

The Fear of Education

Judith Tendler

Massachusetts Institute of Technology
tendler@mit.edu

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Abstract

The “new economy” of the 21st century, as we have come to understand it over the last decade, requires a more literate workforce. Firms and countries without it are advised that they will have increasing trouble competing in a global economy. It is this concern, in part, that has led to the appeals of the last decade to developing countries to take basic education more seriously, by dedicating more attention and resources to the sector. In the research conducted for this paper, however, owners and managers of large modern manufacturing firms in the textile, garment, and footwear sectors of Northeast Brazil reported, to their pleasant surprise, that they have been able to live with illiteracy without compromising their ability to compete. They did not prize an educated workforce and, indeed, sometimes worried out loud that “too much education was a bad thing.” This “fear” of education also pervades the thinking of politicians and governments, particularly the departments that support economic development—and particularly at the subnational level, where decisions to fund and improve education are often made. These actors often construe their region’s “only” comparative advantage in economic development as one of cheap labor; they worry that a more educated labor force may diminish that advantage by leading to a general increase in the region’s relative wage, and by reducing the prized “docility” and “gratefulness” of the region’s labor force; they also expect to lose the returns to their investment in better education, because of the fabled out-migration of the best workers. The above-noted experiences of firm owners and managers, in turn, seems to translate into a *lack* of pressure on governments by important local elites for improved education—a kind of fatal absence of demand-driven pressures. These various perceptions, it is important to note, are eminently rational in both private and economic terms. Together, they contribute to a kind of “low-level education trap,” which may help explain the stubborn persistence of low literacy and poor schooling in many poorer regions (or countries) today. The new wisdom about workforce literacy and global competitiveness, then, may be accurate for only some sectors, regions, countries, and periods of time—but not for others. For this reason, the appeals for improved education should perhaps be grounded in rationales other than the 21st-century “need” for significantly higher workforce literacy. To this end, researchers of political economy and policy reform might explore the historical experiences of other countries—including in other times—to find ways out of the trap.

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1. Introduction

This paper argues that there is a “fear” of education among modernizing and urban business elites in certain developing regions or countries, which might help to explain persistently low literacy and poor schooling. The fear also permeates parts of the government sector, though it takes a somewhat different form. Its consequences for education are linked, in turn, to the way in which poorer regions relate to their surrounding richer regions—in an ironclad dynamic that is actually rational in economic terms and, at the same time, has perverse effects. This is not a novel hypothesis, as will be seen below. Nor is it a peculiarity of the recent history of Brazil, nor even of the much earlier history of some of the now-industrialized countries.

The fear of which I speak exists regardless of whether the public discourse is *pro*-education. Partly for this reason, its consequences for education are almost nowhere to be found in current discussions on the development of lagging regions within developing countries. Neither is it to be found in the current debates on education reform, nor the injunctions regarding the kind of workforce required for global competition in the 21st century. Most analyses of the problems of schooling, literacy, and the quality of the workforce training, moreover, do not disaggregate to the regional level where the dynamic plays itself out.

At the same time, this very literature provides enough bits and pieces to construct such a picture. That the pieces have not yet been put together in this particular way, or for this particular purpose, can be explained by their being somewhat dissonant with the current construction of what the problem is. In addition, the assumptions behind the current discussions

about the causes of poor education in developing countries may inadvertently obscure the significance of the picture revealed in this paper:

First, even though the current literature on basic education in developing countries is keenly sensitive to the importance of “demand-driven” influences in shaping outcomes, it focuses exclusively on demand by *parents*, rather than by business elites. This, despite the fact that business elites are central to political-economy explanations of the success or failure of many major reforms. In addition, and to the extent that the development literature *does* recognize the role of demand by business elites, it links this demand not to basic education—that is, the first eight years—but to vocational and more firm-specific forms of work training or, at most, to secondary education.

Second, the business literature on competitiveness in the 21st century insists on the importance of a more literate workforce. While valid for some sectors, this may well not be so for other sectors—like garments, footwear, furniture, textiles, and food processing. These sectors usually figure importantly in manufacturing employment in the poorest regions and countries.

Third, to the extent that the literature on the causes of persistent backwardness *does* focus on poor education, it views the education problem as the result of a prior and interwoven set of circumstances associated with persistent “backwardness”—inequality, bad geography, meager resource endowments, low suffrage;¹ or with a set of self-defeating institutional patterns, like excessive centralization or, more specific to the education sector, the lack of parent involvement

¹Sachs & Warner, Engerman & Sokoloff, etc.

and the spoiling actions and attitudes of teachers' unions.² This paper suggests that it is not backwardness itself that creates the problem, but its *opposite*—the very desire to modernize and, in so doing, catch up to richer economies in which the poorer region is embedded.

During the course of this research, we interviewed several owners, managers, and supervisors of modern and medium-to-large manufacturing firms in shoes, garments, and textiles in the Northeastern Brazilian states of Ceará, Pernambuco, and Paraíba. A good number of these firms had moved from Southern Brazil, or set up branch plants in the Northeast. Together, these three sectors accounted for 28% of manufacturing employment in Northeast Brazil in 1999.³

Though one might expect that these “traditional” industries would have declined as Northeast development proceeded over the last three decades, the share of garments+footwear has actually steadily *increased*, from a low of 3% in the 1950s to a high of 28% in 1999.⁴ (Employment in the textile sector, however, has steadily decreased from 37% in the 1950s to 9% in 1999, representing one third of total employment in textiles+footwear-garments; the textile decrease is partly a function of steady increase in the capital-intensity of that sector.)

Similarly, the Northeast's share of employment in these labor-intensive sectors *vis-a-vis* Brazil's in these same sectors also seems to be increasing steadily—by 80% since the 1970s, from

²E.g., papers on PE of education reform in LA.

³Unless otherwise noted, the data cited in this text was elaborated by Mansueto Almeida of IPEA, the Instituto de Pesquisas Econômicas Aplicadas, in Brasília; his tables will follow in the next version.

⁴“Manufacturing” excludes the construction industry and minerals production. (Data in this paragraph developed by Mansueto Almeida, see Table X.) If one adds to these sectors that of food production (including agro-industry)—a sector not included in our study—the proportion of output and employment would be significantly greater. This sector—also characterized as traditional (albeit mistakenly with respect to certain firms), and holding similar views about the education of its workforce—accounts for the largest single source of output and employment in Northeast Brazil (as in many poor regions and countries). Like garments, shoes, and textiles, it has also been subject to modernizing influences by global competition and pressures from global buyers and their consumers.

approximately 10% of Brazil's employment in these sectors in 1970 to 18% in 2000. One interpretation of this latter increase is that the South of Brazil has specialized more in capital-intensive goods and the Northeast in labor-intensive goods. Some observers interpret this as a result of the Northeast's comparative *disadvantage* with respect to an educated workforce, *vis-a-vis* the South.⁵

⁵Two other factors in addition to the South's more educated workforce are noted—increasing trade openness, and the competitive advantage of industrial clusters in the South. This argument is made by Clélio Campolina (1996), as cited by Almeida (e-mail of 7/4/2002). At the same time, as Almeida (*op. cit.*) points out, the Northeast's *output* in these sectors has *decreased vis-a-vis* Brazil during the same period—contradicting the argument of Northeast comparative *advantage* in labor-intensive sectors. (Almeida had available 1999 data that was not available to X.)

Though many of the firms in these sectors are more traditional, the firms we visited were among the more modern and sophisticated. They were competitive in Brazil's large domestic market in the South—if not actually exporting—and had successfully faced intense competition from cheap garments imported from Asia. They had adopted, or were moving toward, some of the most cutting-edge practices of global producers in this field.⁶

Our conversations with these firms revealed a consistent set of experiences and attitudes, not only about the perceived traits of workers and their performance, but about public education in general. They also raise questions about the now-current views that a more broadly educated workforce is central to the ability of firms to compete in today's world of trade liberalization and global trade—views such as that expressed in a recent World-Bank study of poverty in the Northeastern state of Ceará, that, "...the rising premium on skills due to technological changes [makes education] seem only more important in the 21st century."⁷ The results of our interviews also raise questions about prevailing interpretations of why public education is so inadequate in backward regions like Northeast Brazil and about how to improve it.

The paper is organized in the following fashion. This introductory Section 1 closes with a short review of the indicators demonstrating the marked and persistent disparity between Northeast Brazil and the rest of the country. Section 2 presents the results of interviews with firms on matters of workforce education, experience, and training, and discusses their relevance to the current debates on education reform and workforce requirements. Section 3 discusses

⁶[Natallichio specifics.]

⁷Preceding this passage, the report cites a study by Barros, *et al.* (2000) that ascribes 40% of overall inequality in Brazil to the lack of education. For example, a World-Bank report on poverty in the Northeastern state of Ceará reports that, "With the rising premium on skills due to technological changes, this [education] seems only more

workforce training by large firms, the subsidization of such training by the public sector, and the way in which such training allows firms to live with illiteracy. Section 4 moves to the particular dynamic of a lagging region, with the help of a comparison to a similar earlier experience of a lagging region—the U.S. South. Section 5 concludes.

The gap: Northeast vs. Brazil

The persistent disparity between the Northeast and Brazil is central to the argument that follows—rather than absolute measures, or improvements in them, of poverty, inequality, and other social indicators like schooling, literacy, per-capita education expenditures and other such measures. A few words before starting, therefore, about this gap.

Northeast Brazil is region of 48 million people constituting 28% of Brazil's population of 170 million (for the year 2000). It has nine state governments, in a federalist system, and a handful of powerful—or once powerful—regional development agencies and parastatals set up and funded throughout the postwar period by the federal government. The Northeast's Regional Domestic Product in relation to Brazil has long been less than half that of its population—at roughly 12% since the mid-1940s, and now 13%. Its GDP per-capita is less than half of Brazil's—at 46% currently—and has remained so, with some variation, from 1947 to this day.⁸ Since the 1960s, Northeast manufacturing employment has held steady at roughly 11% of total Brazil's. Value-added in manufacturing has been even lower—roughly 8% in relation to Brazil, from the 1950s to 1999, with no upward tendency.

important in the 21st century” (WB Ceará poverty-reduction report, 8/2001, p. 42).

⁸See Table X.

Fear of education/U.S. South

The Northeast has also had persistently high rates of workforce illiteracy. Though literacy has slowly progressed through the last decades, the disparity between the Northeast and the rest of Brazil has nevertheless remained roughly the same, as have the GDP indicators. This same period has also witnessed substantial modernization of the manufacturing sector, including among larger firms in the footwear, garments, and, particularly, the textile sectors.

Recent comparisons of illiteracy of the over-15-year-old population as between the Northeast and the rest of Brazil find Northeast illiteracy to be roughly double that of Brazil—27% vs. 13% in 1999 (based on data from WB/Ce, 8/21, p. 15, figure 5). Illiteracy in the Northeast *workforce*, though lower than overall illiteracy, is still more than double that of Brazil—16% for the Northeast vs. 7% for Brazil.

Despite consistently increasing primary-school enrollments in the country and the Northeast over the last decades, illiteracy is even slightly higher today—as compared to 1986—among the younger Northeast workforce (the 15-39-year cohort), as compared to that of the same cohort in Brazil (*op. cit.*, p. 17). Though Northeast illiteracy has decreased from 39% in 1986 to the 16% of the 1999 figure—a notable accomplishment—Brazil’s illiteracy has *also* decreased in roughly similar proportional terms, from 20% in 1986 to the 1999 figure of 13%. The *gap* between the Northeastern and Brazilian illiteracy, then, has not narrowed in this 15-year period and, if anything, shows a slight *increase* of 5.3%—from 1.9% in 1986 to 2.0% in 1999.⁹

This picture was confirmed, more or less, by comments about literacy reported to us by

⁹In that the Brazil-wide illiteracy figures do not fully reflect the even-lower illiteracy rates that characterize the most developed states of the South/Southeast of Brazil, the gap in workforce literacy between Northeast and South would be even greater. Note also that years of education do not necessarily mean literacy, because of the poor quality of much of the region’s education. Finally, illiteracy rates vary substantially as between urban and rural areas within states.

plant managers in the Northeast. The head of a large textile firm in the metropolitan region of Pernambuco's capital city reported that only 30% of the state's labor force in 1994 had eight years of primary education. Only 40% of the workers in his plant had more than eight years. He also said, nevertheless, that he is now starting to hire only workers who have eight years of schooling (JT206). In the same metropolitan area, managers of a large modern garment plant (2,000-5,000, depending on the season) reported that less than 50% of its workers had more than eight years of schooling. In the metropolitan region of the capital city of Ceará, only 35% of the labor force was reported to have reached this level, some of them not having completed the eighth year. Wage costs in large Northeast plants in the garment and footwear sectors are about 50%-60% of wages in similar plants in the South.¹⁰

¹⁰[Natalicchio/also re rural NE as opposed to urban].

2 - Workforce education, training, and experience: views from the firm

Most owners and managers of large firms we interviewed did not express great concern about the high rates of illiteracy among their workers, including some used to supervising more educated and skilled workers in plants in southern Brazil.¹¹ At most, they believed that the first eight years of primary education (*ensino fundamental/primeiro grau*)—or less—was more than sufficient for these workers to be productive. The large firms expressing these views had initiated modular production, with workers producing in small groups (*células*). This requires multi-tasking and teamwork, including team members' having to replace an absent co-worker on any particular day.

Several managers and owners of firms headquartered in the more developed south and southeast¹² of Brazil expressed surprise that they were “achieving near-Southern levels of productivity” with a significantly less literate and experienced workforce than in the South. For example, a large footwear firm in Ceará, which also exported to the United States, reported getting its workers up to Southern levels of productivity within five to six months (JT14). Similarly, some outsider garment firms in Ceará and Pernambuco reported workers to be fully producing as early as their third week of training (Dohnert 42-43).¹³ Indeed, one large garment

¹¹[include note 15 on old p. 24?] Include Dias (2000; textiles/Fort figures (card)); Vasconcelos (1/99; on illit, p. 17).

¹²For purposes of brevity, I subsequently use the term “South” and “Southerners” to refer to the most developed part of the country, even though South and Southeast is more accurate. “Southerners” is also the expression used by Northeasterners, often pejoratively, to refer to people from both the South and Southeast.

¹³To be sure, some of these firms had decentralized and “de-skilled” part of their low-end production—such as tee shirts—upon moving to the Northeast, but our questions related to their large centralized plants that hired upwards of

plant in Pernambuco—belonging to one of the largest producers in this sector in Brazil—reported to us that productivity was actually 30% higher than in its Southern plant in the state of Santa Catarina (JT228). This despite the fact that less than 50% of its workforce had eight years of schooling—in comparison to the Southern plant, where 100% had reached this level and, of those, 25% had completed high school.

In a 1998 study of Southern firms in *various* sectors that had located in the Northeast state of Ceará—where both wages and literacy are roughly half that of the South—firms also reported that productivity in their Ceará operations was “as high as in the Center-South.” They noted, however, that “some greater initial supervision and training may be necessary”¹⁴—a matter I return to below. The firms reported “no real problems at the most basic levels of unskilled labor, *despite* the low levels of educational attainment and schooling” (italics mine).¹⁵ Indeed, they said that labor relations, and worker quality and “attitudes,” were “better” than in their Southern operations—“*especially* for unskilled labor” (italics mine). To the extent that this firm and those previously cited had adopted modular production and its requirements for teamwork and multi-tasking, these operations would seem to have needed *more* skills and literacy, not less.

Those firms that did express some concern that the lack of basic literacy might

500 or 1,000 thousand workers.

¹⁴From interviews reported Tyler (1998:13). Typical monthly wages in the Ceará plants were R\$150 per month as vs. R\$280 at the same firm’s Southern plant (at this time, the Brazilian Real was on a par with the U.S. dollar.) For firms with labor accounting for 20% of costs, this would reduce total costs vs. the Southern plants by 10%. Tyler also noted that Ceará wage rates were low enough to be “competitive” internationally—given that they were about half those of the *La Mercedes* export processing zone in Nicaragua. (A typical monthly wage among the firms he interviewed was US\$150 per month in the Ceará plants vs. US\$300 in the Nicaraguan zone.)

¹⁵*Op. cit.*, p. 16. Firms *did* complain, however, about problems recruiting qualified individuals for supervisory and technical positions—often bringing in staff from the South, despite the associated problems of additional costs, “resentment” by local employees, and “cultural acclimation” (*Ibid.*). Firms linked this scarcity to the “failures and inadequacy” of local training and education.

compromise productivity had started to weed out all job applicants with less than eight years of formal public education, or were thinking of doing so. At the same time, they reported, it was difficult to find workers willing to work in manufacturing, so they could not really observe these requirements.¹⁶ Some firms were providing voluntary literacy classes –albeit after a full work shift or during the lunch period—a not uncommon practice, even among modern firms in the South.¹⁷

One would think that these concerns about literacy might have translated, at the least, into general support of business elites for basic public education. Also, to the extent that some of the newer plants were located in rural areas where illiteracy and joblessness were higher than in urban centers,¹⁸ one would have expected the new job requirements to increase the interest of parents in keeping their children in school and, hence, demanding even more and better schools. Exactly this kind of increased parental demand for basic education where new factories had located was reported in an article on such plants and their effects on interior towns throughout Brazil in the weekly newsmagazine, *Veja*.

Another set of viewpoints expressed by the firms, nevertheless, seemed to work in the *opposite* direction. Firm owners and managers often spoke disparagingly about workers with education, and with skills and experience. These views can be summed up by saying that “too much education is a bad thing”—a phrase we sometimes heard from those we interviewed—and

¹⁶Natalicchio reports, for the textile sector in Ceará and Pernambuco, that many companies were offering remedial education enabling workers to finish the equivalent of the first eight years of schooling (2001:14). [Lima: observed more in the breach].

¹⁷Natalacchio (2001) for Ceará and Pernambuco. Meyer-Stamer for SC in the South.

¹⁸E.g.s from WB/Ce. report, etc.

particularly any education beyond the first eight years. “Too much” skills and experience was also “bad.” Again, this seems to conflict with the emphasis on skills, experience, and literacy in today’s discussions of workforce requirements in the 21st century.

The owner of a large modern textile firm in Pernambuco, which was steadily introducing an array of high-performance practices, expressed views typical of what we heard on other occasions. Although he now considered the first eight years of elementary education to be important for his workers, he nevertheless warned that “anyone who has completed high school won’t ever want to operate a piece of equipment anymore and, in fact, will just only want to work behind a counter in a shopping mall, or do something else in an office.” Managers of textile firms in Ceará seemed to confirm this view, reporting that workers with eight years of education didn’t want to work in a factory, and preferred the service sector.¹⁹ For this same reason, plant managers in the textile sector there reported difficulties in finding workers with primary education who were even interested in factory jobs. They were not willing to raise their wages to a level that would attract them, however, thus forcing them to hire less-educated workers than they were formally requiring.²⁰ given that they were now able to find jobs in the service sector. When asked about the new modular work systems that required more multi-skilling, teamwork, and worker discretion, the Pernambuco textile-firm owner said that up to eight years of formal education was really more than adequate to get workers to operate productively with the new methods. Even completing the first eight years, he warned, “ran the

¹⁹In the 1980s, new technology in the textile sector of Ceará (and São Paulo) lowered the level of education and experience required of workers, as a result of concomitant de-skilling allowed by the new technology. (Schmitz [1985], as cited by Natalicchio (2001:13).

²⁰Natalicchio (2001:14).

risk” of whetting the appetite of workers—particularly the younger ones—“to go on to high school,” after which “they’d never want to work in a factory again!”²¹ (JT262).

The production manager of a large modern garment factory in Pernambuco, with up to 5,000 workers, also seemed to draw the line at eight years of basic education, at most. This despite the fact that 100% of the workers in the firm’s Southern plant had completed the first eight years—and 25% had high school—whereas less than 50% of the workers in the Pernambuco plant had at least the first eight years of education. He also noted that “basic education,” rather than training or experience, was more important in their hiring decisions (JT228). This reflected views we often heard that workers with job experience or vocational training in the same sector were “difficult,” because they had to “unlearn” the previous way they did things, and thought they “knew better.”

With respect to skills and prior job experience in the sector, the responses of plant managers or owners were similar. In Ceará, for example, managers of a branch plant of a Southern headquarters-firm producing athletic shoes told of how “skilled workers resist new methods,” and that “those without any training or experience are much easier to teach” (JT14). (The Ceará plant was the largest of this firm’s plants in Brazil and, given its inauguration only four years earlier, was more modern than the headquarters plant.) Even though the lack of skills and experience meant a somewhat longer period of training and probation, the plant was still able

²¹JT 262. In 1994, he reported, 70% of the labor force in his state (Pernambuco) had less than four years of schooling. His goal was to increase the share with eight years to 70% (and to 20% with secondary education, and 10% with more than secondary education). In order to introduce multi-tasking, he said, it wasn’t necessary to have workers with more than eight years of schooling. Even less than the first eight years was okay, because “by the time they were near finishing the eight years, they already would want to go to high school.” This was consistent with Lima’s observation from fieldwork that although many garment, textile and footwear firms formally required the first eight years, workers often did not have that much schooling.

to get its workers “up to Southern productivity levels” in no more than five or six months.²² A study of garment workers in Ceará reported a variation on this view: managers said that seamstresses with a high-school education “caused problems, rarely adapting to the work rhythm.”²³

More generally, firm managers and owners viewed new workers with skills and experience as “resisting” new equipment and techniques, as “uppity.” They viewed such workers as potential troublemakers, more likely to complain and instigate other workers to do so, or to join or organize labor unions or other collective attempts to express grievances. At the same time, and particularly in the case of Southern firms with plants recently located in the Northeast, managers pointed appreciatively to the “docility” of those without prior employment experience, and their “gratefulness” just at having a job. These views about education, skills, and experience seemed to represent a reality that was far different from, and in many ways the opposite of, the current thinking about the importance of basic education and the kind of workforce required for global competitiveness.

To the extent that the above-reported collection of disparaging comments on the value of workforce literacy and experience actually reflects the thinking of *modernizing* business elites in the Northeast—let alone more traditional elites—this may contribute toward explaining part of the

²²As noted in a separate subsection below, this firm-specific, shopfloor training—often up to three or four months—was fully subsidized by the state governments; firms could train more workers than they needed (from X% to Y% more) and then choose among the best; and state governments allowed firms to be exempted from contracting workers until after the training period by classifying them as “scholarship-holders” (*bolsistas*).

²³“...as costureiras com nível superior causam problemas, raramente se adaptando ao ritmo do trabalho” (Lima 1997:152). (This and all other translations from the Portuguese are mine.) Although this particular quotation comes from a study of garment production in labor “cooperatives” producing for large firms, Lima reported in a personal communication that he found the same views among managers of large garment factories.

persistent problem of high illiteracy and poor public education in lagging regions like the Northeast.

The view from the worker. We interviewed only owners, managers, and supervisors—and, only rarely, workers—in these plants. Lima’s interviews of workers in three large modern textile factories in Paraíba in 1993-94, however, seemed to be the mirror reflection of these views from the workers’ viewpoint—namely that illiteracy and lack of skills were not a problem.²⁴ As with many recent large plants in these sectors in the Northeast, many workers employed by the Paraíba textile firms where Lima interviewed—except for a small proportion of technicians and mechanics—had come from jobs mainly in agriculture or construction. Women workers usually had had no previous paid work at all.

In an ironic confirmation of what the large-firm owners and managers reported, the workers interviewed by Lima saw their textile-factory jobs as the only option for someone *without* an education—a worker who “goes to the factory because he doesn’t know how to do anything else.”²⁵ A female worker, for example, said that she did not have the training or experience that would have enabled her to work elsewhere. The textile plant was therefore the only place where she could get a job, even though she considered it the worst option. “It would

²⁴Lima (1996) [Name the plants]. The much-noted “modernization” of the Northeast’s textile plants with the latest equipment over the last decade or so, one would think, would have made them more demanding of literate and skilled labor—at least more so than the less capital-intensive garments or footwear. As noted further below, in fact, a study of textile plants in the state of Ceará (Dias 2000) found a high degree of illiteracy among their workers (p. X below). At the same time, however, Natallichio (2001)—interviewing managers and supervisors in medium and large textile plants in Ceará and Pernambuco, found that these firms were more concerned about the educational background of their workers than in garments and footwear, and more inclined to provide supplementary education.

²⁵Lima (*op. cit.*, p. 135). Lima found these views about factory work regardless of whether they worked in small,

be better to be a receptionist, a sales person, or something like that,” she says (p. 135), confirming almost literally the aforementioned complain of the textile-firm owner. A male worker, similarly, reported applying for work at the textile plant because it was his “only option,” since he couldn’t read or get a better job elsewhere. Another said that “this was the kind of job for someone who’s never studied—your basic peon” (p. 138).

At the same time, these workers saw their jobs in the textile plants as the first step toward moving to “something better” elsewhere—the “only chance” for someone without formal education.²⁶ Hence the average tenure of only two years for these workers in the textile plants in that state (p. 137). At the same time, and because of this seeming promise of upward mobility, these workers were “grateful” for the jobs. They were “gentler [*mais maneiro, leveza*]” than the jobs they had been used to in agriculture and unskilled construction. And they were, thankfully, “in the shade.” Again, this echoed the characterizations by plant managers of their workers. State-government officials also point to this same “gratefulness” of workers for their jobs in such plants, when defending their governments against public criticisms from some quarters about their industrial recruitment strategies.²⁷

Many of the workers who express gratefulness for their jobs reveal, at the same time, an

medium or large firms (personal communication).

²⁶Lima (*op. cit.*, p. 138). Lima cautions, however, that these reports do not mean that these workers actually *did* obtain jobs in sales or shopping malls or offices, but that this was—at the least—a strong fantasy that they had about the future (personal communication).

²⁷These critics point to labor practices and working conditions as unfriendly to labor. Local-firm owners and their associations, in turn, are also critical of these policies. They allege bias in against local and smaller firms, to which the subsidies are, in effect, unavailable. Also, workers’ hopes of upward mobility to more desirable work *outside* the factory—whether in jobs or self-employment—are consistent with findings of large turnover of workers in such factories.

intense dislike for them.²⁸ They speak of their jobs as “humiliating” to their sense of self-respect, and as “stigmatizing” them in their community—for having to work alongside “people who never studied” and “no-good people [*gente baixa*]” (pp. 138-139). They speak of the harsh discipline and hierarchy of the factory environment,²⁹ for being constantly “monitored,” and for having to work night shifts. In contrast, Lima says, these workers “idealize” the environment of office work—“clean, more involving of one’s head, and easier” (p. 139)—again, confirming the textile-firm owner’s complaint. Workers are grateful for these “undesirable” jobs, then, because they are—in contrast to jobs in agriculture and construction—the only “professionalizing” stepping stone to something else available for those *without* basic literacy and skills.

In conclusion, the jobs in these modern plants represent the only way, in workers’ minds, to substitute for the *lack* of literacy, skills, and experience—rather than requiring more literacy and more training, as the popular discourse would have it. Workers see employment in

²⁸For this combination of gratefulness and dislike, see, for example, Natalacchio with respect to textile and garment firms in Ceará and Pernambuco (2001). A variation on this theme also runs through a study by Moreira (199X) of women workers in the dispersed labor “cooperatives” promoted by large outsider firms, and by state governments, in the garment industry—particularly in the state of Ceará. The first chapter that reports on her interviews leaves one surprised at the harshness of the work environment, at least for someone expecting more modern work conditions and—given the “cooperative” form—more room for worker discretion and expression of worker views. The “cooperative,” however, usually turned out to be a mere outpost of the firm, with a former firm employee or manager as “president” of the cooperative; workers had no formal contracts, fringe benefits, or other privileges of formal employment, let alone the “democracy” of cooperativism.

Moreira’s second chapter on these women’s work in the cooperatives, interestingly, conveys the *opposite* impression: the women are “grateful” for their first paid employment, for earning income that has now improved their position in the household, and—for those who might have worked previously in a larger factory or other establishment—liked the less hierarchical environment of this smaller, more rustic operation where they worked for piece rates and hence at their own pace, and were closer to their homes.

²⁹Some plant managers reported that their biggest problem in introducing high-performance practices was not their workers, but their supervisors which, therefore, had to be particularly trained in this area. Natalacchio reports that in Ceará, one of the reasons for high turnover rates was that supervisors were “extremely authoritarian....[having] little patience with workers’ mistakes” and dismissed them for the smallest of infractions. They conducted courses for the supervisors, therefore, to teach them how to “treat workers in a more respectful way” (2001:15).

manufacturing plants, then, as a pass-through—even if, in reality, this turns out to be a fantasy.³⁰

This also contributes to the high turnover in these plants, now considered prejudicial to competitive manufacturing and the supposed greater discretion, autonomy, and more varied skills that it requires.

What's wrong with illiteracy?

The aforementioned views expressed by firm owners and plant managers turn out to be not limited, actually, to firms operating in the Northeast or even in countries outside Brazil. A 1998 McKinsey study of productivity in *several* sectors of Brazil—mainly the South and Southeast—noted first that the average educational attainment of the Brazilian workforce was roughly half that of Korea, Japan, and the U.S; average schooling of the Brazilian workforce was 5.6 years as vs. 11 to 13 years in the latter countries.³¹ Similarly, the study found Brazilian labor productivity to be only 22% of the U.S. level; even when agricultural workers are excluded, the level is still a low 27%). The report concluded optimistically, at the same time, that it was definitely possible for firms to live with the illiteracy and assumed low productivity associated with it, partly by circumventing it.

³⁰Ironically, in a 2002 interview, the recently abdicating governor of Ceará—Tasso Jereissati, reflecting on his past three terms in office—made somewhat similar judgments about the manufacturing sector (Almeida & Guimarães 2002:3). “Industry,” he said, “—in the world in general as well as in Ceará—is less and less the most important employer. At the world level, manufacturing isn’t where the action is anymore. And here, we believed for many years that industry would still be the engine of growth and of employment generation....” He went on to say that the state had had an excellent year in the growth of the service sector, which “drove the most important generation of employment in the state (p. 3). (Translation mine.)

³¹McKinsey report (March 1998:9ff), “Synthesis and Implications.” Sectors studied were airlines, automotive, food processing, food retailing, residential construction, retail banking, steel, and telecommunications. A number of these sectors, it can be seen, were even less “traditional” than garments, footwear, and textiles typical of poorer regions and countries. I thank Lant Pritchett for drawing my attention to this report.

Despite the marked disparity between Brazil and the industrialized countries, that is, the study reported that labor skills—defined as “the trainability of the workforce”—were “*not...an obstacle to higher productivity*” (p. 1, italics mine). With respect to blue-collar workers in particular, the basic skills and trainability of the workforce were “*not a binding constraint on productivity improvement in any industry*” (p. 9, italics mine). Examples were cited for the sectors of food processing, food retail, automotive, milk, and biscuits.³²

Consistent with the impressions from our interviews, in fact, the study explicitly pointed to the role of training programs by Brazilian plants in helping firms to “circumvent” the illiteracy problem. Companies “*compensate for the lack of education of their work force by providing very targeted training programs,*” the cost of which is “modest compared to their productivity benefit” (p. 6, 9; italics mine). Brazilian blue-collar workers could be trained “to run the new, more productive business systems, *in spite of a lower degree of education*” (p. 3, italics mine). The lower level of Brazilian labor skills, in other words, was not “a constraint for more accelerated growth” (p. 3).

Reports of the “surprising” compatibility of lower workforce literacy and skills with modern production methods, in addition, have not been limited to Brazil, or even to developing countries. The McKinsey study of Brazil brought in supporting examples of such compatibility from the U.S. *itself*, in which lower literacy was not an impediment to higher productivity (p. 6). A Houston housing builder, for example, achieved worker-productivity levels “four times” as

³²P. 9. While noting that labor skills might not “provide a constraint for more accelerated growth” (p. 3), the report concluded nevertheless that “the demand for more highly educated workers will also grow” (*Ibid.*). Hence the report’s positive view of programs to allow “a larger fraction of Brazilian youth to acquire *at least some* secondary education (p. 6, italics mine).

high as Brazilian [?] firms in the same [?] sector, using “Mexican agricultural workers” with the same low level of literacy as Brazilian construction workers. (The Mexican workers, to boot, were not even fluent in English.) A Richmond, Virginia biscuit producer had a similarly successful experience with semi-literate employees, “many of whom had not completed high school and had difficulties with reading and writing.” He found that they were nevertheless able “to fulfill complex work within a highly automated plant.”³³ These companies “tended to *compensate* for the lack of education of their work force,” as the report said, with “very targeted” training programs (p. 6, italics mine).

In a related set of findings, some studies of plants that have relocated from the industrialized to the less industrialized countries have also shown levels of productivity at the new production site as high as, or even higher than, those of the more advanced home country. Similarly, this was achieved with a much less literate labor force and significantly lower wages—even in more skill-intensive sectors than garments and footwear. Shaiken (199X), for example, studied a large General-Motors assembly plant that re-located in the late 1980s from the industrial U.S. Midwest to a rural area of northern Mexico without a manufacturing tradition. He found, to his surprise, that the new plant achieved the same levels of productivity, and only after a year or two, as G.M.’s U.S. plants. At the same time, the new plant’s Mexican labor force had significantly less training and on-the-job experience than the workers in G.M.’s U.S. plants, and G.M. paid the Mexican workers one-quarter to one-fifth of the wage prevailing in the U.S. plants. (G.M. *did* require a high-school education of the new Mexican workers.) But, as in our Northeast cases, GM preferred workers *without* experience in this sector, and for the same

³³[word missing in last quote?]
Fear of education/U.S. South

reason.

Summing up. The findings reported in this section on manufacturing plants are clearly at odds, in conclusion, with the assumptions behind the calls for a more literate workforce, let alone the claim that more schooling brings greater returns to workers—at least in manufacturing. Firms were able to circumvent illiteracy and inexperience, and compensate for the lack of education, by investing in firm-specific training. The circumvention, also, was not peculiar to Brazil or its Northeast.

In many cases—and particularly in Northeast Brazil—governments subsidized this training. This takes the story into the realm of policy—prematurely, in contrast to this section’s focus on the behavior of firms. I postpone the discussion of training subsidies and their economic effect on outcomes to a separate and later section, and turn now to a discussion of why the behaviors and attitudes reported above are both unsurprising *and* surprising.

Surprising or unsurprising?

That firm owners might worry about “too much” education, rather than too little, should not come as a complete surprise. Nor are these views peculiar to Northeast Brazil, or to the current period. This section explains why.

Rural fears. We are used to hearing about the fear of education as it arises from agriculture and rural life, backward production techniques, and low efficiency and productivity—often from an earlier period. This is also linked to a fear of “agglomeration” of workers—their living

together in villages or towns, where services may also be concentrated. The latter fear, of course, is quite different from the current positive portrayal of “clusters.”

In Northeast Brazil, landowners have expressed these fears in terms that are remarkably similar to those of the modern firm managers.³⁴ “Give them a little schooling,” they would say, referring even to the children of the workers, as well as the workers themselves, “and they’ll get uppity and make trouble—and the next thing you know, they’ll be migrating to São Paulo in search of construction work.” This kind of exodus, they feared, would de-populate the countryside of a cheap labor force, pulling up rural wages.

Even if the migration of their workers were cyclical, landowners said, they worried that the workers would come back from the South with more “entitled” attitudes about wages, worker rights, and relations to their superiors.³⁵ They also worried about the “dangers” that would ensue if their workers lived together in towns rather than scattered within or nearby their properties. Though this collection of concerns may be familiar to our ears with respect to landowners, we certainly do not associate it with urban and modernizing manufacturing elites.

The rural fear of education and the out-migration associated with it also lay behind the widespread landowner *support* for rural development programs in the Northeast, and to this

³⁴As expressed to me in interviews I conducted with landowners in the various Northeast states in the 1970s and 1980s. These views came out, not in response to questions about education but in response to questions about other things—agricultural production, relations with tenant farmers and with workers, etc.

³⁵In the U.S. South, large landowners in the U.S. South expressed these views in almost the same words and fears, as discussed later.

In the 1990s, some of the modern Northeast specifically located in rural areas with no manufacturing tradition, lured by the recruitment policies of state governments. In a variation on the “countryside” fears reported in the text, these governments not only gave higher subsidies for rural location, but promised they would not locate other firms in the same town, so there would be no competition from other firms on the labor market.

day.³⁶ A large-scale form of such programs was promoted and funded in the nine Northeast states by the World Bank in the late 1970s and 1980s. One of the important rationales for these programs—also heard from the mouths of politicians, government technicians, and urban elites³⁷ alike, and to this day, was that such programs would help to “fix” the rural population, and particularly the rural labor force, in the countryside (“*fixar o homem no campo*”).³⁸ The programs—focused mainly on rural infrastructure, and agricultural credit and extension—typically did not include basic education; when they did, usually as suggested by the World Bank in pushing for more “integrated” interventions, the component was typically small, unsuccessful, or not sustained after the project ended.

Even outside the WB-funded rural development projects, concerns about education and agglomeration influenced debates among government technicians about the design of policies and programs. During the settlement programs promoted by the Brazilian government during the

³⁶Net out-migration from the Northeast was -10.5% in the 1950s, and has steadily declined through the years to—albeit still a net *outflow*—-2.0% in the 1992-1996 period. The absolute numbers are still high, and have fluctuated markedly on an annual basis, from -96.8 thousand in 1991 to -170.6 thousand in 2000. (Based on data from Mansueto Almeida).

³⁷It was not long before urban elites—in the capital cities of the Northeast *and* the South, to which Northeasterners migrated in great numbers—also supported such programs, when they began to perceive rural-urban migration as bringing increased violence and disease to their cities, and increasing the demands on already stretched urban services like water, electricity, and sewerage.

³⁸The desire to “fix” people in the countryside was central in the history of U.S. policy, especially during the 1930s and in the U.S. South, when the Depression unleashed a new wave of unemployed rural migrants to the cities. This exacerbated the existing trend of rural-to-urban migration that has characterized the “structural transformation” from agriculture and rural to manufacturing and urban—a feature of the growth of most of today’s industrialized countries.

Two major U.S. public investment programs of rural development in the 1930s—that of the Rural Electrification Administration (REA) and the Tennessee Valley Authority (TVA)—were launched with this same justification of keeping people from migrating to the cities. (This justification also combined with a more ‘populist’ opposition to the increasing power of private utilities—both programs gave prime emphasis to public power; as well as with the North-South politics of providing investment funding to the South in return for political support for the federal—interpreted by Southerners as the “Northern”—legislative and executive policy agenda.)

1970s and 1980s—some involving agrarian-reform settlements—public-sector professionals debated the implications of the proposed physical layout of the new settlements. Some advocated a pie-shaped design for the settlement: each farmer would hold a plot of land in the shape of a piece of pie, with his house situated at the narrow end in the “center” of the pie. This was deemed desirable by these articular proponents because this center would agglomerate other plot-holding families and to where the school, health clinic, and other services could also be conveniently concentrated.

Others argued for a more traditional layout of square or rectangular-sized plots, with owners living dispersed, each on his own lot. Some of the technician-proponents of the grid layout of plots argued against the pie shape, on the grounds that the combination of a school and clustered living would turn the new vila into a “hotbed” of schooling, socializing, and information exchange. This would distract the new farmers and their families from the world of farming, they argued, and turn the vila into the first waystation for outmigration to urban areas.³⁹ If each family were to live distant from the other, in contrast, no such center of “fatal” attraction would emerge. (The grid design won out.) Though for slightly different reasons, then, both the landowner and the civil servant were averse to out-migration.

³⁹The pie layout and concentrated living were problematic for other reasons. As cited by technicians concerned about the pie-shaped design, when farming families are used to living dispersed and then come to live in agglomerations, their backyard animals—which previously roamed freely, foraging for food—cause damage to the backyard gardens of other households, as well as wreaking other kinds of havoc. One incident leads to another, as the invaded neighbor kills the offending animal, which is often the only asset—a pig, goat, or cow—held by the family. Agglomerated living, then, often brings major conflicts to dispersed families with previously harmonious relations. One often hears or reads about such problems in various countries in which recently rural and farming dwellers come to live in cities.

Today, coincidentally, the Landless Workers’ Movement in Brazil (the *Movimento dos Sem Terra/MST*) has learned this same lesson in the agrarian-reform settlements it manages through a contract with state government. Their consultation with those receiving land revealed the latter’s preference for the dispersed settlement on rectangular

The concern about the “dangers” of agglomeration, schooling, and other kinds of connectedness to the outside world did not necessarily take the form of explicit opposition to basic education. Nor was there necessarily a public discourse in these terms, though Northeast landowners certainly spoke freely of their opposition to education in my interviews with them. But these worries, it is generally agreed, translated into a clearly inhibiting effect on the supply and quality of public education.

That agglomeration was so feared in rural areas must sound rather quaint today, when we so highly value the *benefits* of agglomeration—exchange of information, propitious conditions for the formation of social capital and, of course, long-recognized economies of agglomeration. Today’s enthusiasts of clusters, trust, networks, and social capital, that is, would certainly have viewed such agglomeration—of the kind facilitated by the pie design—as good, not bad. For rural elites, however, creating the conditions under which the labor force would come together—and become educated and informed—was to be feared, not valued.

From rural elites to urban elites. Although we might be accustomed to hearing landowners speak of their distaste for educated workers, it was surprising to find these views in the manufacturing sector. In certain ways, however, these views could also be considered *not* surprising. After all, the industries studied here—footwear, garments, and textiles—are not necessarily like other sectors. Particularly in poor regions and countries, they are known to be labor- and low-skill intensive (with the possible exception of the most advanced plants in the textile industry), and they have a long history of using cheap and illiterate labor. They tend to

plots (Lima, in a personal communication regarding a previous draft of this paper).

take a “low road” to global competition by cutting costs—particularly of labor—rather than improving quality and productivity. That these sectors have become more footloose internationally during this era of more globalized and highly competitive international trade would seem to have reinforced these low-road tendencies—despite the talk of producing for high-end quality niches. Even if the firms in these sectors may not follow as “modern” practices as some others with respect to the schooling of their workforce, however, they represent an important share of employment and output in the Northeast, as noted earlier. If only for this reason, they contribute importantly to the formation of attitudes among urban business elites in Northeast Brazil.

In contrast to footwear and garments, the marked technological advances in the *textile* industry over the past decade—including in Brazil and its Northeast⁴⁰—might suggest a greater relative concern about an educated workforce relative to the garment and footwear sectors. Natallichio (2000) found this to be the case in Ceará in the late 1990s, but it may not always be such—or perhaps the differential may not be that significant. A study of 28 textile firms in the Northeast state of Ceará, found that in the year 2000 they were requiring that new job applicants have completed the first eight years of schooling (“*primeiro grau*”). In actuality, however, 44% of textile workers had *less* than eight years of schooling in 1995-1999 (33% had the full eight years but less than high school).⁴¹ Textile firms, it should be noted, were not insignificant

⁴⁰In the Northeast, a substantial share of the program to support Northeast industrial development (34/18, FINOR) involved subsidies for the modernization of the textile industry. Indeed, an ex-director of the program often recounts a story—perhaps apochrypal—of the agency having gathered together the old obsolete equipment of some large textile firms receiving the new investment funding and burned it. The purpose was to keep that equipment from re-appearing in the quite substantial second-hand market.

⁴¹Dias (2000:85), also citing Rosa & Mello (1994:29) [check change from 1995-1999]. Lima also reports, based on *Fear of education/U.S. South*

employers in the Ceará economy: they accounted for 18,000 jobs—13.3% of the labor force in manufacturing in the state—and 40% of industrial power consumption. If even the most capital- and technology-intensive of these “traditional” employers could co-exist with these low levels of literacy, this suggests that semi-illiteracy of the labor force did not characterize only traditional and labor-intensive sectors.

Far from being unrepresentative or old-fashioned, then, the views of owners and managers of these large firms—many of them from the more developed South—would seem to represent an important sector of modern business opinion. And in that the preferences of business elites influence the budgets of state and local governments—where matters of basic education are decided and partly financed—these views might well figure importantly in determining the level of support for better basic education. At the least, they might translate into low willingness to support tax expenditures for it.⁴²

interviews with textile workers in Paraíba and Ceará, that though firms formally required eight years of schooling, they do not observe this in practice (personal communication). This is consistent with Natalicchio’s interviews with human-resource managers in textile plants in Ceará and Paraíba, who complained that they were not able to get job applicants who had eight years of schooling *and*, and at the same time, were interested in working in a factory (2001). [goes with prior Lima material on worker views or subsequent non-textile-specific views on this?]

⁴²[To earlier?]: In a survey of Brazilian elites, Elisa Reis found that, on the one hand, business elites (along with others from the political, government, and labor sectors) named education as their highest priority for reducing poverty. On the other hand, they were not willing to support increased expenditures or increased taxes for it. (The latter opinion came out more clearly in a subset of follow-on more open-ended interviews.) They blamed the poor quality of education on the “inefficiency” of government, and thought improved education could be achieved through “an increase in efficiency” (Reis 200X [a shorter version in English can be found in 200Y]; and personal e-mail communication.)

A more recent poll of Brazilians in general found that they ranked “improving education and health” in only fourth priority (16% in February of 2002 and 13% in June)—lower than combating crime (1st with 18% in February and 40% in June), increasing development (2nd), and combating corruption (3rd). Note that though the concern about combating crime had increased substantially since the February polling of the same year, the ranking of education stayed in fourth place, and actually declined by four percentage points from February to June 2002. These rankings and percentages were in response to the question: “If the [presidential] election were held today, which of the [the] following factors would carry the most weight in your choice of candidate?” (CNT/*Sensus* poll, reported in Fleischer, 22-28 June 2002, p. 5.)

Which model? In certain respects, the disparaging attitudes we found toward worker education and skills experience *are* surprising. The attitudes we report seem to go against the grain of the widespread current focus on the need to improve public education, literacy, and work skills. Much of this advice stems from the perceived need to keep up with the radically changed methods of organizing production in the 21st-century world of post-Fordist manufacturing and global competition. This call to business and to governments has become the mantra of economic-development and business-school advice throughout the world. With respect to workers in particular, it emphasizes the greater literacy required by information technology and numerically controlled machines, the increased reliance on workers to identify problems as a way of improving quality and efficiency, and the multi-skilling required by team production. These features of the organization of production seemed common in the large plants we visited.

In Brazil, the calls for a better-educated workforce appear frequently in public discourse—from government, business publications, the press, and often business elites themselves. Yet, the business elites represented by those we interviewed were worried that workers would have too *much* education, not too little. And state-government officials were proudly “marketing” to outside investors their comparative advantage in cheap and docile labor. This, as we know, is the hallmark of illiterate and unskilled workforces.

In a study of changes in Brazilian labor markets, Lima found a similar “paradoxical” difference between the discourse and the practice (1997:143). Northeast firm owners, he reported in 1997 (p.143), are in no way oblivious to the new thinking about the need for a better

educated and different kind of workforce. Indeed, he says, many of these executives are self-declared admirers of the East Asian “model”—which they see as combining enhanced worker productivity with low wage costs. This is, however, a woefully incomplete reading of the East Asia story, he says, given that the enhanced worker productivity of the East Asia story was partly the result of many years of public investment in widespread basic education.⁴³ The “low salary costs” of the East Asia story were also possible, of course, partly because of the heavy public subsidization of “wage goods” like housing, health care, and transport to work. Both of these key pieces are missing in the “East Asia model,” as translated by Northeast firms to their world.⁴⁴

How do we reconcile the strong link now being made between a better-educated labor force and a country’s competitiveness with the complacent views about illiteracy among these “modern” executives and plant managers of Northeast Brazil? Which rendering of the truth is

⁴³Lima notes, also by way of explanation of the “paradox,” that the high worker productivity and educational requirements of the new industrial model may be less binding for the garment and footwear sectors so important in Northeast Brazil, “because most workers carry out simple repetitive tasks that are easily and rapidly taught” (p. 143). In the first stages of the East Asian miracle story, however, garments and footwear were significant; later on, of course, East Asia’s loss of any low-cost labor advantage to South and Southeast Asia caused it to move “upmarket” to other sectors. Also, the garment and footwear factories we visited in Northeast Brazil, had at least already moved to cell production and multi-tasking, said to require more discretion and skills from workers.

⁴⁴A remarkably parallel “mis-translation” of a successful industrialization story relates to the interpretation by Northeasterners of the Third-Italy experience in the Emilio-Romagna district of Italy. I met with an association of young businessmen in one of the Northeast states who had traveled to Emilio-Romagna to learn some of the lessons of the Third-Italy experience. When the president of the association was asked what had impressed him most about that voyage, he referred admiringly and surprisingly to the fact that “they had no labor unions.” This was a surprising response, given that in this particular region unions were an important part of the story of the region’s advance from a stagnant artisan economy in the 1950s to a world exporter today. In particular, unions were important to the collective provision of training to the workers of small and medium enterprises. Observers of development in poorer countries point to the lack of this adequate training of this nature as a major defect of existing training institutions—as discussed in a later section on subsidies for training.

The literature on the Third Italy itself has contributed to this mis-translation of the experience; perhaps more accurately, it has been less interested in researching this particular issue. For a recent study of the period that led up

more accurate? Are better skills and education really necessary to competitive manufacturing in the 21st century, at least in a place like Northeast Brazil? Are the firms that re-locate to or open branch plants in the Northeast a throwback to an earlier Fordist or even pre-Fordist period, and not the epitomization of modern-day manufacturing? Or are they, as Natallichio says, “regressing” to the Northeast mean? Is the illiterate labor force in Northeast Brazil really a comparative *disadvantage* in world of liberalized and globalized trade—as the new thinking would have it.⁴⁵ Or is it truly the *advantage* proclaimed by firms and state economic development officials recruiting new outsider firms? Though these questions cannot be adequately addressed in this paper,⁴⁶ suffice it to report a few findings, however, that—although perhaps muddying the waters that may help illuminate the seeming paradox of our findings and also point to some important questions.

A recent number of “second-wave” studies of particular manufacturing and service firms has suggested that the high-performance human-resource practices with respect to workers in particular are less commonly or less consistently found in modern competitive firms than was originally thought. Though certain practices such as just-in-time inventory management and total quality management may be prevalent in such firms, they are often found to co-exist happily with Fordist, de-skilled, and other “old-style” production.⁴⁷ These findings, then,

to the Emilio-Romagna of today—starting in the immediate postwar period—see a study by Criscuolo (2002).

⁴⁵[Adrian Wood]

⁴⁶That these questions remain unanswered is perhaps a result of Banuri’s interpretation that whereas economists of the U.S. have paid substantial attention to the importance of labor markets and labor skills, this topic has been neglected by many economists working on less developed countries (ed., 1991).

⁴⁷To mention only a few such studies, Osterman (199X) found, in a survey of top firms in the United States, that only 30% used high-performance practices with respect to labor, and those that did use them did not use the whole

suggest an explanation of Lima's paradox—namely, that the worker acting “with a mind of his own” may not be as necessary to international competitiveness as the new discourse claims.

Whether the pro-education discourse about illiteracy is empirically accurate or not, these admonitions may nevertheless be important on their own in heightening public awareness about the need for improved education. At the same time, modernizing business elites in the Northeast may—in their hearts—be less convinced or concerned. This is certainly consistent with their reports that the low degree of education of their workforce is not that much of a problem.⁴⁸

Our findings are also surprising with respect to the desire of governments in poorer

set of them. He argued, moreover, that these practices are effective in increasing productivity only when adopted together as a group. This latter finding would be consistent with Natalicchio's study of human-resource practices in garment and textile plants in Pernambuco and Ceará (2001); she found that the high-performance practices were not only adopted in a scattershot way, but they were often intended mainly for other purposes—such as reducing absenteeism—and did not add up to a genuine high-performance package or set of such concerns.

Another study of plants manufacturing X in the midwestern United States (Knauss, 199X) found that although the firms had adopted important modern practices unrelated to labor with good results, labor practices were more like the old system than the new—hierarchical, un-worker-friendly, etc. The author suggested that this was not simply a case of a sequenced adoption of a some of a larger set of better practices, but that the new non-labor-specific practices were perfectly compatible with old labor ones. They did not represent, moreover, a sequenced adoption that would eventually lead to a coherent set of high-performance practices—consistent with Natalacchio's findings reported above.

Godard [?] & Y (2000) have written a more critical review article of the new-paradigm literature, citing various studies that suggest the new model of production is in many ways “worker-unfriendly.” (For similar findings, see Fleury/Humphrey on this for Brazil, SINE for Ceará).

⁴⁸[put this footnote where question the relationship between education and growth]: Reviewing earlier periods of industrialization in the United States, particularly the 1879-1929 period, Gavin Wright actually finds that most workers in fast-paced, mass-production, and heavy industry—in which the U.S. led during that time—were *not* well-educated, as well as not being native-born Americans. (In 1910, the foreign-born and their working sons accounted for 60% of machine operators [clarify this with following:] and for 66% of workers in mining and manufacturing—a labor force, that by world standards of that time, was not particularly well educated.

Even though these workers earned relatively high wages at the time for uneducated and unskilled workers, this constituted a return to work that was rough, disagreeable, and physically demanding—rather than to education or prior skills. (Though the wages were high, it should be noted, they were still lower than those of skilled craft workers in older technologies.) In this instance and in this period, then, high wages and strong manufacturing development were *not* associated with education (Wright [1990:654], also drawing on Kravis [1956a]).

regions or countries to attract “leader” firms to move there from more developed regions or countries, or to establish new plants there.⁴⁹ Governments believe that such firms will to their poorer region superior set of attitudes, practices, and connections to the outside world to poorer regions. Through customer-supplier relationships in particular, the outsiders will have a healthy effect on the more backward firms. With respect to labor practices in particular, the outsiders are often said to pay higher wages and provide better working conditions—setting an example for the rest.

In our research in Northeast Brazil, we heard these same observations with respect to certain plants that had re-located from the South. In fact, some expressed the view in the form of a complaint, in particular by local firms and their associations, that outsider firms were bidding away the local firms’ best workers. The small- and -medium-sized footwear industry of the state of Paraíba, for example, complained vociferously to the state government in the 1980s when it learned of the impending arrival of two large firms from Southern Brazil, attracted in part by generous subsidies from the state government—mainly in the form exemption from the value-added tax (which could be as high as 17%). As is often the case in such situations, the projected new output of these outsider firms would double shoe production in this small state—one of the Northeast’s major footwear producers. Local producers feared more that these firms would lure away their workers—and particularly the best ones—than they feared product competition from the new firms.⁵⁰

⁴⁹In Brazil, such firms are also termed “mother firms” (*empresa mãe*) or “anchor firms” (*empresa âncora*).

⁵⁰Pinhanez (199X). The local firms objected so vociferously that the state government intermediated a deal between the arriving firms and the local firms by which the former would give various forms of technical assistance in shoe production to the latter.

Strangely, some of the Northeastern transplants of the Southern firms became more *like* Northeast firms upon locating in the Northeast—at least with respect to the workforce practices—than like leaders bringing enlightened practices from the South. Natalicchio (2001) found this to be true among garment and textile firms in Pernambuco and Ceará, with respect to human-resource practices. She termed this seemingly surprising finding as a “regression to the mean.” Instead of standing out from their environment like the stereotypical leader firm, the putative leaders blended into it—at least with respect to human-resources practices.

Alternatively, and less unflatteringly to the Southern firms, one might hypothesize that the Southern firms had *not* regressed to the mean, but that the Northeast firms were *already* engaged in some of these more modern or “best” practices prior to the arrival of the outsiders. Though this may seem unimaginable, a recent cross-country study on foreign direct investment came to a similar conclusion.⁵¹ The authors contested the results of earlier studies that had found higher productivity of foreign firms over domestic firms in developing countries—the latter view being widely held in the development community. The earlier studies, they said, had drawn on *economy*-wide figures of productivity for purposes of comparison to domestic firms. When they revisited the data of the earlier studies, however, they controlled for sector. With this, they found that transnational firms actually had no higher productivity than domestic firms in the same sector. The TNCs, in other words, tended to be drawn to the sectors where domestic firms had *already* demonstrated high productivity. Similar findings emerged from an earlier study by

In another such case outside Brazil, and more recently and “new-economy,” software firms clustered in the city of X in New Zealand also organized protests against an impending deal between the government and a large electronics manufacturer, on the grounds that such a large firm would drain away their best employees [JT seminar/search]

⁵¹Clerides *et al.* (199X). [Aitken/Hanson *et al.* findings too for Colombia and Pakistan, but not in general?]

LaPlane and Sarti (199X) of the top largest firms in Brazil—both multinational and domestic, and in the same sectors. With respect to several indicators, they found no differences between the multinationals and the domestic firms.⁵²

It is not obvious whether, in any particular sector or context, outsider firms would be leaders or regressors. Given the strength of the view in policy and political circles that outsider firms bring something new, and should therefore be courted and subsidized, the question is an important one for further research. Suffice it to say for purposes of this study that the jury is still out on whether or not outsider firms bring new practices and attitudes about the workforce, and under what circumstances. That the Northeast outsiders regressed to the mean with respect to workforce practices, then, may be just as much grounds for the *lack* of surprise as for surprise.

Summing up. We tend to associate the fear of education, in conclusion, with an “earlier” era of extensive agriculture, backward production techniques, and low efficiency and productivity. Appearing more in rural than in urban settings, more in stagnant than in modernizing sectors, and more in agriculture than in manufacturing, the fear emerges as a worry that education will reduce the docility of the labor force, and cause workers to migrate. We certainly do not associate these fears and attitudes, however, with urban and modernizing manufacturing elites—let alone those looking toward global competition and the high-

⁵²Contrary to standard views on outsider firms in the 1990s, LaPlane & Sarti found that outsider firms behaved no differently than similarly-sized local firms on the following indicators: they did not invest in more “modern” sectors (as opposed to resource-based sectors), they did not export more than local firms, and they did not have greater spillover effects on the economy of the region in which they were located. With respect to the latter, in fact, the authors found that the multinational firms bought more of their inputs abroad than did domestic firms of similar sizes and in the same sector (LaPlane & Sarti, 199X). (The latter finding has been documented for the 1990s in several case studies.)

performance practices associated with it.

So far, this paper has focused mainly on attitudes and behaviors of large modern firms, and has said little about policy in influencing them. The next section moves toward that policy realm, by looking at the incentives and disincentives created by a particular policy used by the Northeast states—the subsidization of large-firm training. It shows how such policies can inadvertently affect the attitudes of firms toward education, as well as emitting a strange set of economic signals around training in general, and the distribution of its benefits in the economy. Though the training described in the following section is based on the Northeast case, it is also common in other countries—and not only the poorer ones—as well as in the more developed parts of Brazil itself.

3 - Living with illiteracy by subsidizing training

Our interviews with firms, together with the findings of the McKinsey report on Brazilian productivity cited earlier, revealed how firms were able to live with illiteracy—or actually circumvent it—through firm-specific training. As in many other countries, Brazil—and the Northeast in particular—subsidizes firm-specific training of large firms. This leads us away from the dynamics of firms to those of policy. It also shows a direct link, strangely, between training and the persistence of poor education.

Brazil's Southern firms were able to so quickly bring the newly-hired workers up to Southern productivity levels partly because government subsidies bore a substantial part of the costs of training—through a federal-government fund, administered and in other ways facilitated by state governments.⁵³ This kind of public financing of firm-specific workforce training for

⁵³Most of the training subsidies going to large firms are from a program using funds of the Fundo de Amparo ao Trabalhador (FAT) called Programa Nacional de Qualificação do Trabalhador (PLANFOR), which started in 1995. In the year 2000, FAT/PLANFOR trained 3.1 million workers in Brazil, of which almost 30% were from the Northeast; FAT/PLANFOR expenditures for this training were R\$383.8 million in the same year—23% of this total going to the Northeast. These funds were available not only to large firms, but to other institutions engaged in training—like nongovernment organizations (important in the state of Pernambuco's use of FAT funds [cite Melo]), and labor unions (important in the Southern states). FAT/PLANFOR are not the only funds available for training, though they are a significant source; they require, for example, 20% matching funds from the state governments that administer them.

It is ironic that federal-government funds were so key to these training subsidies, given that the federal government was at the same time highly critical of the fiscal implications of the firm-recruitment incentives of the state governments to lure firms to the Northeast by their state governments—incentives of which the training subsidies were a part.

Acting upon its disapproval, the federal government had issued regulations and introduced legislation in the Congress to prohibit this use of the value-added tax which, though administered by the states, belonged to the federal government and was re-allocated back to the states according to a formula taking per-capita income into account. The value-added tax is the single largest source of state revenues. The federal government disapproved in particular of the states' exemptions of firms from this tax—as well as of the competition between states to provide greater subsidies than the competing state—because this contributed to the perennial debt crises of the states. The federal government had found it to be politically difficult *not* to bail the states out of these crises.

large firms is not uncommon, particularly in lagging regions, as part of recruitment incentives to outsider firms.

Scholars of industrial relations often view training subsidies to large firms as a positive example of public-private cooperation that leads to more relevant and customized training institutions—compensating for the inadequacy of public or other training institutions in the region. The subsidies may also have important spillover effects in the region to the extent that the firms train more job candidates than they hire; or, less directly, the firms “spill” trained workers into the local economy by way of turnover, the rates of which are usually high in poorer countries and labor-intensive sectors. This section shows how this particular form of subsidizing workforce training is, however, a mixed blessing with respect to education and its improvement.

The large outsider firms we interviewed had received an average of three-months of fully-subsidized firm-specific training—carried out mainly by the firm on the shopfloor—with each worker receiving the minimum wage. In addition, the firm did not have to actually hire the trainees; during the training period, they were considered to be “scholarship-holders” (*bolsistas*) of the government training program, and paid the minimum wage—a “training wage.” Firms reported appreciating especially this latter provision, because it relieved them of the burden of having to formally contract the trainees during the training period.

Also appreciated by the firms, the state governments allowed them to use the subsidies to take on significantly *more* trainees than they intended to hire. Hence firms reported training

between 40%-65% more job candidates with this cost-free arrangement.⁵⁴ This enabled them to choose from among the best-performing trainees at the end of the training period. Though many firms said they valued these two particular arrangements, they almost never mentioned that they valued the subsidies also for their monetary value, enabling them thereby to reduce their own outlays for training—nor that the subsidies their decisions to move to the Northeast or locate in a particular state.⁵⁵ Indeed, they reported previously having typically financed their own workforce training in Southern Brazil (Dohnert, *Ibid.*).

Second-best or worse?

Firm-specific compensatory training is, of course, not the first-best solution that improved education would be. In certain ways, however, it may make “second-best” sense in the short run—at least when the only option is to do nothing about these problems until the time that

⁵⁴Dohnert (1999:42-43, and JT interviews). A large textile firm I interviewed in Ceará reported training 40% to 60% more job candidates than it hired (JT206). In addition to the training subsidies, the outsider firms received exemptions from the value-added tax administered by the states (ranging from 13% to 17% of the value added of sales) for a period of 10-15 years.

Also, firms received both short-term loans for working capital from parastatal banks, as well as long-term investment loans; interestingly, the former were particularly advantageous, since working-capital credit could not be obtained by most firms from parastatal banks, unless it was linked to large investment credits—and interest rates on loans for working capital from commercial banks was prohibitive. Given Brazil’s high interest rates during the 1990s, these favorable terms were of substantial value.

Finally, and as reported to us by firm owners and managers, consultants, and bank managers and staff themselves—the credit subsidies reduced the costs and risks of the new firms’ plants substantially, by reducing the number of years before which they started to receive a return on these investments.

⁵⁵The firms stressed most consistently the exemption from the approximately 17% value-added tax (ICMS), and the “*confiabilidade*” of the state governments with which they negotiated their packages.

Similarly, a survey by Vasconcelos (1999) of the reasons firms chose to locate in Ceará, found that the firms they ranked “confidence on the state government” (*confiabilidade*) highest. (It should be noted, however, that the survey instrument did not specify “training subsidies” as one of the choices to be made by firms in this closed-ended

improved public education and training institutions emerge. Once firms develop a taste for a better-educated workforce, one could argue, this could initiate a chain of events leading to broader support from these business elites for public education.

In certain ways, however, this approach to enabling large outsider firms to compensate for illiteracy is seriously *less* than second-best, and it actually exacerbates an existing market failure. The reasons are listed only briefly here, because they appear in the literature on training and development:

First, the compensatory literacy classes offered by firms are not without cost to workers, those least able to finance such an approach.⁵⁶

Second, in that large firms often find it worthwhile to themselves invest in training their workforce, the training subsidies appear to be economically perverse: they provide public funding to the firms *most* able and likely to finance their own training while, at the same time, *not* subsidizing the small and medium firms (SMEs) that are *least* likely to invest in workforce training.⁵⁷ SMEs, which often account for a significant share of employment—if not output—in poor regions, do not invest in training because of its economies of scale, their well-grounded fear of losing these workers after investing in their training, and their inability to pay the higher

questionnaire. The training subsidies would have been included, implicitly, in the option “incentives” (i.e., tax exemptions, project-specific infrastructure, etc.)—which did not distinguish between the various types of incentives.

⁵⁶Literacy classes offered by firms typically take place after a full day’s work, and at no compensation to the worker; they often require yet additional time in transport from the workplace to the class. (See, for example, Meyer-Stamer for the Southern Brazilian state of Santa Catarina [1998:24]; though he notes that the firms he studied sometimes reduced worker hours to compensate for literacy—or, at least, for external training; we did not find this in the Northeast.) Needless to say, moreover, the literacy obtained through these classes represents a much narrower education than these workers would have been obtained at school.

⁵⁷In the textile industry of Ceará, for example, seemingly paradoxically, large firms preferred *less* experienced workers that they could train from scratch—after a switch to new technology in the 1980s; medium firms, in turn, preferred *experienced* workers, so as minimize their training costs—even if they have to pay somewhat higher wages

“efficiency” wages that large firms pay to retain their trained workers. In this sense, the subsidization of large-firm vs. SME training exacerbates an already-existing market failure.⁵⁸

Third, many large Latin American firms have high turnover rates, including Brazil, particularly in labor-intensive sectors. This causes the return on the training subsidy to be lost—at least by the firm.⁵⁹

Fourth, firm-specific training is considered less desirable economically because the skills acquired are less “portable” for employment elsewhere, and to this extent may not add up to an increased level of training in the economy at large. Less specific training provided by collective institutions—like community colleges, or labor unions—provide greater portability of skills.⁶⁰

Fifth, and finally, recent studies of the economics of firm-specific training in an environment of illiteracy and low skills suggest that it is considerably *less* efficient than hiring

(Natalicchio [2001:13]). Schmitz came to similar conclusions for the garment industry in Pernambuco (1985).

⁵⁸Dohnert (1999) reported that, among the large firms she interviewed in the garment sector of Pernambuco and Ceará, several had previously invested their own funds in training the workforce. For the widely-reported problem of large-firm willingness and ability to finance and provide their own workforce training—regardless of whether they receive public subsidies for it—while at the same time SMEs neither train nor receive subsidies for it—see Schmitz (1985) for Brazil in general and also for garments and textiles in the Northeast state of Pernambuco (1977?)—also for textiles in Ceará and São Paulo (1985, as cited by Natalicchio [2001:13]; Doner & Schneider (2000a, 2000b) for developing countries in general; and Osterman & Batt (199X) for the U.S.

⁵⁹In terms of public efficiency, of course, the investment is not lost if this short-term firm-specific training—as distinct from the subsequent on-the-job training—leads to a pool of trained workers who, upon leaving the firm, are available to other firms in the same sector, many of which will want trained workers but will not be able to invest in training. The latter is typical of SMEs, leading to the paradoxical result that SMEs want trained workers while large firms often do not, for the reasons expressed in the afore-cited interviews. This is one of the arguments made in favor of non-firm-specific training. The extent to which this indirect investment in the training of the job-leavers benefits the local economy would appear to vary considerably from one case to the next.

⁶⁰In the Brazilian South, as in many other more advanced countries, labor unions—along with other institutions—are important collective providers of portable training to workers, and also avail themselves of the FAT training subsidies. Labor unions are non-existent or weak in the Northeast.

workers with at least ten years of education.⁶¹

That subsidized training might help firms feel comfortable with a poorly schooled workforce is not to be found in the education or the training literature. A few studies, however, present the elements that would help to make such a connection. In a study of outsider firms in Ceará, for example, Tyler (1998) posits a direct link to poor schooling from the state-government program of subsidies to outsider firms, of which training subsidies constitute a part. The tax exemptions and other subsidies, he says, crowd out expenditures for education from state and local budgets, let alone for increases in such expenditures. The above-noted studies of Labarca, and also those cited by him, represent another step toward that conclusion.

That training helps firms to adapt to illiteracy is also consistent with a set of cross-country findings reported by Maloney (199X) for Latin America. In findings that are consistent with my interpretations here, his analysis shows that countries with higher illiteracy showed higher gaps between formal- and informal-sector wages. (In his subsequent explanations, he uses the latter category as a rough proxy for small firms.) The explanation for this greater gap in the more illiterate countries, he says, can be found in the way large firms compensate for illiteracy in their workforce: they have to invest more in training their workers than they do in the more literate countries and, therefore, must protect that investment by paying higher “efficiency” wages to keep them from leaving. Hence the greater gap in more illiterate countries between large-firm wages and those of the informal sector, whose small (and often medium) firms do not invest, typically, in training. In Northeast Brazil, actually, the gap would be even

⁶¹Labarca (1998). He also finds that the additional investment costs of such training are as high or higher than the direct cost of the training itself (p. 422).

greater—and hence the required investment by large firms in training as well—given that Brazil ranked among the highest in illiteracy among Latin American countries, and the rate of illiteracy in its Northeast is double that.

Maloney’s findings are interesting in that they differ from the typical explanations for the wage gap between the formal and informal sectors. As is well known, the latter point to causes relating to constraining labor legislation and other requisites of formality, like minimum wages and labor unions. These are typically said to “artificially” raise wages and hence contribute to the existence of a much lower-paying and lower-productivity informal sector alongside the formal sector.⁶² Based on Maloney’s analysis, in contrast, the wage gap between formal and informal wages arises because of the greater “efficiency-wage” premium paid by large firms to their workers for their in-house training. The gap, in turn, is exacerbated by the inadequacy of public education.

⁶²For a recent statement of these views and their application to policy advice, see the analysis for Eastern Europe by Ravenga in comments on the draft proposal for the report on Inequality and the State.

It is not that Maloney does not find these latter these factors to be significant in his analysis. Rather, they turned out to be considerably less important in his findings than the role of illiteracy and poor public education in contributing to the differential.

Corporate social responsibility

In addition to firm-specific training, some large firms also offered free adult literacy classes to their workers after work, inside or in the vicinity of the firm. Some gave financial support to the closest local school (as well as to other public services, like a health clinic); or they even created their own primary school in the community.⁶³ In contrast to the in-house workforce training, firms and others view such assistance to local public services as “corporate social responsibility.” Indeed, the term has become so popular throughout the world that it now has its own acronym, CSR. Calls for and celebrations of CSR have become important in business schools, in the business press,⁶⁴ and among business consultants—as well as among some nongovernment organizations, and even the government sector itself, in the category of “public-private partnerships.” In Brazil, as well, various workshops and seminars have proliferated about how to do CSR, some even sponsored by government or parastatal entities.

Like the subsidized workforce training, these acts of CSR are often complemented by public-sector support in terms of funding or contributions in kind at the local level. The “social-

⁶³Natalicchio reports for the textile sector of Ceará and Pernambuco that firms were offering remedial education classes, citing a very large textile firm training 1,000 workers in this way; they also offered free medical and alcoholism-treatment services (2001:14-15). For Southern Brazil, Labarca (1998:422) cites cases of large firms providing such compensatory training. One such firm with 3,000 workers in production was training 300 and planning to train another 300; another, with 400 production workers, was training 90 (citing Roese, as cited in Fleury and Humphrey [1993]). In studying Brazilian companies that were restructuring to improve quality in Southern Brazil, Gitahy & Rabello (1991)—also as cited by Labarca (*Ibid.*)—found firms giving courses in Portuguese, basic mathematics, and elementary statistics. Meyer-Stamer’s study (1998:24) of clusters in the southern state of Santa Catarina noted that it was common for the high-performing firms to set up in-house courses in basic education (first eight years)—arranging transport and reducing weekly working hours—as well as supporting training in external secondary- and tertiary-level institutions (p. 31). (They also founded vocational training programs, despite the existence of semi-private institutions operating in this field—a common finding reflecting the perceived inadequacy of public or semi-public training institutions [p.24].)

⁶⁴In Brazil, for example, the business news magazine *Exame* devotes a single issue each year to the most socially responsible corporations in Brazil, and a description of their CSR programs.

responsibility” characterization of these particular efforts to cope with illiteracy, it should be noted, is quite distinct from that of the training programs. For the latter, the justification is not social, but self-interested—or economic, in terms of the expected broader impact of the firm on the local economy.

Though the CSR initiatives in education, adult literacy, and other areas are commendable, their increasing appeal and public attention also serves to distract attention from the problem of improving basic education. For one, they obscure the more socially useful role that business elites could actually play by backing system-wide public commitments to the improvement of public education and its financing. The individual corporate-sponsored schools represent a certain privatization and “piecemeal-ization” of this public function. In general, of course, privately-funded schools are not unusual in larger *systems* of public education. But the piecemeal nature of these CSR deeds means that the local school, as improved by corporate beneficence, is often an island in a sea of poor schools, probably without beneficial impact on the broader system of schooling.

One might well argue that these better-supported schools may serve as beacons for education reformers—a kind of strategy of reform, à la Albert Hirschman, in which one such deed starts off a dynamic that leads to more systemic treatment of a problem. But the effect could easily be just the opposite. In developing countries, those used to living with bad schools may well view the corporate-blessed schools as exceptions rather than models—something beyond their reach, and the result of “lavish” support that “we could *never* aspire to.” In this sense, the

CSR school does not provide a model for workable change that is system-wide.⁶⁵

The efforts invested by firms in corporate acts of *social* responsibility distract attention from another kind of public-minded deed that can have a significantly greater impact on the local economy—and in a way that also meets the social goals of reducing unemployment and poverty. Such deeds would build on the expertise of the firms as *producers*, rather than as providers of charity. For example, large customer firms in search of CSR potential could provide upgrading assistance to myriad small and medium firms (SMEs) producing the inputs they buy, or to smaller more rustic producers of a version of the same product, who do not compete in the same market.⁶⁶ Recommending this kind of assistance, of course, has been standard policy advice in the SME literature. I am suggesting, however, that large customer firms could go well beyond their immediate small circle of preferred suppliers.⁶⁷

In the same vein, and in contrast to the current focus on customer-to-supplier linkages, large *input*-producing firms also provide this kind of support to their SME customer firms, sometimes in cooperation with local training institutions. This support, moreover, reaches a much broader array of firms than in the case of the customer-to-supplier linkage. Some

⁶⁵An example of this kind of “adverse” or “exculpatory” reaction to “models” of excellence comes from another sector—local economic development. Over the last decade, in some of the towns of Northeast Brazil, outside consultants and development agencies have lectured firms and local-development agencies about the virtues of small-firm clusters based on the Third-Italy model. A typical response by SMEs was that, “oh, we could never do that here,” because Italy has the infrastructure, the financing, the education and training, that “we simply do not have.” (Tito Bianchi, personal communication, and based on research for his 1996 and 2001 studies.)

⁶⁶This was the kind of solution brokered by the state government in the previous case alluded to involving footwear SMEs in the state of Paraíba, as documented by Pinhanez (199X).

⁶⁷See, for example, Durán/Piore/X for footwear in Mexico, which notes the problem for the Mexican footwear sector of the very small number of firms that become preferred suppliers or benefit in other ways from the presence of the large global buyer (Walmart, in this case)—leaving the rest of the sector, an important employer, to go under in the face of the large post-trade-liberalization influx of cheap shoes from Asia.

examples from our Northeast research include multinational producers of zippers for jeans, labels for garments, and varnish for furniture.⁶⁸ In contrast to the large customer firms, it is in the direct interest of the input-supplying firms to reach as many customer firms as they can, in aggressive efforts to market their product and to thereby “hook” their customers on it. The more the better, no matter how small. Large customer firms, in contrast, must successively *limit* their relations with local supplier firms to a small circle of preferred suppliers, which usually represents only a tiny share of existing firms.

Despite the fact that the forward-linkage connection of large producers to input-using firms may actually have greater spillover effects in the local economy than backward linkages, the development-economics literature has focused—currently as well as historically—on the strength of *backward* linkages to smaller supplier firms. For reasons including those mentioned above, however, backward linkages do not occur with the ease assumed by Hirschman and others in the 1960s, let alone by the present-day supply-chain literature.⁶⁹ Similarly, these literatures have suggested or assumed that the forward-linkage effects are more difficult to make happen, and therefore less reliable. Or, they have simply received less attention, given the focus of the supply-chain literature on large and often global *customer* firms.

The connections of large input-supplying to local input-using firms, then, seem to be a neglected and fruitful path to spillover impacts for large firms interested in acts of CSR. This

⁶⁸See Tandler (200X) for this point, which draws on Northeast examples from Dohnert (1999) for jeans’ zippers and garment labels in Ceará (the large multinationals YKK and Haco, and Bianchi (199X) for furniture in Maranhão and Pará (the multinational Sayerlack).

⁶⁹For the difficulty of making the customer-to-supplier linkage actually work, see X & Foley (WD 200X) for Sri Lanka, Kaplinsky for the auto-parts industry in South Africa (WD 199X), Schmitz and Navas-Alemán for footwear in southern Brazil, Meyer-Stamer for Brazil, Schmitz/Humphrey/VW for various countries (2002).

kind of assistance has been neglected perhaps because it seems not to be “social”—or seems “self-interested.” This contrasts with the apparently more “*non-self-interested*” contributions to schools, literacy classes, and health clinics.

Summing up. In that training subsidies help large modern firms to live with illiteracy, they may teach firms that poor public education need *not* be as much a constraint on modern production as the current discourse suggests. At the same time, the subsidized training initiatives—while solving a specific problem for a firm—have a cumulative effect of distracting attention from basic education. In addition, the CSR initiatives—rather than setting an example for the education system to follow—may reinforce the impression that such good education is a luxury that the public sector could never afford. This particular less-than-second-best scenario is certainly consistent with the disparaging comments by firms reported earlier, about workers with “too much” education and skills and about the dispensability of such learning. In this sense, the second-best solution provided by training and CSR may—instead of ultimately leading to the first-best spread of basic education—actually do the *opposite*: it reduces the perceived need of business elites for public education and hence the political support for it.

In that state governments reduced the costs and hence the risks to firms of experimenting in unknown workforce territory, then, one could say that they were also giving the firms the wherewithal to learn that illiteracy and low skills were not as much of a problem—as they told us—as they had originally thought.

4 - The U.S. South and the low-level education trap

Up to now, I have suggested how and why modern business elites might be possessed of the fear of education. In this section, I move to a policy canvas that is broader than that of the training subsidies. It relates to a *regional* dynamic affecting education that is nevertheless played out by state and local governments—which make most of the decisions about education.

Though I sensed something coming through in my interviews with government officials that exposed this fear and its link to education outcomes, I couldn't quite make it explicit. This was partly because of the difficulty of finding a reference point for the subject in the literature of Northeast Brazil, or economic development, or education reform. But in the historical literature of the development of another famously lagging region—the U.S. South—this fear has been explicit. Scholars of the South have linked it, via policies in the economic-development realm, to the persistent illiteracy and poor quality of Southern education

Drawing on similarities between the economic history of the U.S. South and Northeast Brazil might seem to be somewhat of a “stretch,” given the major *differences* between the two countries. It turns out, however, that the differences make the similarities even more striking, at least with respect to the matter at hand. I therefore turn to this history now, because of the light it casts upon the Northeast Brazilian case.

The U.S. Southern story helps us to understand three important aspects of the Northeast Brazilian case. *First*, it shows how the fear of education is not limited to individual firm owners or to business elites as a group. *Second*, the U.S. Southern story brings to the fore the central importance of the perspective of the backward *region*—as distinct from that of states and

municipalities—in driving attitudes and actions toward education. Though strong regional entities existed in both cases, they nevertheless had almost no fiscal or implementation responsibilities in the education sector, which fall in the domain of local, state, and federal governments. *Third*, and seemingly unrelated to education, a particular form of industrial policy adopted by governments in lagging regions—recruiting outsider firms with tax exemptions and other subsidies—has had a strong negative impact, if only indirectly, on education. The Southern case in particular allows us to better discern this perverse dynamic—which could be called a “low-level education trap.”

Scholars of U.S. Southern development have long pointed to the link between business-elite demand (or lack of it) for education—whether from earlier slaveholding planters or, later, manufacturing enterprises—and the inadequate supply of public education (and other services) in the region’s towns. This helps us to understand how significant improvements in public education face substantial political difficulties in lagging regions or, at the least, do not find strong elite support in the business community. The story of the U.S. Southern case, then, illuminates the dynamic by which business-elite attitudes and behaviors—and the way in which they construe regional comparative advantage—feeds into the persistent problem of poor public education in the Brazilian Northeast, as well as other lagging regions.

Similarities against differences

A comparison between the U.S. South and Northeast Brazil might be considered rather strange. The U.S. South has been low-income region in a highly developed country throughout the 20th century, while Northeast Brazil is still today a much lower-income region in a much

lower-income country. The difference in per-capita income between these two lagging regions is quite large, even when comparing today's income in Northeast Brazil to that of the U.S. South in the late 19th and early 20st century, let alone to that of today.⁷⁰ In the U.S. South, slavery and its aftermath—the politics as well as the economics—had a defining influence on the relations between the region and the rest of the country, the transition from agriculture to manufacturing, and the evolution of the educational system. Northeast Brazil's history has no analogue to this highly conflictual theme. Up to the beginning of the 20th century, moreover, the prosperity of U.S. Southern agriculture was helped by good rainfall and soils;⁷¹ in the Northeast, and to this day, severe and frequent droughts, a semi-arid climate, and poor soils have afflicted the region, with the exception of its verdant coastal strip. Most relevant to the matter of education, finally, though the U.S. South and Northeast Brazil had highly similar policies of industrial recruitment, the U.S. experience in this area started half a century earlier than that of Northeast Brazil.

Though this list of differences could be easily expanded, this small sampling of them makes the *similarities* between the two regions for purposes of comparison particularly striking. Several of the policy approaches and their justifications found in Northeast Brazil today, including those bearing on matters of education and the workforce, are actually remarkably similar to policies and arguments found in the U.S. Southern states. The commencement of the Southern policies, however, date back to roughly 50 years earlier than that of Northeast Brazil.

1. By the 1960s, per-capita income in the South's rural areas reached a plateau of 70% of the national level, a ratio that has not improved since then. In Southern *cities*, however, the ratio was 90% of the national average by that time (Wright 2000:22).

2. U.S. Southerners argued, however, that they were at a severe disadvantage—*vis-a-vis* their North—because much of the land was low-lying and prone to flooding, requiring heavy investments in drainage and reclamation. This was one of the arguments made in the legislature, which justified the continuation of slavery. Without “costless” labor, it

Both countries, to start, contained a lagging region. It had roughly the same number of states.⁷² The states are part of a larger federalist system, and formed a block with a significant influence in the national legislative bodies. As in many federalist systems, local, state, and central governments had more fiscal and/or administrative responsibilities for education than in unitary countries—although, until recently, expenditures and responsibilities were more decentralized in the United States than in Brazil.

Until the late 19th century, both regions were on a par economically—if not better off—than the now more-developed part of the country.⁷³ The widening gap that started to develop in the late 19th century between the two regions in each country—a kind of fall from grace—generated a long history of resentment in the lagging region. In both countries, and to this day, the ill will between the lagging and the advancing region has expressed itself in remarkably similar language and stereotypes. Each region has developed a set of resentful and disdainful views of the other; and each has believed that the other has been receiving a disproportionate share of tax revenues, as well as of the benefits of other policies of the central government. Each region's scholars have produced elaborate economic analyses to prove their point.

Each region's complaint about the other is the mirror opposite of the other's. The lagging regions, for example, perceive themselves as having been long subject to policies of

was said, the South would not able to grow.

3.The Brazilian Northeast has nine states (or ten, if one counts the semi-arid northern region of Minas Gerais) out of a total of roughly 20, depending on the period. The U.S. South has nine states out of (now) 50, including Virginia and West Virginia—the latter sometimes counted as mid-Atlantic or border states. (The U.S. Census Bureau uses a somewhat different grouping of states, divided into East South Central, West South Central, and South Atlantic—adding up to 15 states; about five of them are not what is customarily thought of as the U.S. South.)

4.Since early colonial times until well into the 19th century, Northeast Brazil was actually the more developed part of the country. Even when they became roughly equal by the late 19th century, literacy levels as between the Northeast

“internal domination” and other unfairnesses “inflicted” upon them by the more developed part of the country. Common examples are trade policy that has penalized the poor region’s agriculture and protected the rich region’s manufacturing, or policies directed toward internal transport that prejudiced the poor region. The richer region, in turn, has considered itself hostage to the “high” and “disproportionate” political role of the lagging region in national politics and in the expenditure of revenues, which has “hindered” the advance of the rest of the country both politically and economically. The lagging region, in turn, has resented the richer region’s use of its superior economic power to “deny” the programs and subsidies that were its just due.⁷⁴

Finally, the richer region has characterized its poorer cousin as hopelessly backward and clientelistic, with its “corrupt” and otherwise wanting state and local governments. The lagging region, in turn, has viewed the culture of the rich region as materialistic and self-centered—proudly contrasting itself as giving prime place to loyalty to family and friends, and possessing a gracious and warm hospitality—“Southern hospitality” in the U.S., and “Northeast hospitality” in Brazil. (Both richer regions themselves often concede this latter point.)

The direct link from firm-recruitment policies to the education sector took the following form in both regions. State and local governments believed that it was important to keep taxes lower than in the richer states in order to attract firms from there and, in general, create a

and the South were roughly equal, rather than the 1:2 ratio of today (Romo diss., Harvard).

5. In a recent example from Northeast Brazil, the Northeasterner Olímpio Galvão (2002:2-3) complains that the Northeast regional development agency, SUDENE, failed because it was “not...a project of the national elites—that is, the elites of the hegemonic regions of the country. And without the strong and growing national support that SUDENE required to become strong, or to actually survive, its failure became unavoidable” (p. 3, translation mine). He points to the U.S. South as recognized by many as the *opposite* model, in that the eventual convergence of the U.S. South with the rest of the country was the result of pressure and fiscal support from the U.S. *central* government (p. 2). Most U.S. Southerners, of course, would in no way agree to this interpretation; if they knew about Northeast Brazil, they would describe their own regional developments as quite similar.

“business-friendly” environment. More important, they construed their main comparative advantage in attracting outside firms to be their cheap and docile labor. They worried that a better-educated labor force would ultimately lead to higher wages inside the region, and hence threaten their “only” comparative advantage.⁷⁵ In the Northeast case, this chain of logic was at least implicit in several of our talks with government officials, as well as with firm owners. Indeed, this view of comparative advantage is not peculiar to lagging regions, as distinct from countries. As a Malaysian government official commented recently, in response to complaints about sweatshop and lax labor standards, “how can you expect us to get rid of our *only* comparative advantage *vis-à-vis* the developed countries?”⁷⁶

Both regions saw industrialization as the path to modernization, as well as imitating the footsteps to growth of the more-developed region of the country. As key to this transformative strategy, they gave prime place to policies of attracting—with substantial subsidies—large modern firms from the more developed region. Both also used tax exemptions and other fiscal mechanisms that were similar and often illegal, and that compromised federal-government revenues. In the U.S. South, this took the form of issuing municipal bonds for subsidizing the investment of the outside firms and, when that was declared illegal by the federal government,

6. In both regions, a few states have not taken this tack in recruiting outside firms, at least recently. Florida, for example, promoted its image of “a nice place to live” in an early recognition of the need for skilled labor and, as a result, attracted engineering-intensive industry (Glickman & Glasmeier 1989:63). [North Carolina e.g.]. In Northeast Brazil, the state government of Pernambuco has been ambivalent about the cheap-labor strategy of recruitment, partly because the state was one of the earliest industrializers in the Northeast—at least with respect to the greater metropolitan region of its coastal (and capital) city, Recife. In addition, the politics of the state and the considerable history of labor-union organizing in the coastal sugar-growing plantation area, made it politically awkward to pursue such a strategy or, at least, promulgate this kind of discourse.

7. (X, 2002).

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exemptions from the corporate income tax.⁷⁷ In Northeast Brazil, the states exempted new firms from the value-added tax, which was a significant 17%.

In both countries, the tax exemptions provoked the ire of the central government, which enacted measures to make such exemptions illegal.⁷⁸ In both cases, state governments found ways of circumventing these regulations, or simply ignoring them.⁷⁹ The recruitment policies also provoked outcries within both regions from local firms for which such seemingly lavish subsidies were not available.⁸⁰ In both cases, moreover, state governments argued, in their defense, that if they hadn't attracted the outside firms, there would have been no additional tax revenues anyway. The increased consumption of the newly-employed, they said, would increase tax revenues indirectly.⁸¹ Most important for the matter of education, critics in both regions argued that the tax exemptions and other subsidies seriously jeopardized the revenues of state and local governments and hence expenditures for public services—of which education was a

8.The recruited firms could also deduct from their federal taxes as operating expenses the amortization of these bonds.

9.In the 1930s in the U.S. South, ironically, some local firms criticized the support of outsider firms with tax revenues as “socialistic” industrial policy.

10.For example, in 1969, the U.S. Treasury limited the federal tax-exempt status of the municipal bonds used for firm recruitment, to “restrain this form of ‘unfair’ inter-state competition (as well as to enhance federal revenues). The reaction of the Southern state governments was to replace this incentive with exemptions from corporate taxes. After this 1969 ruling, corporate taxes in almost all the southern states “were driven below the national average” (Wright 2000:20-21).

11.See Cobb (1993:40) for the U.S. case. In North Carolina, for example, local textile and tobacco firms pressured to get the same incentives as those offered to outside firms (Lowe 1999). In the state of Mississippi, in the 1930s, local business elites criticized the recruitment incentives as “socialism,” arguing that the Constitution prohibited direct aid to private corporations (Cobb 199XX:19ff). At an earlier time, when agriculture (including tobacco) was more important in the U.S. Southern economy, local landholding elites protested the recruitment policies because they would draw labor out of *agriculture* (Lowe 1999).

12.For the U.S. South, see Cobb (1993:50). With respect to Northeast Brazil, for example, this argument was made to me in the same words a few years ago by a state governor.

major item.⁸²

A strong and genuine concern about high levels of rural unemployment among government officials also shaped the firm-recruitment strategy, and in a way that enhanced the cheap-labor advantage. To deal with the rural-unemployment problem, both regions promoted the location of manufacturing plants in rural areas with a largely unskilled labor force that had worked only in agriculture. Wages in these areas were often as little as half of those in urban areas.

In the same spirit, both regions initiated particular policies and practices related to labor and having implications for public schooling. One set of such policies helped to reduce workers' real wages for the newly-arriving firms—either by making deductions from the wage bill to finance the new firms (the U.S. case), or working to reduce or completely eliminate worker fringe benefits (the Brazilian case);⁸³ anti-union and other anti-labor practices also helped preserve these low costs. In addition, state governments in both regions reduced labor costs to the outsider firms by banking the cost of firm-specific and shopfloor training for numerous new and inexperienced workers hired by the newly-recruited firms. Workers in training received

13. For the U.S. case, see Cobb (1993:100). For the Northeast Brazilian case, see Tyler (1998) for Ceará, as cited in a previous section.

14. In the 1930s, the U.S. Southern states mandated that employers deduct 5-7% from worker wages in the name of promoting the state's economic development. These deductions went into a fund used by the state to offer subsidies to the recruited firms for the cost of building a plant or other related investment subsidies (at that time, the prevailing wage in these industries was US\$5.55 per week)(Cobb 1982:5ff). Though there is no such direct financing deducted from workers' wages in the Northeast, another mechanism reduces workers' real incomes by relieving firms of the obligation of paying fringe benefits, mainly in rural areas. Namely, state governments have encouraged and assisted recruited firms to decentralize production to newly formed "labor cooperatives," which have the status of contractors rather than employees of the firm. Though the responsibility of paying fringe benefits rests with the "cooperative," many of these associations--newly formed with the assistance of the state government and the firm--operate as outposts of the firm itself, and do not function as true cooperatives, let alone pay fringe benefits.

“training wages” lower than what they would receive if immediately hired as workers.⁸⁴ As explained previously for the Northeast Brazil case, the training programs and their subsidies enabled the outsider firms to reduce the problem of illiteracy and poor schooling by, in effect, getting around it. This reduced the potential, in turn, for demand-driven pressure on government by business elites to improve public education.

In both regions, the cheap-labor policies and the aggressive recruitment of outsider firms exacerbated the ill will of the rich region toward the more backward one. States in the richer part of each country--after witnessing the erosion of their industrial base by the poorer region’s “raiding”--counter-reacted. First complaining bitterly, they then initiated their *own* version of the poorer-region’s recruitment programs. The backward regions, in turn, expressed a certain new pride at having succeeded in seriously compromising part of the industrial base of the richer region. In both countries, critics of these competitive firm-recruitment policies used the language of war to describe them--the “economic wars” in the U.S., and the “tax wars” in Brazil (*guerras fiscais*). There were others who approved of the policies, it should be noted--especially local-development officials and technicians.

Against this canvas of similarities, it is surprising that commentators on the persistent poverty of the U.S. South up to the 1950s have pointed to a direct link connecting poor education to pro-business policies and business elites while, at the same time, those observing the Brazilian Northeast have been silent on this matter, pointing to other explanations of the Northeast’s lag.

15. In the late 1930s, the state of Georgia paid “training wages” to future employees being trained on the recruited firm’s shopfloor or a school operated by it (Cobb 1993:pp.). This is similar, as described above, to the “training scholarships” supplied by Ceará and some other Northeast-Brazil state governments to the future workers of its recruited firms.

*Lagging and catching up*⁸⁵

Economic historians of the U.S. South, like those of the Brazilian Northeast, have for many years struggled with the question of why the U.S. South remained poor and un-industrialized for so long, despite the long period of prosperity of Southern agriculture up through the 19th century. Today, after all, scholars view such long earlier periods of agricultural prosperity in many now-industrialized countries as setting the conditions for successful industrialization and modernization—often starting with the processing of crops or natural resources.

With respect to education in particular, several historians of U.S. Southern underdevelopment have long focused on the relation between what was going on in its towns and the poor quality of public services in comparison to the rest of the country.⁸⁶ This problem is exacerbated in a federalist system like that of the United States, as well as Brazil, where fiscal

16.The footnotes in this section have suffered an irremediable computer glitch, and some do not belong where they are indicated in the text, starting with footnote 17 and ending with note 21 or 22. Also, after note 21 or 22, the subsequent note goes back in order and starts numbering at 17 again. Also, the notes would not number in the text, so I put in the numbers manually. These problems will be fixed in a subsequent draft.

17.It should be noted that Graham (19XX), a historian of Brazil, contests the assumption commonly seen in the historical literature that the effects of the U.S. South’s slavery in inhibiting the growth of local towns and non-agricultural industry were the same as those in 19th-century slaveholding Brazil. Graham argues that the U.S. South actually had a *higher* level of town development and related incipient manufacturing activities during and after the period of slavery—mostly linked to agro-processing—at least as compared to Brazil, if not to the U.S. North.

E.g., Cobb (199X). Wright (198X) offers an additional explanation for the underdevelopment of Southern towns, originating in the period of slavery. He maintains that the asset value of slaves held by landowners was considerably greater than the value of their landholdings. The primacy of such “moveable” slave assets in the total asset portfolio of landowners, Wright argues, meant that landowners did not feel bound to the economy or institutions of any particular place—resulting in a relative disregard for the development of the towns in the regions where their landholdings were located. (Indirect evidence of the importance of slave assets among plantation-owners’ total assets can be seen in the significance of insurance taken out by landholders against the loss of their slaves, as witnessed by the recent apologies of major Northern insurance companies for having trafficked so heavily in this kind of insurance during the 19th century [NYTimes, 7/X/00]).

and other responsibilities for the provision of public goods like education and other public services are decentralized.⁸⁷ In addition, some historians attribute the continuing poor quality of education to the fear among Southern businessmen that more-educated workers were likely to migrate to the ever-expanding industrial job market in the U.S. North, especially during World War II.⁸⁸ These fears were quite realistic, as documented by the waves of migration of Southerners to work in the industrial North starting in the second quarter of the 20th century—and not ending until the 1950s, when in-migration exceeded out-migration for the first time. As put by Glickman and Glasmeier, the South simply could not “afford” to better educate its workers, given the well-grounded fear that the better-educated would migrate (1989:62-3). This fear was particularly prevalent in the textile-producing areas, where “mill...owners well understood that a high school diploma was as good as a ticket to leave the mill village” (Wright 2000:16). (The Southern wave of out-migration paralleled, some decades earlier, a similar wave of out-migration from the Brazilian Northeast to its South in the second half of the 20th century, which also has slowed down considerably since the 1970s.)⁸⁹

18.Coatsworth and Romo (diss.) have recently argued that the decentralization of education in Brazil and some other Latin American countries accounts for lower social indicators historically. They say that periods of strong improvement has been made during times of strong central-government action, and contest the current assumption that decentralization of educational expenditures, policy, and implementation is best decentralized. [move to correct place later]

16. There is some disagreement about how to **construct the rates for out- and in-migration based on the IBGE population.** The “direct” method shows that there has been no turnaround, though there is a decline. Since the 1970-1980 period, that is, net out-migration from Northeast Brazil to the rest of the country seems to have declined from a high of 6.5% (it was 5.5% in 1960-1970) to 4.3% in 1980-1991 and 2.0% in 1991-1996 (data not available yet for 1996-1990). These declines are paralleled in out-migration to the metropolitan region of São Paulo—known as the major migration destination of Northeasterners—from the high of

In the U.S. Congress and the Senate, Southern politicians voiced their concerns about out-migration and the loss of their labor force explicitly. In compensation for this loss, they argued successfully, the Federal Government should allocate to the Southern states a disproportionately large proportion of the expenditures for new military bases required by World War II. The Southerners argued that the military bases, with their large number of new jobs and procurement of local services, would partly compensate for the increased out-migration of the region's labor force to Northern jobs created by war purchases from Northern industry.⁹⁰

With respect to improving its public education and access to it, then, the U.S. South—like Northeast Brazil—was trapped. On the one hand, if it kept its population illiterate, this would clearly condemn the region to continued backwardness. On the other hand, if it educated its labor force, it would lose its workers and the benefits of this public investment to the North. That these benefits would accrue to the wealthier North, to which the South had lost the Civil War, made this loss a particularly bitter one. To add insult to injury, higher education levels would lead to increased wages, thus undermining the South's "only" comparative advantage.

The way out of this dilemma—perhaps the only one—was to industrialize in a way that *avoided* educated labor. This could be done by luring labor-intensive Northern firms to re-locate in the South with the offer of significantly cheaper labor and the guarantee of anti-union and, later, anti-environmental—

3.5% in 1980-1991 to 1.1% in 1991-1996. The more recent "indirect" method actually shows a turnaround in the 1990s—from net out- to in-migration—having previously shown a steady decline until 1990 (from -7.3 per 1,000 in the 1960s, to -4.1 in the 1970s, and -2.5% in the 1980s.) Based on material elaborated by Mansueto Almeida (see Table X, drawing partly on Lopes Ribeiro [2000?:5], and Moura & Teixeira [n.d.].

17. Bense (199X), Cobb (199X), Wright (19XX), Finegold and Skocpol (199X), Kennedy (200X). In return for this consideration, the traditionally conservative and "states'-rights" South agreed to not block the New-Deal welfare programs and labor-rights legislation of the Roosevelt administration

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regulation. The strategy seemed to have worked well, particularly for the states of the Deep South, the old Confederate states. “In order to keep taxes low [for business],” Cobb writes (2000), “expenditures for education and public services were held to a minimum” (p. 18). He notes surveys, as evidence that ranked business climate across the U.S. states, in which the Deep South consistently achieved the highest ratings while, at the same time, it ranked the *lowest* among the U.S. South in educational achievement and expenditures.”⁹¹

A Mississippi governor made the connection even more explicit. Upon vetoing tax increases for public education in 199X, he explained that to raise taxes for education would be to use a “funding method for education [that] is against the very jobs we need the education to fill.”⁹² It would scare away the firms and the new jobs they brought, in other words, which the state so badly wanted.

If financed by tax increases, in other words, expanded public education would increase revenue requirements for a budget that was *already* severely stretched by the extensive tax exemptions and other subsidies granted by state and municipal governments for several years to firms recruited from outside. This revealed a view of firm-recruitment policies and better public education as *tradeoffs* and not, as they are construed today, as complements. Much as we would like to think otherwise, the “tradeoff” view may better reflect reality than the more currently familiar view of complementarity.

Before concluding this section on the U.S. South, it is useful to look at one recent source

18.Cobb [2000?:21]. The same states also ranked the lowest in wages, unemployment compensation, public welfare, environmental protection, and progressive taxation.

19.*Op. cit.*, p. 21. Mississippi also had the lowest income tax among the states of the Southeast.

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of improved schooling in the South—and an unexpected one at that, at least given the current thinking about education reform in developing countries

Parents and education reform

In some states of the U.S. South, the steely logic of the regional education trap has actually been broken by the presence of outsiders—but in the form of outsider *parents*, rather than outsider firms. Viewed from the perspective of the development literature and policy advice on education, this should not come as a surprise. Parents are now seen as playing a central role in the scenario of desired education reform in developing countries, in combination with a decentralization that brings educational systems closer to parent demands for accountability. Though what follows may seem to be a digression from the story of business elites and education, it nevertheless speaks to the current interest in parents as “demanders” of improved education.

In a recent chronicle of improved public schooling in the U.S. South, it was “outsider” parents—rather than locals—that played a crucial role.⁹³ The recent emergence of the U.S. South over the last decades as a growing region with particular life-style amenities, that is, has attracted a “migration” of middle- and upper-class professionals and others, often to the suburbs of Southern cities.⁹⁴ These outsiders were used to a higher level of public services, including schools, in the part of the country from whence they had come—mainly, the Northeast. As a

20. Firestone (2000).

21. The South’s acceleration of growth and its “modern economic takeoff” started in the 1940s (Wright 2000:17). The net out-migration of Southern whites had ended by the 1950s, though blacks continued to leave the region in large numbers through the 1960s (*Ibid.*). By the 1990s, the U.S. South had the highest *in*-migration rates of any

result, they have demanded better public schools for their children and voted for those candidates in local and state elections who promised to raise taxes for schools and other public services.

After noting the influence of the “newcomers” living in the suburbs of Southern cities, Firestone (2000) reported that 19 out of 20 counties in the metropolitan region of the city of Atlanta, Georgia “voted to raise their sales taxes to pay for schools and other projects, often by overwhelming margins.” This, he reported, has changed the face of electoral politics at the local and state levels in the South. Native Southerners, whether Democratic or Republican, have usually identified themselves “as conservatives more often than newcomers.” At the same time, Southern Democrats in the South have favored more spending on public services, including education, and the Republicans less. The newcomers, often Republican themselves, have been “prodding elected officials to be more aggressive about spending tax money on their priorities.” As one Republican in Georgia and a former state representative said, “ ‘This transformation is going on around the South, and the Republican leadership just does not get it’ ” (as cited by Firestone). It caused some Republican voters to vote Democrat, or Republican legislators to switch to the Democratic Party in order to respond to the new constituencies.⁹⁵

The moral of the story is not that one has to wait for outsiders to play an education-improving role. Rather, local parents in poorer regions may have less reason than we believe to find education urgent; and they often do not have the power and the status *vis-à-vis* teachers, school administrators, and electoral candidates to demand improved education and accountability

region in the country (South Atlantic, 2.4%; East South Central, 0.6%; West South Central, 0.6%)(Firestone, 2000).

22. For example, several Southern Republicans who have opposed Democratic initiatives to raise teacher salaries and hold schools accountable through testing were considered obstructionist. Two legislators in South Carolina have switched to the Democratic Party, complaining that Republican leaders “tried to force them to vote against education programs that their constituents supported” (Firestone 2000).

of them. This is nothing new, in that current policy advice points emphatically to parents, combined with decentralization, as the drivers of education reform. At the same time, however, several micro studies have shown that the returns to education are lower in poorly growing regions,⁹⁶ suggesting why parents there might not be that concerned about educating their children. Similarly, the greater status differences between teachers and administrators in poorer regions make it difficult for parents to engage on an equal footing with them.

In this light, it is important to draw attention to the *electoral* path to improved education that characterizes this story—as distinct from the more direct involvement of parents with schools. Key to this outcome, moreover, the desire of the “migrants” for better education for their children did *not* translate—as is often the case—into increased demand for *private* schooling. Being focused *inside* the public-education system—rather than outside—it produced the changed politics of this story which, in turn, opened a direct path to improved public education.

Conclusion

The South’s cheap-labor approach, in sum, seemed to solve its dilemma of how to industrialize—linked as it was to the unusually aggressive recruitment of Northern firms.⁹⁷ In so doing, however, it seems to have created another problem in today’s world of more globalized and competitive trade, which also relates to education. Namely, and as Wright (2000) argues, although the South’s cheap-labor policies were successful in recruiting firms from higher-wage

23.AER 9/66, etc.

24.[Earlier?]: Wright (2000) data on several-times higher per-capita expenditures for recruiting (advertising, etc.) than the rest of the country.

regions, they at the same time “undermined the incentive for employers to invest in education as a means of raising the standards of the labor force.”⁹⁸

Wright calls attention to the extent to which the tax exemptions and other subsidies “forced the southern states into low-revenue positions,” suggesting that this may have caused them to get “locked into” an equilibrium that made them “unable to finance the upgrading of their educational systems....”⁹⁹ The South’s cheap-labor “climate,” he concludes, has left the region without a skilled and literate labor force and, hence, unprepared for global competition and the information economy.

The cheap-labor climate, of course, is the heart of the “low-road” approach to competing. It is also the reason for which the literature on global competitiveness considers this particular cost-cutting approach risky. This, then, is the South’s new dilemma. In the 21st century, it still conceives of its cheap labor as its particular “comparative advantage” in attracting firms from outside—just as do the states of Northeast Brazil.

Put in other terms, state and local governments in the U.S. South had difficulty internalizing the benefits to public investment in basic education. This contributed to the Southern neglect of education, and to the region’s longstanding bottom-ranked position on indicators like schooling, literacy and others, such as health. Notwithstanding these failings, and similar to the Brazilian Northeast, the strategy also worked—at least as indicated by the South’s

25. Wright (2000:16), paraphrasing views stated in his earlier book, *Old South, New South*. In the 2000 paper cited, he modified that view somewhat, saying that, “[i]f I were re-writing the book today,” he would have distinguished more clearly between the plantation belt and its slave labor, and outlying areas of the South where education “progressivism for whites only” was underway in the first half of the 20th century.” He notes, however, that “the educational incentive problem still permeated the textile area....”

26.P. 22. As evidence, he reports that though the South has recently led the nation in the promotion of research

highest ratings in the country on “business climate” and its success in attracting Northern firms. As one sign of this success, the “economic wars” decimated the traditional manufacturing base of the U.S. Northeast by the mid-20th century, particularly in the labor-intensive industries of textiles and garments. This was sweet revenge to a region that felt itself humiliatingly defeated by the North in the country’s Civil War and subject to a long history of “internal colonialism.”

Applying the U.S. Southern lens to the Northeast Brazil experience, in sum, has brought to the fore explanations of poor literacy and schooling that differ from typical Brazilian observations about the root of Northeast backwardness. Whether coming from the mouths of Brazilian Southerners *or* Northeasterners, the more traditional explanations focus on other causes—underdevelopment, resource constraints, and traditional attitudes. The pairing of the U.S.-Southern and Northeast-Brazilian cases, then, has helped to free the analysis from each region’s stereotyping portrayals of the problem by the other. It also helps to clarify the self-perpetuating nature of the dynamic more clearly.

5 - Conclusion

Whether about Northeast Brazil or the U.S. South, these stories of persistent regional backwardness—and poor education and literacy in particular—have clear elements of a vicious circle or perverse dynamic that is eminently rational. It might be called a bad case of path dependency, which contributes to a “low-level education trap.”¹⁰⁰ The initial inequality of

parks—more than twice as many projects as in any other region—it also had the lowest success rate.

27. In the case of the U.S. South, this path-dependent portrayal of the problem contrasts with popular portrayals of it
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development between one region and another within a country *reduces* the return to public investment in education in the lagging region relative to that of the more developed region—in the eyes of firms *and* governments, not to mention the parents of school-age children. Even when political leaders and managers of state and local government are seriously committed to economic development, they see their region as standing to lose—or not having much to gain—from public investment in improving public education. This is exactly the opposite of what one would expect as development proceeds, as least according to the current discourse.

As long as out-migration continues, draining off a region's most educated workers, the lagging region has difficulty internalizing the benefits to its investment in public education. Not able to escape from the horns of this dilemma, the region is doomed to construct its comparative advantage in terms of cheap labor. This translates into a pursuit of “the low road” to manufacturing and modernizing development, driven by the threat that improvements in public education and literacy pose to the cheap-labor comparative advantage—improvements that invariably pull wages up and give present and future workers the educational wherewithal to migrate.

One could explain the problem of the trap, in part, as a “failure of demand” by firms—namely, a demand curve for educated labor that does not shift upward “normally” with growth or modernization of the economy. It stays where it is because it is reinforced by the development policies of local governments, the path they choose to manufacturing development through outside firms, and the way they construe their comparative advantage. As a result, the more the

by Northerners, particularly those of a more “liberal” bent. They see the South as racist, exploitative of labor, and repressive of worker organization. They view these traits and values as generic to the South—as hopelessly backward and morally reprehensible, let alone development-inhibiting. Brazilian Southerners, similarly, describe

richer region advances, the more the lagging region perceives its comparative and *only* advantage as cheap labor.

As long as there is an initial wage differential between a poorer and richer region of a country—like the almost 50% lower level of the Northeast Brazilian wage as compared to that of its South—the lagging region is trapped into “fearing” education, or simply feeling no particular need for it. And it pursues a catchup industrialization policy that turns illiteracy into a cheap-labor “comparative advantage.” Though things don’t necessarily have to turn out this way, they may also not necessarily evolve in the more familiar way, according to which development is inextricably linked to increased investment in education—whether as cause or effect.

their “backward” Northeast in kindred and equally pejorative terms—albeit minus the racism.

28.[this note goes previously in earlier text] Many observers of U.S. Southern history, like Glickman and Glasmeier (1989:61), attribute the South's better growth rates after the 1950s to, in part, the large *consumer* market created by the more net in-migration. The in-migration starting in the 1950s, in turn, partly grew out of a response to the increased demand injected into the South by large military contracts and military bases established in the South during the World War II.) The significance of this particular explanation is that it focuses on the effect of increased consumer income on growth, in contrast to the explanation that links at least part of Southern growth to the success of the firm-recruitment program.

Also with respect to consumer-demand-driven growth, a growing local consumer market in the Brazilian Northeast—at least as perceived by the recruited firms—was actually an important reason for Southern Brazilian firms to re-locate to the Northeast (Tendler 2000, “Economic Wars....”). It was as if the proponents of the Brazilian Northeast's cheap labor as their “only” comparative advantage in attracting outside firms were blind to the perception that the Northeast was, at the same time, becoming an attractive *consumer* market to Southern firms. Seeing one's own region as persistently poor, perhaps, made it difficult to at the same time see it as a growing and attractive consumer market.

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