Harnessing Faith: A Productive Approach to Development Action and Policy

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Research that connects religion with low demand for public schooling, credit or other "modern" services usually attributes fault to the consumer's faith, not to the service of interest. Accordingly, supposing that the service is inherently good, the argument is made that the object of policy should be the recalcitrant parent or borrower, because there cannot be anything wrong with the (unmarketable) service. This kind of reasoning, more or less sidestepping the idea of consumer rationality and sovereignty, emanates to a considerable extent from adoption of imprecise concepts, absence of robust causal theory, and overreliance on data that are too inappropriate or insufficient to provide useful insight on religionservice interactions. Providing clearer insights are empirical instances demonstrating that religion does not act as a barrier to modernization. One such experience is an education experiment in Chad that originated from an understanding of religion's causal function in schooling. Implemented by the Swiss Development Cooperation agency, the project, ascribing fault to the school rather than faith, tested the hypothesis that schools emphasizing improvement in religious knowledge and practice could elicit positive responses from rural parents. In the event, demand for schooling girls and boys exploded. Outcomes of the experiment suggest at least two things. One is that religion has power to both block and facilitate progress through its influence on consumer demand. There is much to gain from harnessing this power by adapting the product to the consumer rather than the reverse. This applies as readily to financial services as it does to education. The second thing is that more thoughtful, not more research is required to improve understanding of relationships between religion and modern services and the policy recommendations that flow from this understanding.

INTRODUCTION

Economists and other social scientists have thought for a long time about the role of non-market interactions in shaping issues of theoretical and policy interest, such as connections between religion and economic growth. However, empirical analyses that can clearly inform theory and policy have not accompanied this interest. Manski (2000) suggests two constraints that impede empirical work. One is reliance on imprecise concepts to depict social interaction. Common practice tries to infer interactions from observations of outcomes, e.g., income associated statistically with religion. However, it is hard to make such inferences because, in addition to absence of robust causal theory to explain associations, observed outcomes can stem from many different interaction processes, most of which may be beyond the reach of available data sets.

This scarcity of appropriate data, stemming from and contributing to conceptual imprecision, is the second constraint. Especially sparse, according to Woolcock (1998), is information about specific kinds of relationships, and about how they interact with institutional and other

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factors to affect outcomes in different milieus. Among other things, these constraints have helped to sustain a variety of speculative notions that permeate research and policy talk. Noteworthy among them is the notion that religion influences economic performance. This can happen, for instance, through degree of tolerance for interest-bearing accounts and loans, which can raise or lower capital accumulation and investment. Likewise, receptiveness of a religion to education can influence the speed of human capital formation.

Focusing on the link between religion and education, we describe processes and outcomes of a policy experiment in Chad that the Swiss Development Cooperation agency (SDC) initiated in 1994. Set within a broader effort to assist nomadic communities in improving their condition, the aim of the project was to work with parents, all Muslim, in using extant religious and some other educational forms as foundations to grow sustainable methods of schooling children; i.e., of "modernizing" their education. Outcomes of the experiment through 2004 were positive, indeed, they were extraordinary relative to prior efforts.

Results further challenge the persistent view that adherence to Islam exerts some kind of restraining influence on education in general, or in specific reference to girls. Evidence produced by the experiment suggests, rather, that schooling - i.e., the secular, state-sanctioned model of the Western tradition that most countries have adopted - is what exerts a negative influence on education. People need not feel that they must sacrifice faith to educate children. Public schooling systems can choose to sacrifice secularity and other alien norms and, in so doing, harness the power of parents' religion to school those same children.

In sequence, the paper proceeds with a brief review of the literature on interactions between religion and development, and also between education and development. Underscored here is that theories and premises concerning causal relationships among these things are supported by highly ambiguous evidence. Turning to connections between religion and education, the historical record, empirical, reveals clearer interactions. To replicate itself, religion causes education, and has done so for several millennia. The "modern" school evolved from demand for religious knowledge in most places.

Presented next is the thinking and historical forces that led the SDC to engage the nomad community schooling experiment, respectively consumer rationality and product failure. Following this, providing a bit of the empirical evidence that Manski and Woolcock suggest is lacking, is an account of some of the interaction processes involved in design and implementation of the project, and outcomes. Concluding, the paper suggests that the habit of ascribing fault to religion contributes to intellectual stagnation and antiquated policy. Analyses and policy prescriptions in education are little different today than they were two or more centuries ago. Needed to rectify this circumstance is more thoughtful research and policy action. Discussing implications, the paper's final section suggests that the need for a new framework is no less compelling for Islamic finance than it is for education.

1. RELIGION AND DEVELOPMENT

Attempts to show causal connection between faith and development usually rely on a twostep effects mechanism. The first step links a number of institutional characteristics to growth. The second connects specific attitudes or actions associated with these characteristics to religion (Heath et al., 1995). Important among growth-enhancing institutions are strong legal enforcement and honest practice (Barro, 2003; La Porta et al., 1998; Rodrik, 1999) and protection of property rights (Acemoglu et al., 2001; Besley, 1995; Hall and Jones, 1999; Knack and Keefer, 1995). Also significant is absence of usury laws and the like (e.g., Ekelund et al., 1989; Villegas, 1989).

Associations between religion and attitudes or actions that shape these institutions are varied. Guiso, Sapienza and Zingales (2003), for instance, suggest that religious Protestants and Catholics have higher levels of trust in other people and in government. They are also less likely to break laws and more likely to believe that market outcomes are fair. Accordingly, religious Christians are good for growth because their attitudes support growth. In contrast, Muslims are not as helpful because they do not share comparable outlooks. Like claims include Treisman's (2000) finding that Protestantism is associated with reduced corruption, La Porta et al's (1998) assertion that countries with more Catholics and Muslims have less property rights protection and greater corruption, and North and Gwin's (2004) conclusion that Protestantism and Hinduism are more favorable to rule of law and honesty relative to Orthodox Christianity.

Claims like these are speculative, for several reasons. In addition to Mangeloja's (c. 2004) notation that there are too many institutional differences across countries and too few degrees of freedom to identify specific effects of religion, one is aggregation. Broad categories of religion contained in most data sets, such as Protestant, Catholic and Muslim assume homogeneity where there is none. Variance within categories, as highlighted by Steensland et al. (2000), is often greater than differences between them. Islam, for instance, is a completely decentralized faith that subsumes different major denominations (i.e., Sunni, Shi'a, Sufi), subdenominational groupings (e.g., Jafari, Ismailiyah, Zaiddiyah, Alawi and Alevi for Shi'a; Sufri, Azraqi, Ibadi for Kharijite), schools of thought (i.e., Hanafi, Hanbali, Maliki, and Shafi'I for Sharia) and philosophical orientation (i.e., Asharite, Jabriyya, Maturidi, Murjite, Mu'tazili and Qadariyya for Kalam). There are the various affiliates too, such as the Nation of Islam, Lahore Ahmadiyya, Nation of Gods and Earths, Submitters, Zikri, Wahhabi, Salafi, and Liberals. Even within one of these groupings, there is often wide variation in interpretation of the Koran, Haddith and other sacred texts, between one neighborhood or village and the next, due to differences in underlying ethnicities or cultures, local religious leaders who have received different training, or other factors. With such variance, explanatory power of the word "Muslim" is unlikely to be strong, or at least no more so than, say, "Non-Christian."

Another reason is unclear specification of causal mechanism. It is congenial to assume that an attitude might beget an economic effect. But how does that happen? How does trust in other people and in government, or belief that market outcomes are fair, shape institutional characteristics presumed to influence an economy? Although Steensland et al. imply plausible instrumentality through differences in voting preferences, studies on religion and economy rarely incorporate instrumental dimensions. They retain "black box" approaches common in institutions research. Causal relationships, as a result, are uncertain. Combined with analytical challenges of aggregation, this leaves open the possibility, noted by Acemoglu et al. (2001) and Jones (1988), that religion and economy are jointly determined, and endogenous.

2. EDUCATION AND DEVELOPMENT

One area of inquiry that some observers believe might help to better connect religion with development is education or, more precisely, human capital. The effects mechanism here is that increased productive knowledge acquired through education influences economic

growth. If religion affects quantity and/or quality of human capital accumulation, then it also influences development. Daun (2000) implies this in his assertion that Islam weakens schooling in Africa. Odaga and Heneveld (1995) contend, similarly, that local religions, subsumed under the heading of cultural pressures, undermine schooling of girls.

An association between human capital and material welfare is nearly indisputable. But uncertainties remain about direction of causation, the relative importance of different methods of accumulating human capital (e.g., formal schooling, informal learning, on-the-job training, medical care, nutrition, improvements in working conditions, etc.), and the universality of each component's influence (e.g., Does formal schooling affect development in the same way everywhere?).

With respect to formal schooling - i.e., curricula of national or sub-national education systems derived from the Western (and now mainly secular) public school tradition that emerged in the process of industrialization - there is often passionate belief that this one form of education provides much more than an incremental addition to human capital. As calculated by one or another combination of adult literacy rates, enrollment rates and average years of schooling of working-age people, it is frequently "the" measure of human capital. This premise is evident in litanies of untoward consequences imagined to result from deficiencies in the volume, quality and incidence of schooling. In a World Bank report on Africa (i.e., White et al., 2001), for example, the first of several such consequences is poverty, because schooling provides access to employment and enhances productivity in informal and agricultural work. A second consequence is poor health, because maternal schooling reduces infant illness and death. A third is weak governance, because schooling enhances possibilities for effective political participation. A final consequence is slavery, because school-free slaves may be ignorant of their legal position and unable to seek alternative employment. Similarly, Appiah and McMahon (2002) suggest that schooling has positive effects on infant mortality, longevity, democratization, civic institutions, political stability and investment. Artadi and Sala-i-Martin (2003) add that if places such as Africa had exhibited enrollment rates at rich-country levels over the years, per capita income today might be two and a half times bigger. That is, enrollment deficiencies impede growth. Fix them, including those that emanate from religion, and development will surely follow.

There is considerable skepticism about such claims, especially for Africa. Econometric analyses often fail to show evidence of tangible benefit to the individual and/or to the larger society. Some researchers attribute these failures to inadequate data, particularly data on school quality (e.g., Michaelowa, 2000; Wößmann, 2003). Others focus on disconnects between characteristics of schooling and their economic milieus. Among them, Pritchett (2001) suggests that individual returns to schooling are low or negative because quality is so poor that several years of school attendance create no human capital. Jolliffe (2002) points out that schooling shows relatively little impact on economic growth because the benefits of this kind of learning accrue mainly in urban wage employment, which in poorest countries is less than 5 percent of total employment. Looking at self-employment, Gurgand (1997) finds little return to schooling. Like Jolliffe, he suggests that failure to find positive connection to economic growth or to aggregate product stems mainly from sensitivity of returns to the environment (Gurgand, 2000a, 2000b). Freeman and Lindauer (1999) agree. They argue that there is nothing wrong with quantity or quality of school. The problem is limited demand for the kinds of additions to knowledge that it supplies.

In other words, it is not obvious that causal direction necessarily runs from schooling to growth. It may flow the other way or, maybe, they are both fashioned by other things, including other components of human capital. Accordingly, if schooling has less influence on development in places such as Africa, then it follows that evidence concerning religion's positive or negative influence on this form of education transmits little information.

This is a big "if." States of knowledge concerning associations between education and development, like those between religion and development, are laden with heroic speculation. Limitations include aggregation (again), as when analysis relies on national aggregate data to link national schooling rates with national income indicators. There is the matter of imposed homogeneity, as when a year of schooling in Zambia is equivalent to a year in Congo or France, or a year in rural areas is equivalent to a year in capital cities. Then there is the problem of measuring income, at the national level where these are often uninformed guesses, and at the individual level where surveys often ask rural producers with recall abilities shorter than a month or week how much they earned the previous year. That is to say, even if knowledge of relationships between education and development is better than understanding of relationships between religion and development, it is not much better.

3. RELIGION AND EDUCATION

This does not mean that understanding of links between religion and education is weak. It is not weak. Known with certainty is that the today's Western-derived public school is the outcome of two distinct educational threads that reach back to around 3500 BCE. One is response to demand for public sector workers. Examples include the Sumerian "tablet house" to train scribes for administrative functions (Kramer, 1963); Egyptian government schools to prepare courtiers in speech, proper conduct, moral values, psychology and hieroglyph literacy (Crenshaw, 1985); and Scottish grammar schools made compulsory in 1496 for eldest sons and heirs of barons and freeholders destined to administer the legal system (Brown et al, 2007). These were for the elite, however. Even if not, demand for graduates by government, just about the only entity requiring them, was usually narrow

The second thread is response to demand for religious knowledge and access to sacred writings, initially by religious institutions for training clergy, as in the Sumerian priesthood, and later by clergy for educating adherents. High priests Joshua ben Perahia in 130 BCE and Joshua ben Gamla in 63 or 65 CE are reported to have ordered that schools be provided in every village in order to remediate ignorance and limited knowledge of Judaic law stemming from reliance on home schooling (Kaplan, 2007; Klausner, 1950; Lemaire, 2004).

Martin Luther, shocked at the quality of Christian knowledge and teaching in early modernizing Europe, pressed for compulsory schooling so that all parishioners might be literate and then read the Bible themselves; an action that Strasbourg legislated in 1598. He also prepared a still popular Small Catechism for ordinary people to read, and a Large Catechism to help pastors teach essential elements of the Christian creed

Soon after, in 1616, the Scottish Privy Council adopted the School Establishment Act mandating creation of parishioner-funded, Church-supervised schools in every parish. The purpose was to foster and promote Protestantism, assure that everyone be educated in civility, godliness, knowledge and learning, and obliterate the Gaelic language because it was a cause of barbarity and incivility (Society for Bettering the Condition of the Poor, 1809).

And in the Americas, Reverend John Cotton, a teacher at the First Church of Boston and an influential leader of the Massachusetts colony, preached loudly that knowledge of Scripture was essential for life and salvation (Eberling, 1999). Laws passed under his insistence in 1642 and 1647, which framed ignorance of Scripture as a satanic illness requiring treatment through education of the young, required all towns to establish schools— male graduates of which would prepare for the ministry at Harvard. This was serious. Authorities imposed fines on parents who did not enroll children and took upon themselves the power to transfer children to others if parents did not educate them properly (Rothbard, 1975). Of course, with weak enforcement and limited market demand for literate labor, it would not be until the end of the 19th century before most kids attended class, which by then looked much more like Sumerian scribe than religious schools. In the intervening period, religion-centered schooling was about the only form that ordinary people might be willing to countenance for their children, and the only means to acquire literacy.

What seems rarer than it should be in research and policy talk about religion, education and development is acknowledgement that parts of Africa, maybe the whole of it, hold economic and social conditions of the 3rd millennium BCE that exist side by side with those of the 3rd millennium CE. Under contrails of gleaming airplanes, nomadic peoples follow tracks pioneered by ancestors hundreds, thousands of years before. The education system that helps to produce safe passage in the sky cannot be the same as that which helps to assure survival on the ground.

In this sense, the challenge of education may have less to do with deficiencies in literacy and enrollment rates, or quality, or number of years of attendance in public schools of the 3rd millennium CE. It may have more to do with engaging processes to "grow" educational products that make sense to communities living in environments that are 1000, 2000, 3000 or more years away, and who may want to reach forward in time.

Whether this is possible to do quickly is uncertain. Certain is that Africa, and perhaps other regions, continues to offer opportunities for experiment. The seed in this instance, as it was in Sumer, Biblical Israel, Reformation Europe and Puritan America, is religion. A person might not really want to bother with religious study, but there is nothing inherently wrong with it if the religion in question is familiar and reflects community preferences. If such study requires learning more along the way, reading for instance, maybe writing, then that is also not too objectionable.

Africa holds several global and many local religions to act as prospective seed. One that stands out in large swathes of the continent, because it already calls on parents to provide children a minimum of knowledge and, importantly, has an attendant body of sacred writings, is (mainly Sufi) Islam. At the same time, though this is changing in wealthier parts of the Muslim world, Islamic instruction has yet to develop something resembling a social institution with discernible sets of organizations, practices and clearly circumscribed areas of knowledge (Cheddadi, 1994).

In practice, as Retamal and Devadoss (1998) observe, Islamic education in buildings, sheds, under trees or in fields and dunes of rural areas typically limits itself to rudimentary learning of the Koran, maybe some lines from the Haddith, reading, writing, morality and prayer performance. Instruction comes from relatively knowledgeable elder members of a family or community, or from itinerant teachers sustained with alms, all with widely varying knowledge of the subject matters and of pedagogical methods. Quality of instruction can be very high sometimes, as in Medersas (i.e., Islamic colleges combining primary and secondary

instruction) that cater mostly to children of urban elites. Usually, quality is low, with outcomes limited to memorization of some key prayers and Koranic snippets and vague familiarity with Arabic script. Landscapes confronting ben Perahia, ben Gamla, Luther, Cotton and other activists were likely similar to this. Scope for improvement cannot be any less today than before.

Small projects by governments, donor agencies and non-governmental organizations have tried and continue to try to upgrade Koranic schools through teacher training and addition of national language, math, history and geography to the curriculum. The hope is that these schools come to resemble public schools providing what governments view as "basic" education. But the prognosis for these schools after external support ends is uncertain, largely because it is unclear whether parents and project sponsors put the same value on curricular additions. Parents usually see benefit in improving quality of religious education, but projects do not focus on that.

By ignoring religion, these kinds of projects preclude the possibility of harnessing demand for religious knowledge as a basis for planting and then growing a basic education system such as that which produced the public school in the West. This preemption seems unfortunate. An experiment with this kind of process in northern Chad among Arab, Kanembu, Gorane, Zaghawa and other nomadic peoples reputed to be the hardest to reach because of their mobility, suggests that when parent and community preferences shape the course of change, such an evolution is feasible and sustainable.

4. THE NOMAD COMMUNITY SCHOOLING EXPERIMENT

The experiment, which started in 1994, emerged from juxtaposition of an economics way of seeing things with urgent practical necessity. The vision part was a perspective that views parental decision making about the Western-derived public school through the lens of subjective expected utility theory. Decisions derive from relationships between expected benefits, tangible and intangible, and expected costs. In this context, a parent in rural Africa would assess several considerations at the same time. Main ones likely would turn on acquisition of marketable output, loss of labor and productive knowledge, weakening of intergenerational and other transfer systems, emotional injury, and social consequences (i.e., response of others in a community).

In this perspective, predicting a parent's decision in the specific circumstances of nomadic lives scattered across the savannah and desert of Africa requires a lot of information. A parent has that information. An outsider does not. It is therefore a bit presumptuous for outsiders to judge the quality of parental analysis and decisions about schooling. More modest might be to recognize that if parents reject schooling completely or in part, then in their eyes benefits do not look big enough to offset the costs of producing them. The product, not the parent, may be at fault. Also modest would be acknowledgment that changing the relationship between benefits and costs might be easier to accomplish if parents with the information play important, perhaps leading roles in improving education for their children.

This, of course, is hypothetical. The hypothesis, now turning to the necessity part, subjected itself to empirical testing after a string of disappointments with educational reforms that did not incorporate parental perspectives and preferences. The government launched the first of these soon after independence in 1960. At that time, the overall enrollment rate in primary schools surpassed 50% in large towns, but averaged less than 20% in the countryside

(Mbaïosso, 1990). In northern, mainly Islamic zones populated by different nomadic populations, the rate ranged from 3% to 8% across different prefectures.

To narrow the gaps, educators and officials concluded that schools needed to offer rural parents a strong incentive to enroll children, at least as strong as the system seemed to offer their urban counterparts. Authorities believed that what needed doing was introduction of agriculture, crafts and other content that seemed "practical" in rural settings. Their effort, part of a "ruralization" movement that covered much of West Africa, began in 1965 with directives to rural school officials that they take action to adapt instruction to local milieus. The directive stimulated several ventures, the most notable of which was a project organized by the Groupe de Recherche Pedagogique (GRP), a French government agency.

Establishing the first of what would later become a set of "pilot" (or demonstration) schools, the GRP used "study of the milieu" by children as the way to link the school to its surroundings. The focus, however, was on improving the teaching of arithmetic and French reading, writing, and speaking. In the event, the school proved more effective than regular schools in transmitting numeracy, literacy and oral communication skills.

This success looked like failure because the focus on basic learning sacrificed effort to prepare students to pass the examination to the secondary level. Only a small number got through, and because the content of secondary school was a direct extension of the regular primary curriculum, which they did not experience, these few students could not advance to higher grades. The GRP had ignored the vital importance attached to the link between primary and secondary education. To many or most parents with kids enrolled, primary schooling was a shot, in most cases a very long shot, at escaping total dependence on the rural economy, ideally by reaching secondary and beyond, and the benefits attendant thereto. Public schooling, though literacy might be handy here and there, served no other useful purpose.

The GRP venture ended in 1972. The next year, with technical and financial support of the Swiss Development Cooperation agency (SDC), the government created 20 pilot schools, eventually growing to 31. Their objective was to continue the search for ways to link education with its milieu while also, recognizing that the milieu contained secondary facilities, assuring students the same chance to reach this level as those in regular schools.

An evaluation in 1993, done by the SDC to learn what its twenty years of support to pilot schools had achieved, supplied dismaying results.⁵ Among other things, it found that no schools had experimented with new curricula and methods, in large measure because assuring that students would have the same chance to pass to the secondary level as those in regular schools gave instructors good reason to avoid experimentation. Thus, except for having more resources at their disposal thanks to SDC support and some incorporation of practical activities, pilot schools after nearly two decades were essentially the same as regular schools.

The evaluation concluded that without significant re-conceptualization of what schools were and could be in the circumstances of Chad, schooling would remain poorly matched to economic, social and cultural milieus, and would continue to challenge rather than invite rural parents to enroll children. The evaluation then argued that impediments preventing pilot schools, indeed, all schools from reaching their objectives stemmed largely from the government's failure to continue a reform process it launched in 1975, after reflection on the GRP adventure. At that time, the government announced a new reform that would advance

upward from the ground, starting with discussions between educators and parents to betterdefine the meaning of "practical" and of "adaptation" to milieus, and that implementation instructions would follow. ⁶

Instructions never came, for several reasons. In addition to eruption of civil war in 1979-1982, dampening public sector activity, one of the most important was appearance on the education scene of foreign donors, notably the World Bank, UNESCO and the Bureau d'Appui Pedagogique (BAP), France's education assistance agency. Accompanying them was the notion that education and (Western-style, secular) schooling were synonyms – i.e., an unschooled child was an uneducated child – and that what needed doing was improvement in quality of teaching and learning, and berating parents for not enrolling children. Implicit in this last was the premise that the school product was inherently good, and that the parental consumer who refused the product must be defective in some way. That is, the idea of reform drowned in a sea of other, competing educational priorities and perspectives. Pursuit of prewar directions soon stopped.

SDC evaluators thought this unfortunate because conversations with parents on one hand, and with school directors, teachers, and foreign technical assistants on the other revealed wide gaps in meanings attached to terms such as "practical" or "adapted." For most educators and experts, practical meant knowledge directly pertinent to vocational pursuits, and adaptation meant a focus on teaching things readily applicable to rural milieus. The pilot school, in principle if not in practice, was the model of what a rural Chadian school should be.

Parents with children in schools took a different view. When evaluators asked them whether practical works were truly practical for children, the dominant feeling everywhere was that the activities were not useful – mainly because it was impossible for younger children to learn more from school than from working side by side with parents. Schooling could provide much of value, but mostly at the secondary, not the primary level. At that level, the only thing that might have some utility now and then was French literacy.

Evaluators then asked other parents why they did not enroll children. The majority in northern communities responded that there was only limited gain to French literacy. At the same time, social costs were high because schools had yet to adapt themselves to the Islamic and pastoral attributes of the region. Schools might call themselves "secular," but this term had no meaning. Such facilities, if not overtly Christian or pagan, were in any event divorced from the milieu. The risk was high that graduates would display disrespect toward faith and family. It made as much sense to send children to this type of school, one parent opined, as it would for most in France and the United States to enroll them in a Muslim, Buddhist or other completely alien facility. Almost all parents added that incorporation of religious instruction would remove a big obstacle to enrollment of both boys and girls.

Although some schools taught Arabic as a second language, the basic curriculum was French only. Other than in ethnic Arab communities, neither was mother tongue in the region. However, Arabic did have economic value as the common language of trade, and ability to read (rather than just recite) extracts from the Koran in the traditional manner, and thereby access the Prophet's words directly, had enormous value. Accordingly, parents argued that in addition to incorporation of religious instruction, a primary curriculum in Arabic, addition of more qualified Arabic-speaking and bilingual teachers (especially women to teach girls), improvement in quality of instruction and like initiatives would likely stimulate demand for schooling. ⁷

The vital aspect emerged in a series of discussions with nomad tribal leaders. The issue, they said, was not whether schools should have one set of characteristics or another. The main issue was that nomads and others did not have the power to determine these characteristics for themselves. They wanted their people to be more educated and literate. But they also insisted that this education be supplied on their terms using as teachers people drawn from their communities that respected their way of life and that did not alienate children from their parents.

Whether this education required their people to become sedentary, as the government and donor agencies seemed to assume, or be done while they were still nomadic, was a question that warranted study. The decision, however, was ultimately theirs to make and negotiate. The problem, as these leaders saw it, was that no one ever asked them questions about schooling or offered to help them with the matter. They were politically marginal, and were unable after many tries to elicit attention or support from authorities.

Indeed, though expressed with less eloquence, the issue of parental and community influence on schooling and education policy surfaced in every evaluation discussion. When parents proposed first aid or other curricular preferences, for example, evaluators asked why they did not present this interest to the school director, or to higher authority. They replied, first, that they did not know that alternative subjects were permissible. Second, they did not realize they could play a role in the curriculum. They were surprised to learn that decrees, circulars, and other policy documents put in place in 1975-79, still in effect, gave them this right.

Out of these various discussions, it seemed clear to evaluators that parents, whether or not they were literate and whether or not they sent children to school, had a good understanding of the advantages and disadvantages offered by the public system, and of many of the things needed to improve it. It also seemed evident, as it may have been to those who drafted policies before the war, that prospects for resumption of the reform process, to a considerable extent, depended on the speed by which parents lost their impotence.

5. PROJECT DESIGN AND IMPACT

The evaluation recommended that the SDC widen the scope of its educational assistance to include actions to encourage parents and communities to both voice their opinions and act on behalf of their interests. If successful, such actions might do more than improve the performance of pilot and other schools. By narrowing the gap between what was offered and what current and prospective consumers (i.e., parents), wanted, the actions would help raise enrollment.

This recommendation was a restatement of ideas contained in policy documents prepared by the government before 1979. New in 1993, and offering hope for more progress in the future than in the past, was change in the political environment. One change was newfound willingness of the SDC to work directly with communities rather than through intermediary public and non-governmental organizations. While most donors and NGOs still viewed "participation" as a way to convince people to help an agency reach its own objectives, by this time the SDC's new strategy for Africa was to "accompany" communities, particularly the most disadvantaged, as they tried to reach joint goals.

The other change, a precursor of what was beginning to happen elsewhere, was massive financial decentralization of primary education, especially in the south. By 1993, communities were paying the salaries of more than half Chad's primary teachers and the bulk of non-salary operating costs in all schools. Fass and Desloovere (2004) suggest that almost all enrolment growth during 1979-93, from 240,000 to 550,000 students, flowed from increasing willingness of parents to pay teachers and other costs (and which contributed importantly to primary enrolment rates, shown in Table 1, much higher in 2004 than in neighboring countries). That is, the fiscal basis upon which government might claim "ownership" of the school system had evaporated. The new reality, if people chose to look at it this way, was that parents owned the "community" schools they established. Having long since acquired the habit of creating facilities without state permission, they also did not require authorization to modify the curriculum. The future was largely in their hands.

The SDC launched its new project in mid-1994 as a small experiment to find out whether direct collaboration with communities could produce better results than pilot schools. One component of the project concentrated on nomad communities in the north where school enrollment was nil, and where Koranic instruction was in most places rudimentary. The implementation process involved a "promoter" and local "animators" who circulated the savannah and desert areas of two (later 4) prefectures in search of "pilot" communities – villages or encampments - that might have interest in using existing Koranic instruction as foundation for evolving "improved" forms of basic education.

Table 1: Social and Schooling Indicators in Selected West African Countries (2004)						
		Sub-Sahara excluding South Africa and Nigeria	Burkina Faso	Mali	Chad	Niger
Population (millions)		511	11.8	11.4	8.3	11.4
GNI per capita (Atlas dollars)		309	250	240	220	170
% of population living under US \$1 per day		61	73	na	61	
life expectancy at birth (years)		46	43	41	48	46
0/ of a dult manufaction that is illiterate	male	31	64	62	45	75
% of adult population that is illiterate	female	49	84	83	62	91
	male	70	42	50	75	45
net enrolment rate, primary *	female	63	31	39	51	31
% of cohort reaching grade 5	male		68	100	58	76
	female		71	86	48	71
school life approximation (years) **	male	8	4	6	8	4
school life approximation (years). **	female	7	3	4	4	2
primary school completion rate			30	43	31	27

^{*} number of pupils enrolled who are in the official age group for a given level of education, divided by the population for the same age group, multiplied by 100.

Sources: World Bank, African Development Indicators 2004; UNESCO Institute for Statistics, 2004

^{**} expected number of years of schooling that a child can expect to receive, assuming that the probability of his/her being enrolled at any particular future age is equal to the current enrolment ratio at that age.

Progress was quick, largely because, as suggested in the meeting with tribal chiefs mentioned earlier, many (but not all) nomad communities already had an acute sense that they had to do "something" to slow or stop their further marginalization. What they needed was an opening that allowed them to define the "something" on their own terms. To make the case that the project might be such a something, i.e., not imposition of a standard school, the project team applied careful logic in discussions with leaders and parents. First, they noted that the nomad group, as in every Muslim community, already had a valued education system. Part of the system was Koranic instruction. Another part of the system comprised lectures, demonstrations and on-the-job training by others in basic skills, such as nighttime desert navigation.

Next, they asked leaders and parents whether the community was satisfied with the quality of Koranic instruction and of other knowledge. On both counts, after extended and sometimes heated deliberations on the meaning of quality, the answer was usually no. Religious instructors, parents said, often appeared to be marginally literate in Arabic and marginally competent in Islamic religion, law and ethics. Their pedagogical skills, as best they could estimate, seemed abominable. As for other areas of instruction, parents were sure that there was more for children to learn about animal and human health, the two vocational subjects of most concern to them, than offered in the community.

Moving to the crux of the matter, the promoter and animators asked why the community had not tried to improve quality, by arranging training for Koranic teachers and other instructors at Medrasas in towns, or by acquiring learning materials for their students. This question launched lively debates that almost everywhere concluded that the possibility of actually doing something to improve education had never occurred to anyone. In part this was because no visitor had ever come to suggest that their system was worthy of improvement or, more important, to show a way to do it. At this point, the project team would indicate that the purpose of the project was precisely to do this, by helping the community reform its Koranic and other instruction as a "school," arranging training for teachers, and supplying books and other inputs. This did not exclude incorporation, in whole or part, of the standard public school curriculum.

Recalling the meeting with tribal chiefs, the project team added that the school would necessarily belong to the community. This meant that the community would decide its characteristics, including curriculum, instructors, and the content of teacher training. It also meant that the community was obliged to build and equip the school and, crucially, to pay all teacher salaries and other operating costs. The SDC's contribution, beyond an initial endowment of books and the like, would limit itself to financing items pertinent to schooling that were beyond community means, such as teacher training and deep wells. The SDC also would pay the animators to circulate among the communities to offer encouragement, address problems, arrange training, deliver commodities and do other things that resembled the school inspector function.

The impact of these discussions, repeated week after week in one encampment and then another, was dramatic. By February 1995, seven months after initial contact with the project, and three months after returning to their dry-season encampments, 22 communities in two prefectures had built, equipped, and organized management committees for their new schools (Table 2). These contained more than 1,700 students, of which 36% were girls, somewhat higher than the 23-29% average for all public schools in the prefectures. This was a clear

gain. Less than 300 boys and girls in the communities were receiving any kind of Islamic instruction before the project. ⁹

Table 2: Enrolment in Nomad Schools, Chad, 1994/95-2003/04									
Prefecture	1994-1995			2001-2002			2003-2004		
	schools	students	% girls	schools	students	% girls	schools	students	% girls
Kanem	15	975	37.7%	26	1,248	47.0%	26	2,217	51.1%
Batha	7	766	34.2%	26	2,062	40.2%	26	2,343	45.8%
Biltine	-	-	-	14	622	25.0%	26	2,116	30.9%
Ennedi	-	-	-	26	1,080	42.9%	22	1,555	47.8%
Total	22	1,741	36.2%	92	5,012	40.6%	100	8,231	43.8%
Prefecture	% of all schools in prefect.	% of all students in prefect.		% of all schools in prefect.	% of all students in prefect.			% of all students in prefect.	
Kanem	10.1%	5.8%		17.8%	4.2%			6.6%	
Batha	11.5%	9.2%		28.3%	8.6%			8.7%	
Biltine				17.1%	4.5%			13.5%	
Ennedi				76.5%	24.0%			30.8%	
Total	7.5%	5.0%		26.0%	7.0%	-		10.2%	
% of national enrolment		0.3%			0.5%			0.7%	

During that first year, the 22 communities collected more than \$3,000 in cash and in-kind contributions of millet and animals to support the schools, or 4% to 5% of their total income. On its side the SDC, in addition to blackboards and hundreds of slate boards, boxes of chalk, pencils, pens, and notebooks, supplied 665 Arabic and 955 French reading books. These texts, donated by the government, were from stocks left over from a World Banksponsored program that could not distribute them to northern government schools for lack of students. The project did not ask its help. But as several high-ranking officials remarked, this was the first sensible project they had seen in a long time. The government had to do "something" to signal support.

The first year culminated in a community-designed training program for instructors. Here, 21 trainers, composed partly of personnel from in-service teacher training centers, public secondary schools, Medrasas, the Central Mosque in the capital (N'djamena) and rural extension services (e.g., public health, veterinary medicine), and partly of individuals within the communities renown for their traditional knowledge, provided instruction to 48 teachers. It covered Islamic law (20 hours), general culture (30 hours), agriculture and animal husbandry (32 hours), human health (14 hours), astronomy (16 hours), pedagogy (74 hours), psychology and ethics (38 hours), and history and geography (10 hours).

A participant assessment of training pinpointed several shortcomings that would require address before the next iteration. ¹¹ At the same time, most participants, including senior government officials present, agreed that the notion of encouraging individual communities to decide the content of basic instruction, to design teacher training in the light of this content, and to select teachers for appropriate training, was overdue. Some of them speculated that if the government had pursued this approach from 1960, or even from 1980, Chad would have long since reformed its primary education system. Enrollment among nomads and other groups that saw little of value in the public system would have long since

come much closer to universality.

Implementation difficulties were omnipresent. Many communities left the project because of political discord within encampments, passage of missionaries preaching Wahabist doctrine and preaching against cooperation with the SDC, death or departure of key leaders, drought, or general dissatisfaction with the project. Some rejoined a year or two later. At the same time, other camps and villages presented themselves as candidates for participation. The net effect over time was positive. A decade on, in 2004, the project approached the limit of what the SDC could support, 100 schools. Some of them used Arabic for instruction, others French or both. Enrollment exceeded 8200 students, 44% of them girls (Table 2). In the process, the share that these students represented of total prefectural enrolment increased from 5% (or 0% counting from 1993), to 10%, and from 0.3% to 0.7% of total national enrolment.

Most of these students – quite a few were young adults - stayed in school for two years, long enough to grasp literacy in Arabic, French or both, to have a very workable knowledge of the basics of Islamic faith, morality, and practice, and to gain some useful lessons about health and other things. Some stayed for 4 years, enough to qualify for teacher training if they chose to do that. A few completed the 6-year primary cycle, becoming members a schooled nomad elite that could intercede with government and donor agencies on behalf of their communities; an especially important function after the Darfur rebellion spilled over the border in 2003.

Although different in several respects, many community schools chose to retain essential strands of coursework from public schools in order to assure that students with motivation and ability could complete the primary cycle, compete to enter the secondary cycle, and then continue study in government secondary schools, Medrasas and beyond. The project did not ignore lessons learned from GRP and pilot school experiences. Quality, certainly, was not at issue, at least no more than for government schools. As indicated in Table 3, shares of students who sat for and passed the examination that granted them both the primary level diploma and admission to the secondary level in Biltine prefecture were roughly comparable in 2001-2003.

Table 3: Students Receiving Primary School Diploma Biltine Prefecture, 2001-03					
	% of students passing				
	nomad schools	public schools			
2000-2001	89.7%	76.1%			
2001-2002	71.9%	82.8%			
2002-2003	86.2%	89.9%			

Looked at broadly, the project encouraged different groups of parents within each participating community to get and pay for what they wanted from schooling. Stripped to essentials, these were a highly popular two-year program assuring basic literacy and religious knowledge; a 4-year program of advanced literacy, numeracy, religion and vocational qualification as teachers, scribes, etc.; and a 6-plus year program to prepare agents to advocate for the community in the world outside.

This is an instance of applying the notion of consumer sovereignty to education – an

expression of the idea that one shoe may not fit everyone – and of applying consumer research to determine marketable sizes and styles. Outcomes in Chad suggest that, in some places, it may be more productive to supply a variety of shoes than to continue to insist upon squeezing feet.

6. CONCLUSION

How the various community educational programs might yield human capital income gains was still unclear in 2004. Clearer was that they supplied opportunities that did not exist before. It was now possible to believe, for instance, that one or more individuals in each community, better equipped to interact with public and private institutions, might find gainful employment or self-employment in towns inside and outside Chad, and then supply remittances for productive community investment. Also possible to believe was that access to written Arabic or French might now and then stimulate some productive idea for individual or collective benefit. These beliefs have retained their allure to the present. By 2010 Batha prefecture had grown to 74 community schools and 22 literacy centers enrolling 4800 students (50 percent girls), and in Ennedi prefecture 39 schools and 23 literacy centers with 6270 students (48 percent girls).

Whatever might be the eventual course of events, the nomad schooling experience reminds that after six or more millennia, religion remains a vital factor in shaping important decisions, notably but not exclusively about education. Set in historical context of how schooling evolved over the ages, the experience also underscores the advantage of harnessing the power of religion, Islam or any other, for productive service on behalf of development action and material betterment.

At the same time, the project offers further evidence to weaken claims that Islam or some other religion exerts negative influence on education. This idea is logically impossible because religion, any religion, transmits itself inter-generationally through education. Nor is it meaningful to suggest that religion impedes schooling. Yes, schools advocating ideas that challenge parental beliefs are unlikely to be popular. But this is true everywhere, and with respect to consumer beliefs and preferences having nothing to do with religion. If there are gaps in enrolment, graduation rates and the like, research and policy attention might more productively focus on the attributes of schools, in principle more malleable than people, than on attributes of parents.

For better or worse, researchers who rely on remote sensing through available data sets to understand interactions between religion and education (or other things) may find trouble doing this. Available variables are extraordinarily limited. Sets contain much about school and student attributes, but are empty with respect to direct and indirect messages that schools transmit to students, not to mention messages that parents prefer that their children receive. Absent the kinds of data necessary to make fuller empirical sense, say, of why there are urban-rural, gender and other gaps in schooling, researchers remain captive of their variables, unable to search for explanation beyond the limits of data sets that do not contain requisite information, and vulnerable to the temptation to venture untamed speculation.

An unfortunate result of this dependence is intellectual stagnation. Required to explain low enrollment and absenteeism, a French school inspector in the middle of the 19th century wrote that it had to do with the negligence, ignorance, greed, lack of appreciation of knowledge, and "the indifference of some parents who do not want for their children a benefit whose advantages

they cannot comprehend because they themselves are deprived of it." (cited in Maynes, 1985: 105) One would like to think, 160 years on, that research could contribute something more to understanding than addition of "religion" to the list of parental shortcomings.

By extension, policy recommendations and actions that sustain themselves on this kind of research and associated speculation continue to seem antiquated. It may well be, as Tuwora and Sossoub (2008) claim, that "cultural practices" associated with religion impede realization of gender parity in African education. At the start of the 21st century, however, there must surely be a better remedy than their recommendation to impose mandatory measures to hold parents accountable and responsible for schooling girls. It is of course possible that what made sense in 1642 Massachusetts makes comparable sense in today's Africa. Elapse of nearly four centuries of research and practice since then, however, should have pointed to some plausible alternatives.

This situation is unlikely to change quickly so long as research and policy continue to rely on vague concept, theory-free causal conjecture, and data sets that do not contain enough relevant information to answer the questions at hand. Clearly, more research is not required. Needed is more thoughtful research, and more thoughtful policy action.

7. IMPLICATIONS FOR ISLAMIC FINANCE

This plea for thoughtfulness extends beyond the matter of education. There are numerous other domains where observers claim that religion may facilitate or may hinder progress by instilling in adherents unfavorable attitudes, noted earlier, and/or strong aversions to key instruments of economic growth. The pioneering study here is Weber (1930), who claimed that Protestant readings of the Christian Bible - Sombart (1911) saw this attribute in Jews - led to intense worldly engagement, i.e., breaking out of insular worlds, to foster modern capitalism. A contemporary expression of this idea is a model by Blum and Dudley (2001) showing that a small change in the subjective cost of cooperating with strangers produces major impact on trading networks.

Recent research that looks more closely at influences of religion on economic outcomes relies, as for education, on a dual logic of effects mechanism. Norms extracted from interpretations of scripture, e.g., having to do with work ethic, honesty, selflessness, trust, cooperation and so forth, shape individual and social preferences and decisions. Intensity of religious belief then modulates the extent to which an individual respects the norms. Thus a person who understands the parables of the Talents (Matthew 25:14–30) and the Ten Minas (Luke 19:11–27) in the manner of Gregersen (2003) might take as gospel that Christianity encourages risk liking behavior and, varying with level of belief, act accordingly. In this interpretation, observant Christians, not averse to risk, should do well economically.

In contrast, an individual sharing Al-Suwailem's (2000) view of Islamic law's *gharar* - risk conditioned on uncertainty or on illusory causation akin to what Camerer (1995) calls magical thinking - might assume that *Sharia* law demands aversion to risky behaviors that look like zero-sum games with uncertain payoffs. In principle, this might explain why people in Islamic societies, especially the devout, seem averse to buying insurance (Patel, 2002) and investing in hedge funds (Smolarski, Schapek and Tahir, 2006). Or, a person may see individual and society as inseparable, a tenet that Mbiti (1990) suggests is frequent in Africa. The prospect of communal liability for individual behavior, to someone who adheres to Ibn Kaldun's idea of asabiyah, or social solidarity, gives a different flavor to risk preferences

than personal liability for personal choice (Dusuki, 2008; Parisi and Mattiacci, 2003). Add to this litany of apparent obstacles a fundamental aversion to the sin of *riba*, or usury (i.e., unjust gain in trade or business), and the impression that religion presents serious obstacles to modernization of financial systems and economic development in Islamic societies seems inescapable.

However, a review of proscriptions embedded in the Hebrew and Christian bibles should lead to exactly the same conclusion. Yet no one suggests that these religions impede economic growth. Somehow, over the course of time, the proscriptions adjusted to economic progress and to introduction of new concepts, such as inflation and opportunity costs. Along the way, the notion of usury being any interest fee transformed itself into "excessive" or unfair interest. The religions did not change, just the interpretations. There is no reason to assume that Islamic texts are immune to similar transformation. Indeed, the decentralized character of the faith, described earlier in this paper, suggests that Islam is likely more open to adjustment than the (Catholic) Church when it had to reconcile the sin of usury with the compelling needs of commerce during the 15th and 16th centuries.

In fact, there is evidence that the process of transformation is underway here and there, and has been ongoing for several years. In Malaysia, for example, Ismail and Sanusi (2005) and Mohammed et al. (2005) derive an Islamic-based pawnshop (ar-Rahnu) concept that eliminates riba and gharar and thereby reduces obstacles to lending and borrowing. In parallel, Hanudin et al., (2007) conducted a survey of consumers to explore their likely acceptance and use of an ar-Rahnu shop. Their finding, what they called an "eye-opener," was that after survey respondents understood that this kind of shop would operate in accordance with sharia principles, they seemed eager to see such a shop in their communities. Further ahead, Fealy (2008) reports the emergence of several types of sharia microcredit schemes in Indonesia, including a chain of 50 sharia pawnshops operated by the sharia branch of the government's Pawnbroking State Enterprise. He also notes the emergence of 3000 Islamic saving and loan cooperatives serving tens of thousands of villages. Such experiences are small undertakings. As is the case of schools in Chad, they represent only early steps toward emergence of "modern" financial instruments and mechanisms that are consistent with Islam. But the experiences do underscore the utility of working collaboratively with Islamic communities and their faith leaders, as the SDC did in Chad, to develop sustainable saving and lending mechanisms that people can use without reservation.

At the start of this paper, we emphasized that it serves no productive purpose to explain weak demand by ascribing fault to the consumer rather than to the product or service. Likewise, it serves no useful purpose to blame the consumer's religion for aversion to financial products or services that assault notions of what is right and appropriate. And it seems unproductive to insinuate that religious aversions underwrite underdevelopment and poverty among more devout segments of Muslim populations, among other reasons because it implies that progress requires conversion. It is much wiser to assume that failure to account fully for faith in design of financial mechanisms has underwritten unnecessary delay in introduction of novel approaches that respond both to faith and to financial sustainability. This assumption should be a guiding framework for future policy research and policy action.

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ENDNOTES

- In 1993, for example, UNICEF started a project to improve instructional scope and quality, and to close gender disparities in 150 schools in Somaliland. That experience seemed to reinforce the idea that a link between Koranic and primary education was essential if children were to obtain the "basic" education supplied by public schools (Morah, 2000). This kind of initiative can be controversial. UNESCO was censured by its own staff and by diplomats in 1993 for supporting a seminar in Sudan to promote Koranic schools (Barry, 1993). Critics claimed that because Koranic schools excluded girls in some places, support seemed to contradict UNESCO's policy of increasing educational opportunities for girls. They also claimed that it was impossible to distinguish between religion and education in Koranic schools, that support risked endorsing the Sudanese government, which was fighting the Christian south, and that since the government intended to turn the country into an Islamic republic, helping the schools would only encourage that strategy.
- In Senegal, Canada's Gérin-Lajoie Foundation worked with a few Koranic teachers in 2003 to add French, mathematics, history and geography to the curriculum, and in 2008 joined with the government to improve teaching quality in six schools. Separately, the US Agency for International Development and Counterpart International, a non-governmental organization, initiated an effort with the government to widen the curriculum in nine schools.
- An evaluation of projects funded in Somaliland by the Danish government, similar to that of UNICEF, seemed positive (Smith and Seel, 2006). Nonetheless, there was concern that gains might not be sustainable after the end of external support, especially with regard to payment of teacher salaries by parents.
- 4 Ordonnance No. 0021/PR (1966), Gouvernement de la Republique du Tchad
- Direction de la coopération au développement et de l'aide humanitaire (DDA), "Projet Tchad 17: Bilan et Perspectives," Département fédéral des affaires étrangères, Bern, Suisse, 12 juillet, 1993.
- Ordonnance No. 005/PR/CSM/SGG (Fevrier, 1978), Gouvernement de la Republique du Tchad
- To support this claim, many pointed to enrollment in the region's Medrasas. Girls, for instance, represented more than 50 percent of enrollment in all grades while ranging between 20 and 30 percent public in schools. Further, while Medrasas were usually full to overflowing, schools, even those with Arabic instructors, were more than half if not completely, empty.
- 8 Gouvernement du Tchad. 1993. "Annuaire statistique de l'enseignement élémentaire: 1991-1992." Ministère de l'Education Nationale. Direction de la Planification, des Examens et Concours. Division des Statistiques. Ndjamena.
- Results were also dramatic relative to prior experience with noad education. Colonial authorities, though they tried to do more, succeeded in establishing only six schools for nomads in all of French West Africa between 1917 and 1942, each containing 15

to 35 students (Khayar, 1969). That is, the project accomplished more in a few months than the French had done in 25 years. Likewise, though the government made a few attempts to school nomad children soon after independence, by assigning teachers to wander about with them, these failed. Communities, though they felt obliged to host state teachers, did not let children study with them.

- This total comprised 860,000 francs in cash (\$1,720) and 640,000 francs in sheep and millet (\$1,280). Camps contained an average of 30 families. A typical family, owning about 50 goats, sheep, cattle, and camels, generated income from production of milk, new animals, and millet from dry-season fields. The total value of this production at 1994 market prices was about 50,000 francs, or about \$100 per family. By this reckoning, the 720 families in the 22 camps earned \$72,000, from which they contributed \$3,000, or 4.2%, to the schools. Making allowance for monies still being given to Koranic teachers in the form of alms and sums that management committees were still in the process of collecting at the time, rough estimation was that communities would eventually collect closer to 5%, perhaps more, by the end of that year.
- Training materials often arrived late. Trainers wanted higher per diems, and trainees higher food and shelter allowances. Some teachers were too old to withstand the rigors of an intense learning schedule. Training in the dry season would be better than in the wet season. There was not enough effort to assess the impact of instruction on the effectiveness of teachers. And there were no women at the training sessions.