency advantages arise from several sources.

First, the Bangladeshi Literacy Bond approach would encourage diverse, adaptive literacy-raising initiatives. There are many ways of trying to raise literacy but we cannot know in advance which is the most cost-effective for any particular time or place. With technological changes occurring so rapidly and a wide range of pedagogical approaches to literacy teaching, a bond regime, because it would not prescribe methods but only the goal, would encourage focused experimentation and innovation.

Of course, the Bangladeshi Governments and the numerous non-governmental organisations are already carrying out literacy-enhancing activities. But there is a crucial difference: under a Bangladeshi Literacy Bond regime the bondholders' self-interest would give them an incentive to seek out those ways of achieving the targeted level of literacy that would give them the best return on their outlay. Their outlay, of course, is the outlay of the bonds' backers. And only when the targeted literacy level is achieved would they actually pay for it. Until then, their funds earn interest in an escrow account and it is bondholders who have to finance the initiatives that they think will achieve higher literacy. So it is bondholders who bear any risk of failure or undershooting the literacy target. In effect, the issuers would be contracting out the achievement of higher literacy to the bondholders. But it is the issuers who would set

the desired literacy outcome, and, by undertaking to redeem the bonds, be the ultimate source of finance for that achievement.

A second source of efficiency is the enlarged and more motivated pool of people working to raise Bangladeshi literacy. Bangladeshi Literacy Bonds would give efficient literacy-raisers the chance of large financial gain. This would both increase the number of people working in the literacy-raising area, and motivate them to work more effectively.

Another source of efficiency arises from the information a Bangladeshi Literacy Bond regime would convey through the market price of the bonds. To see this consider how much the bonds' backers would have to spend on the literacy objective. Their maximum outlay would equal the total number of bonds multiplied by their redemption value, minus any revenues gained on floating the bonds. But while the issuers would have to decide on the maximum cost of achieving the objective, they wouldn't have to calculate the actual cost with any accuracy - that would be done by bidders for the bonds in the open market.

For example: if one thousand bonds, each redeemable for \$1000, were issued, this would mean the maximum cost to the issuers of achieving some targeted objective would be capped at \$1 million (which assumes a negligible initial market value). If, when they were first marketed, the bonds fetched just \$100 each, the actual cost to the issuers of achieving the literacy goal would (ignoring administrative costs and interest payments on the funds in escrow) equal one thousand times the difference between \$1000 and \$100, which is \$900 000. This is how much would-be investors think it

will cost to achieve the targeted objective, and it amounts to \$900 per bond. But suppose the issuers were totally in the dark about how much it will cost to achieve universal literacy in Bangladesh, and instead of issuing 1000 Bangladeshi Literacy Bonds they issued 10 000, each redeemable, again, for \$1000. They would then be liable for a maximum cost of \$10 million rather than \$1 million. But would-be purchasers, competing in the market for the bonds would still reckon that they could achieve the targeted objective for \$900 000. Divided amongst 10 000 bonds, this implies a value of just \$90 per bond and that is what they will bid.

The crucial point is that it is not necessary for the bond issuers to estimate how much the targeted increase in Bangladeshi literacy will cost to achieve. Instead, potential investors in the competitive market for the bonds would do this, and they have every incentive to minimise this cost. They would do this when they bid for the bonds at issue and at all times subsequently.

These facts, and bondholders' incentive to minimise their costs, contrast with the current system, in which the costs of social goals like higher literacy, if they are estimated at all, are not widely known, nor subject to competitive bidding on a continuous basis.

If, once the bonds are issued, progress is too slow, the bonds' backers can issue more at any time. They could do this by asking members of the public all over the world to contribute to the goal by making deposits into the escrow account, so swelling its value. Interestingly (and unusually for a financial instrument), this would tend to raise

the value of the previously issued bonds, by providing further impetus to moves to achieve the literacy goals quickly.

In sum, then, under a Bangladeshi Literacy Bond regime competitive bidding would work to minimise the cost to the bonds' backers of achieving the goal of universal literacy in Bangladesh. The implication of this goes beyond reducing the costs to the backers: it will make contributions more forthcoming. People will be more willing to make donations when they know they will not be wasted.

Stable goals

Universal literacy in Bangladesh could take years to achieve. Under a Bangladeshi Literacy Bond regime bondholders would be free to choose how to achieve the targeted objective. This is important, because new technology or pedagogic techniques will most probably become available during the lifetime of the bond issue. Indeed, the potential rewards to bondholders could stimulate the rapid development of such literacy-boosting systems or methods. So it is important that the bonds target literacy itself, not any of the assumed ways of achieving it: the goal is more stable than these ways.

As well, and at least as important, policy priorities change and it is possible that any political commitment to universal literacy could waver. A Bangladeshi Literacy Bond regime however would to a large degree be insulated from such uncertainty. The stability of the targeted outcome means that potential investors in the bonds would

hardly be deterred from taking measures to achieve it by fears of a reversal of government policy—or, indeed, a change of government.

Transparency

Another significant advantage of Bangladeshi Literacy Bonds is their transparency. The bonds would make clear to everybody exactly what are the objectives of those governments, non-governmental organisations, philanthropists and charities that back the bonds. The objective of a Bangladeshi Literacy Bond issue is just that: to increase literacy in Bangladesh: there is no hidden agenda. Whatever the feelings of some people in positions of authority, they would be unlikely openly to oppose the goal of universal literacy for Bangladeshi children.

Other advantages

Further advantages of a Bangladeshi Literacy Bond regime are:

- Funds for increasing literacy could bypass corrupt or inefficient people in position of authority or, by appealing to their financial self-interest, could effectively modify their behaviour in favour of achieving literacy targets.
- The bonds' backers would incur significant expenditure only when definite outcomes had actually been achieved. In the meantime their funds would be earning interest. This means that the risks of failure are borne by bondholders, not those who contribute financially to the universal literacy

goal. This is important, because it enhances the attraction of making a contribution (or commitment to contribute) in the first place; as well, it is especially significant if some portion the funds come from taxpayers, either in Bangladesh or elsewhere.

- A less obvious benefit of a Bangladeshi Literacy Bond regime would arise from the existence of a means of acquiring wealth whereby private gain would be strongly and inextricably correlated with public benefit. Some bondholders, whether institutions or individuals, would start out rich, and if their bonds rose in value they would become richer. But working successfully to achieve such a desired social goal as universal literacy in Bangladesh would most likely be seen as a laudable way of acquiring wealth. There are intangible benefits from having people or institutions grow rich in this way. There are many disaffected people who, in some cases no doubt justifiably, view with suspicion or alarm the very high incomes or profits of corporations engaged in activities of little obvious net social or environmental benefit. They are also unconvinced that ‘trickle-down’ occurs to any meaningful degree. Wealth, in these people’s eyes, is the result of exploitation. Bangladeshi Literacy Bonds would shift this worldview and, by helping people take a more positive view of the act of earning an income and accumulating wealth, could make for a more cohesive society.

Practical aspects

Defining the redemption terms

The Bangladeshi Literacy Bonds' redemption terms must be carefully defined. So as to reduce to a minimum the scope for manipulation it's important, for instance, that the reading tests used to measure literacy and hence monitor progress toward the goal of universal literacy, be undertaken by an impartial body. Furthermore, the sample of Bangladeshi schoolchildren whose reading is to be tested should not be known in advance. Statistical protocols and procedures should, in other words, be robust.

Nor should bondholders be tempted to lobby in favour of easier reading tests. Again, judicious specification of the targeted objective could forestall the problem: the bonds could stipulate the exact reading tests to be used, or that the tests would have to be certified as appropriate by a specified panel of impartial literacy experts.

The Free Rider question

Could 'free riders' undermine the workings of the Bangladeshi Literacy Bond mechanism? If purchasers of a significant number of the bonds hold them with no intention of doing anything to help raise literacy that could undermine the potential of a bond regime.

There are, though, grounds to believe that free riding would not be a serious problem, mainly because it is unlikely much free riding would occur, and partly because even if it did occur, it would not impede the operation of the bond mechanism. Free-riding would be a self-cancelling activity: if most of the bonds were held by would-be free

riders, then little would be done to help achieve the targeted objective. As the objective becomes more remote, the value of the bonds would fall. And as the bonds lose value, they would make a more attractive purchase for people who would be prepared to help bring about universal literacy. So free-riders would be tempted to sell, even at a loss, to active investors, rather than see the value of their bonds continue to fall. Or they could be tempted to become active themselves, and work towards raising literacy in Bangladesh. There are other reasons why passive bondholding would be unattractive to potential free riders:

- Individual free riders would have no incentive to collude with other free riders, because the more they did so, the more remote the targeted objective would become, and the further would the value of their bonds fall. This would act so as to limit any free riding activity to small 'players'.
- As with other financial instruments, small players would have to pay higher transaction costs than the bigger institutions – the ones that can initiate objective-achieving projects.
- Small players also would not have access to the research that would enable big players to value the bonds accurately. Therefore they would be at a disadvantage in the market.

Note also that even if free riders were to gain from holding Bangladeshi Literacy Bonds, they would be doing so only because their bonds rise in value when the

targeted objective becomes closer to being achieved. Attempted free riding would have positive effects: it would add liquidity to the Bangladeshi Literacy Bond market.

Existing institutions and the transition to Bangladeshi Literacy Bond regime

Few bodies aiming to raise literacy in Bangladesh are currently paid in ways that correlate directly with their performance. Nevertheless these bodies are the main repositories of expertise, and some of them are certainly efficient, or capable of becoming efficient at achieving the targeted literacy goal. It would be unwise as well as unfair and unnecessary to divert their funding at short notice into funds allocated to redeem Bangladeshi Literacy Bonds. The answer, if we are talking about reallocating existing funding, rather than proposing a completely new source of finance, could be a gradual transition to an outcome-based funding system, as against the current system of institution- or activity- based funding. This would mean that funds currently spent on institutions and activities instead be used to back Bangladeshi Literacy Bonds. So while the funding of institutions and activities per se would gradually decline, there would be a corresponding increase in funds allocated via Bangladeshi Literacy Bonds to the outcome of universal literacy.

For example, the Bangladeshi Government and existing aid donors could reduce their funding of bodies currently operating literacy programmes by 3 per cent a year, in real terms. It could allocate the saved funding to the future redemption of the Bangladeshi Literacy Bonds it has issued. After five years, each body would be receiving directly from central government only 85 per cent of what it formerly received. But holders of Bangladeshi Literacy Bonds will choose to supplement the income of the more

efficient of these bodies. They might judge some of them to be especially effective at converting the funds they receive into increased Bangladeshi literacy. It could be that the most effective literacy-raising bodies, in terms of achievement per unit outlay, are working in especially deprived areas of the country, where small outlays would probably bring about larger increases in literacy. Or bondholders might judge that a particular educational research body is worthy of additional funding, because they judge its research most likely to yield effective and efficient literacy-raising initiatives. In such cases, bondholders would supplement existing sources of funds. It might well be that these favoured bodies end up receiving considerably more than 100 per cent of their former income, throughout the lifetime of a bond regime.

It is also likely that investors in Bangladeshi Literacy Bonds look for completely new ways of achieving universal literacy; ways that currently receive no, or very little, funding. For example, they might be convinced that one of the best ways of achieving society's long-term literacy objectives is to increase women's access to family planning supplies. Following this logic, they might find that one of the most efficient ways of doing this is to support non-governmental organisations that already have this objective.

Could bonds targeting universal literacy in Bangladesh be compatible with a gradual transition whereby funding to existing government-funded institutions reduces by 3 per cent annually? At first sight there is an apparent mismatch between small reductions in funding through the current system, and the large sums that would be needed to motivate potential investors in bonds that target the fairly remote objective of universal literacy. The critical point though is that bondholders will be investing

not on the basis of the annual funding of existing bodies, but on the basis of the redemption value of all the bonds issued. To be more precise, it will be this total redemption value, minus the bonds' existing market value, that will drive bondholders' investment decisions. This sum could be many times each year's incremental reduction in current institution-based spending. One of the virtues of a Bangladeshi Literacy Bond regime is that even in the short term bondholders would begin to invest in projects with a long-range objective, on the expectation of capital gains that might arise only in the distant future.

Interaction with existing programmes and projects

Note that, while changes in the source of funds would be gradual, those already funding, or working for, the many literacy-raising bodies in Bangladesh might well react by quickly reviewing how all their existing programmes and projects operate. If bondholders see existing programmes as being particularly effective in achieving targeted outcomes they would be inclined to invest in them. On the one hand, the switch in funding would tell existing institutions that they could expect to see their relatively ineffective operations receive diminishing funds in the future. On the other hand, their effective operations could look forward to higher—possibly much higher—funding. Even a gradual transition, involving 3 per cent annual cuts in funds allocated to existing institutions, that was balanced by equivalent increases in funding via Bangladeshi Literacy Bonds could bring about a rapid change in the way all existing bodies conduct all their programmes. They might have to devote some of their resources into persuading bondholders of the cost-effectiveness of their activities; but this would not represent a radical difference from the way these bodies

lobby for funding nowadays. Under a bond regime, though, they would do their lobbying on a more transparent, outcome-oriented, basis.

What would happen once universal literacy has been achieved?

Assume that Bangladeshi Literacy Bonds had been issued, that universal literacy had been achieved, and that we were approaching the end of the three-year period after which the bonds could be redeemed. What would the bonds' issuers be doing?

Towards the end of the three-year period the bonds issuers could float a new set of Bangladeshi Literacy Bonds aimed at maintaining the universal literacy outcome or at further improvements.

Such improvements could take the form of raising the targeted literacy rate closer to 100 per cent, or increasing the difficulty of targeted levels of proficiency in Bangladeshi or English.

Sustaining the outcome beyond the period specified in the original bond issue would most probably be cheaper than achieving it, while further improvements targeted by a second bond issue are likely to cost less, in terms of benefit per unit outlay, than those achieved by the first issue. There are two linked reasons for this:

1. Bondholders may have invested in literacy-raising systems or capital assets that cost less, per unit benefit, to keep running than they did to set up. For example, the initial training of literacy teachers would

generate literacy-raising benefits beyond the initial three-year period, as would the setting up of production and broadcasting facilities for tv programmes.

2. Bondholders, in a similar fashion, would have learned from their experience of achieving the objective targeted by the first bond issue. They would have looked for, and experimented with, different methods of solving the targeted problem, and be able to choose the most efficient ones for subsequent bond issues.

A new policy instrument

Resources are always going to be limited and Bangladeshi Literacy Bonds will not change that fact. Priorities and choices will always have to be made. Whoever backs and issues Bangladeshi Literacy Bonds will still decide on the exact literacy targets, and on the sums allocated to their achievement. In economic theory, and on all the evidence, markets are the best way of allocating scarce resources to achieve prescribed ends. Bangladeshi Literacy Bonds would allow both the bonds' backers (be they public or private sector) and markets to do what each does best: respectively: prescribing and raising the finance needed to achieve these ends; and allocating resources to meet these ends efficiently.

By injecting market incentives into the attainment of universal literacy, a Bangladeshi Literacy Bond regime would be more effective than conventional ways of bringing

about a more educated population and, ultimately, a population with a higher stake in a stable and prosperous future.

Funding outcomes rather than activities or institutions would encourage diverse, adaptive and untried solutions to Bangladesh's literacy and perhaps also to that country's other social and environmental problems. Bangladesh faces pressure on many fronts. It's not always obvious what are the best means of tackling these problems. But there is a high degree of consensus over what is needed. Successful deployment of Bangladeshi Literacy Bonds could have immensely valuable implications for the achievement of Bangladesh's other social and environmental goals.

Annex: a note on Social Policy Bonds

Bangladeshi Literacy Bonds are a particular application of the Social Policy Bond concept.

In 1991 the Social Policy Bond idea won an award for the Best Political Social Invention from the UK Institute of Social Inventions; now the [Global Ideas Bank](#). In early 1997 I received [a letter from Robert Shiller](#), Professor of Economics at Yale University, praising the Social Policy Bond idea, saying that it creates ‘a large interest group for the solution of important problems. The political and other effects of creating such an interest group could be incalculable.’ Professor Shiller later mentioned the concept in his book [The New Economic Order](#).

In 1999 an essay on Social Policy Bonds was one of the three finalists at the inaugural \$25 000 St Andrews Prize given by Conoco and St Andrews University, UK. I have given presentations on Social Policy Bonds at other fora, including the University of Cambridge, the Institute of Economic Affairs (London), and the Institute of Public Affairs (Melbourne). I have also discussed it with the New Zealand Prime Minister’s Chief Policy Advisor.

In April 2002, I presented a paper on the Social Policy Bond concept to a joint meeting of the Agriculture and Environment Committees at the Organisation for Economic Cooperation and Development (OECD) in Paris.

I maintain two websites on Social Policy Bonds:

- <http://socialgoals.com>, which describes the concept and various other applications in detail; and
- <http://socialgoals.com/blog/blog.html>, which is a blog site on Social Policy Bonds and outcome-based policy.

Over the years quite a few private individuals have talked with me about issuing their own Social Policy Bonds, for projects as diverse as boosting voter registration, raising literacy in developing countries, reducing homelessness and developing open-source software. However, as far as I am aware no bonds based on the Social Policy Bond idea have yet been issued.

Ronald Jacob Horesh, February 2007

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